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Article

The Relationship Between Spirituality Level and The Incidence of Depression: a Study on Eleventh-Grade Students at Pondok Al-Hidayat Islamic Boarding School Krasak Demak

Linda Sulistiyowati, Alifiati Fitrikasari^D, Natalia Dewi Wardani^D, Widodo Sarjana^D

¹Faculty of Medicine, Diponegoro University, Semarang, Indonesia



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*) Corresponding Author : fitrisutomo@gmail.com

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ABSTRACT

Introduction: The depression incidence around Southeast Asia in 2017 was 85.67 million cases, and 7.5% of it occurred in the 15-19 years old age group. In Indonesia, the incidence of depression in 2017 was 9,162,886 cases. Depression is a mental disorder characterized by sadness, loss of interest, fatigue, and poor concentration. This can cause a major disability, even lead to suicide. Thus, promoting studies to find preventions for depression in teenagers, one of which is related to the spirituality level through emphasizing beliefs to encourage someone to overcome challenges. Methods: This study is a cross-sectional quantitative study. A total of 106 samples, eleventh-grade students who only studied Salaf and students who studied both Salaf and general sciences at the Al-Hidayat Islamic Boarding School Demak, were included. Data was collected using the Spirituality Orientation Inventory questionnaire and the Child Depression Inventory questionnaire, then analyzed using the Chi-square test. **Results:** The depression incidence among Al-Hidayat Islamic Boarding School students is 12%. Most students (93.5%) have a high spiritual level. There's a relationship between spirituality level and the incidence of depression in all students, but no significant difference between spirituality level and the incidence of depression among the students who only study Salaf and the students who studied both Salaf and general sciences. Conclusion: The incidence of depression in Al-Hidayat Islamic Boarding School students is related to the spiritual level of students.

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Introduction

Depression is a mental disorder characterized by sadness, loss of interest or pleasure, feelings of guilt, low self-esteem, sleep or appetite disturbances, fatigue, and poorer concentration [1,2]. Depression in teenagers is a combination and accumulation of many factors, such as personal, family, social and academic factors that may affect depressive symptoms in teenagers [2]. Factors causing depression are high levels of anxiety, dysfunctional thoughts about success, lack of emotional adjustment in school, lack of a father's and/or a mother's warmth, lack of education, chronic medical conditions, major life events, high academic demands, and psychosocial stress [3]. Teenagers who are unable to handle academic, social, and emotional demands may feel discomfort which then leads to depression [4]. Teenagers who experience depression often feel bad about themselves, have worsened concentration, aren't interested in doing anything, and have drastic changes in their weight [5]. They also find it difficult to feel joy in life (anhedonia), feel sad most of the time, want to cry, become worried that something bad might happen, are easily annoyed and disappointed about certain events, are unable to change negative thoughts, aren't pleased with their appearance. They tend to have learning are difficulties which lead to a decline in academic achievement. People also often mistreat them, in this case, friends and parents [2, 3]. Moreover, depression can also be a major cause of disability and can even lead to suicide [5]. Several studies have reported a link between spirituality and depression [6, 7]. Spirituality is defined as a level of self-knowledge and affirming transcendent powers or fears in their lives which provide a deep sense of meaning and purpose. In recent years, research on how spirituality is associated with psychological adjustment and positive development has gained much attention. Through spirituality, people can cope with stress by receiving hope and a meaning for life. This is enlightening, since teenagers are at a sensitive period for developing faith and spiritual involvement [8].

The global incidence of depression in 2015 is around 4.4%, which is 332 million cases. The incidence of depression in Southeast Asia is 85.67 million cases (27%), and 7.5% of it occurs in the 15-19 years-old age group. In Indonesia, the incidence of depression is 9,162,886 cases (3.7%).[1] In 2019, the incidence of depression in Demak was 7,845 cases (7.8%). The highest incidence was in Guntur District with 221 cases, and Temuroso Village positioned the highest rate with 45 cases [9]. Although lately there have been growing concepts of separation between spirituality and religion, they are often interrelated and used interchangeably [10]. In a survey conducted by Gallup World Poll, found that in 143 countries (n = 140,000), 92% of people in 32 developing countries indicated that religion was an important part of their daily life [11].

Knowing the big impact of depression, especially in teenagers, researchers conducted studies on various factors that can decrease or prevent depression in teenagers, such as cognitive therapy intervention programs, positive education programs, and spiritually integrated depression management programs [12–16]. However, there had been a different result reported by Ola, stating that spirituality wasn't significantly associated with depression but had a significant relationship with anxiety [17]. The existence of inconsistent results regarding the relationship of spirituality with depression makes this research interesting to be studied. In addition, previous studies had already reported the relationship between spirituality and depression in students and have never been conducted on high school students in Islamic boarding schools. Therefore, this study aims to analyze the relationship between the spirituality level and the incidence of depression in high school students at the Temuroso Islamic Boarding School, Guntur District.

Method

Design, Time, and Place: This research is an observational quantitative study with a cross-sectional approach. The research was conducted at Al-Hidayat Krasak Temuroso Islamic Boarding School Guntur Demak in November 2020.

Population and Sample: The research subjects were eleventh-grade students at Pondok Pesantren Al-Hidayat Krasak Temuroso Guntur Demak for the 2019/2020 academic year who met the inclu sion criteria. The inclusion criteria cover male and female eleventh-grade students of the 2019/2020 school year who are willing to take part in the study and don't meet the exclusion criteria, namely consuming drugs (narcotics, psychotropics, and other addictive substances), suffering from severe and chronic physical illness and suffering from psychotic disorders. The number of research samples was 108 students and was selected using stratified random sampling.

The Measuring Instruments: The Spirituality Orientation Inventory Questionnaire consists of 40 questions. Each question was rated with a Likert scale of 1-5, ranging from very inappropriate to very appropriate. Answer "Very Appropriate" (VA) scores 5, "Appropriate" (A) scores 4, "Less Appropriate" (LS) scores 3, "Disagree" (DA) scores 2, and "Very Disagree" (VDA) scores 1. The spirituality level results are then further categorized into low, moderate, and high. Next, the depression measuring instrument used is the Child Depression Inventory Questionnaire which consists of 27 questions with three answer choices. Each answer scored from 0 to 2. The total score was added, then categorized into non-depressed (score 0-12) and depressed (score 13-54). The student's demographic data questionnaire contains demographic characteristics, such as name, gender, age, mother's education level, the reason for entering a boarding school, and a genogram.

Data Processing and Analysis Data: Collected data were statistically processed using the SPSS software. Data of prevalence was analyzed as descriptive data. The association test used the Chi-square test. The comparison test used the independent sample t-test.

Result

This study involves 108 subjects in total. The mean age of the subjects was 17.52 \pm 0.502 years old, and 51.9% of them (56 subjects) were aged 18 years. 95 subjects (88.0%) are female. Among the subjects, a subject (0.9%) is fatherless, 5 subjects (4.6%) are motherless, and there weren't any orphans (both fatherless and motherless). In 103 subjects (95.4%), their mother's education level is in elementary school. In 98 subjects (90.7%), they entered the Islamic boarding school based on their own will. A total of 106 subjects (98.1%) didn't experience economic difficulty. All students didn't have any serious illnesses and didn't take any doctor's prescribed drugs. The general characteristic description of the subjects is listed in Table 1.

The research subjects were divided into 2 groups: a group of students who only studied Salaf and a group of students who studied both Salaf and general sciences. As many as 48 students only learned Salaf. Their mean age is 17.33 ± 0.476 and most of them (32 subjects; 66.7%) aged 17 years.

The gender majority is female (46 subjects, 95.8%). Among the subjects, there aren't any fatherless and orphans (both fatherless and motherless), but there are 2 motherless subjects (4.2%). A total of 21 subjects (43.8%) mother's last education was elementary school. As many as 41 students (85.4%) entered Islamic boarding schools based on their own will. Most students (47 subjects; 97.9%) don't have economic difficulties. All students didn't have any serious illnesses and didn't take any prescribed drugs. The description of subjects who studied Salaf was shown in Table 1. 60 students studied both Salaf and general sciences. Their mean age was 17.67 \pm 0.475, and 66.7% among them (40 subjects) aged 18 years. The gender majority is female, which is 49 subjects (81.7%). As many as 1.7 % of subjects (1 student) were fatherless, 3 subjects (5%) were motherless, and there were no orphans (both fatherless and motherless). A total of 29 subjects (48.3%) had their

A total of 29 subjects (48.3%) had their mother's highest education level in elementary school. 57 subjects (95.0%) entered Islamic boarding school based on their own will. A total of 58 subjects (96.7%) didn't have economic difficulty. All students didn't have any serious illnesses and didn't take doctor's prescribed drugs. The description of subjects who studied both Salaf and general sciences were shown in Table 1.

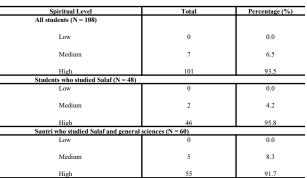
 Table 1. Research subjects Relationship Between Spirituality Level and The Incidence of Depression on Eleventh-Grade Students at Pondok Al-Hidayat Islamic Boarding School Krasak Demak

| Characteristics | Salaf | | Salaf and Ge | neral Sciences | Total | | |
|-----------------------|--------------|---------------|--------------|----------------|---------------|---------|--|
| | f | % | f | % | F | % | |
| Age | | | | | | | |
| 17 years old | 32 | 66.7 | 20 | 33.3 | 52 | 48.1 | |
| 18 years old | 16 | 33.3 | 40 | 66.7 | 56 | 51.9 | |
| Mean | 17.33 - | ± 0.476 | 17.67 | ± 0,475 | 17.52 ± 0.502 | | |
| Median | 17.00 (| (17-18) | 18.00 | (17-18) | 18.00 (17-18) | | |
| (Range) | | ı — | | | 10.001 | (17-10) | |
| Gender | | | | | | | |
| Male | 2 | 4.2 | 11 | 18.3 | 13 | 12.0 | |
| wate | 2 | 4.2 | 11 | 16.5 | 95 | 12.0 | |
| Female | 2 | 4.2 | 49 | 81.7 | 95 | 88.0 | |
| Fatherless | | | | | | | |
| | | | | | | | |
| No | 48 | 100.0 | 59 | 98.3 | 107 | 99.1 | |
| Yes | 0 | 0.0 | 1 | 1.7 | 1 | 0.9 | |
| Motherless | 0 | 0.0 | 1 | 1./ | 1 | 0.9 | |
| Moneriess | | | | | | | |
| No | 46 | 95.8 | 57 | 95.0 | 103 | 95.4 | |
| | | | | | | | |
| Yes | 2 | 4.2 | 3 | 5.0 | 5 | 4.6 | |
| Orphans (fatherless a | 48 | ess) 100.0 | 60 | 100.0 | 108 | 100.0 | |
| No | 48 | 100.0 | 60 | 100.0 | 108 | 100.0 | |
| Yes | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |
| Mother's highest edu | cation level | | | | | | |
| Elementary | 21 | 43.8 | 29 | 48.3 | 50 | 46.3 | |
| school | | | | | | | |
| | 19 | 39.6 | 13 | 21.7 | 37 | 34.3 | |
| Junior high | 7 | 14.6 | 18 | 30.0 | 20 | 18.5 | |
| school | ' | 14.0 | 10 | 50.0 | 20 | 10.5 | |
| Senior high | 1 | 2.1 | 0 | 0.0 | 1 | 0.9 | |
| school | | | | | | | |
| school | | | | | | | |
| Bachelor | | | | | | | |
| degree | | | | | | | |
| Reason for choosing | an Islamic b | oarding sch | ool | | | - | |
| Asked by | | | | | 10 | 9.3 | |
| parents | 7 | 14.6 | 3 | 5.0 | | | |
| | | | | | 98 | 90.7 | |
| By their | 41 | 85.4 | 57 | 95.0 | | | |
| own will | | | | | | | |

| Characteristics | Sa | Salaf | | neral Sciences | Total | | |
|----------------------|---------------|-------|----|----------------|-------|-------|--|
| | f | % | f | % | F | % | |
| Economic difficulty | | | | | | | |
| No | 47 | 97.9 | 58 | 96.7 | 106 | 98.1 | |
| | | | | | | | |
| Yes | 1 | 2.1 | 2 | 3.3 | 2 | 1.9 | |
| Having any serious p | hysical illne | sses | | | | | |
| No | 48 | 100.0 | 60 | 100.0 | 108 | 100.0 | |
| | | | | | | | |
| Yes | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |
| Consuming prescribe | ed drugs | _ | | _ | | | |
| No | 48 | 100.0 | 60 | 100.0 | 108 | 100.0 | |
| | | | | | | | |
| Yes | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |

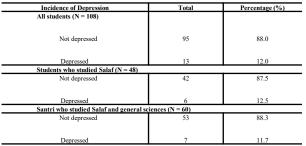
The spirituality level of the subjects was shown in table 2. All students had a high spiritual level (101 subjects, 93.5%), divided further into 46 students (95.8%) who only studied Salaf and 55 subjects (91.7%) who studied both Salaf and general sciences.

Table 2. The subjects' spiritual level description on Eleventh-Grade Students at Pondok Al-Hidayat Islamic Boarding School Krasak Demak



The incidence of depression among the subject was listed in Table 3. Of all students, most subjects didn't experience depression, which is 95 subjects (88%). When getting more specialized, as many as 42 subjects (87.5%) studying Salaf and 53 subjects (88.3%) who studied both Salaf and general sciences =didn't experience depression.

Table 3. The incidence of depression among the students at Pondok Al-Hidayat Islamic Boarding School Krasak Demak



The bivariate test results showed a significant relationship between students' spiritual level and the incidence of depression (p = 0.000) as shown in Table 4. There's also a significant relationship between spiritual level and the incidence of depression in students who only studied Salaf (p=0.013) and the students who studied both Salaf and general sciences (p=0.000). **Table 4.** The relationship between spiritual level and the incidence of depression at Pondok

Table 4. The relationship between spiritual level and the incidence of depression at Pondok Al-Hidayat Islamic Boarding School Krasak Demak

| | | Depress | Tot | | | | | |
|------------------------|-----|---------|-----|-----|-----|------|---------|--|
| Spiritual level | Yes | No | | 100 | Р | | | |
| - | N | % | N | % | N | % | | |
| All students (N = 108) | | | | | | | | |
| Moderate | 0 | 0.0 | 7 | 6,5 | 7 | 6,5 | 0,000*f | |
| | | | | | | | | |
| | | | | | | | | |
| High | 95 | 88.0 | 6 | 5.6 | 101 | 93.5 | | |

| Spiritual level | | Depres | | | | | |
|----------------------------|--------------------|-------------|----|-----|-------|------|---------|
| | Yes | No | No | | Total | | |
| | N | % | N | % | N | % | 1 |
| Students who studied Sala | f(N = 48) | - | - | | | | |
| Moderate | 0 | 0.0 | 2 | 4.2 | 2 | 4,2 | |
| | | | | | | | 0,013*f |
| | | | | | | | ., |
| High | 42 | 87.5 | 4 | 8.3 | 46 | 95.8 | |
| Santri who studied Salaf a | nd general science | es (N = 60) | | | | | |
| Moderate | 0 | 0.0 | 5 | 8.3 | 5 | 8.3 | |
| | | | | | | | 0,000*f |
| | | 00.2 | | | | 01.5 | ., |
| High | 53 | 88.3 | 2 | 3.3 | 55 | 91.7 | |

The relationship between the characteristics of the subjects and the incidence of depression was shown in Table 5. This study showed a significant relationship between gender and the incidence of depression (p = 0.049) in all students. When further explained, the significant relationship between gender and the incidence of depression was found in the group of students who studied both Salaf and general sciences (p=0.017) whereas, for the students who only studied Salaf, there was no significant relationship between gender and the incidence of depression (p=1,000).

Based on Table 5, it appears that there is no significant relationship between the mother's education level and the incidence of depression for the entire subject group (p=0.962), including the students who only studied Salaf (p= 0.914) and the students who studied both Salaf and general sciences (p = 0.847).

Table 5. Data on the incidence of depression based on the characteristics of research at Pondok

 Al-Hidayat Islamic Boarding School Krasak Demak

| No | Тс | | |
|------|--|--|---|
| | Total | | Р |
| % | N | % | |
| | | | |
| | | | |
| | | | |
| 3,7 | 13 | 12,0 | |
| | | | 0.049*£ |
| 8.3 | 95 | 88.0 | ., |
| 0,0 | | ,. | |
| 5,6 | 50 | 46,3 | |
| Í | | Ĺ, | |
| 4.6 | 37 | 34.3 | |
| 1,0 | 57 | 54,5 | 0,962 [€] |
| 1.0 | 20 | 19.5 | 0,902 |
| 1,9 | 20 | 16,5 | |
| | | | |
| 0,0 | I | 0,9 | |
| | | 1 | |
| | | | |
| | | | |
| 0,0 | 2 | 4,2 | |
| | | | 1,000£ |
| 12,5 | 46 | 95,8 | |
| | | | |
| 4,2 | 2 | 43,8 | |
| | | | |
| 6,3 | 3 | 39,6 | |
| | | | 0,914€ |
| 2,1 | 1 | 14,6 | |
| | | | |
| 0,0 | 0 | 2,1 | |
| | | | |
| | | | |
| 1 | | | |
| 6,7 | 11 | 18,3 | 0,017*£ |
| | | | <i>.</i> |
| 5.0 | 49 | 81.7 | |
| | 8,3 5,6 4,6 1,9 0,0 12,5 4,2 6,3 2,1 0,0 | 8,3 95 5,6 50 4,6 37 1,9 20 0,0 1 0,0 2 12,5 46 4,2 2 6,3 3 2,1 1 0,0 0 6,7 11 | 8,3 95 88,0 5,6 50 46,3 4,6 37 34,3 1,9 20 18,5 0,0 1 0,9 0,0 2 4,2 12,5 46 95,8 4,2 2 43,8 6,3 3 39,6 2,1 1 14,6 0,0 0 2,1 |

| The characteristics of | De | T (1 | | | | | | |
|----------------------------|-------|--------------|----|-------|----|------|-------|--|
| The characteristics of | Y | N | No | Total | | Р | | |
| subjects | Ν | % | N | % | N | % | | |
| Mother's highest education | level | | | | _ | | | |
| Elementary School | 25 | 41,7 | 4 | 6,7 | 29 | 48,3 | | |
| Junior High School | 16 | 26,7 | 2 | 3,3 | 18 | 30,0 | 0.045 | |
| Senior High School | 12 | 20,0 | 1 | 1,7 | 13 | 21,7 | 0,847 | |
| Bachelor's degree | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | |

This study found that 46 students (95.8%) studying only Salaf and 55 students (91.7%) studying both Salaf and general sciences had high spiritual level. There was no significant difference (p > 0.05) between students' spirituality level (p = 0.459) in both groups of students who studied Salaf and the group of students who studied both Salaf and general sciences. In addition, there was no significant difference in the incidence of depression between the students who studied Salaf and general sciences (p = 1,000).

Discussion

The relationship between spirituality level and the incidence of depression

This study showed that spiritual level was associated with the incidence of depression in eleventh-grade students at Al-Hidayat Islamic Boarding School Krasak Demak. Most students who have a high spiritual level are not depressed while students who have a moderate spiritual level are generally depressed. The result is in line with Mahwati et al., saying that spirituality is significantly related to the incidence of depression [7]. This result is also in line with a study conducted by Rentala et al., stating that there is a relationship between spiritual level and depression. It also explained that mostly, mild depression occurs in subjects with high spiritual levels [6].

The relationship between spirituality level and the incidence of depression in

students who only studied Salaf

This study was conducted on teenagers. Teenagers tend to seek spirituality in various ways. In this study, teenagers seek spirituality by studying Salaf in an Islamic boarding school. Their spiritual fulfillment making them able to overcome various mental problems such as aggression, depression, and anxiety, which arise from high divorce rates or environmental instability [18]. This is because spirituality can cultivate youth perspectives by providing a sense of protection, security, and comfort [19].

A high spiritual level can build a sense of self-acceptance in teenagers, making them feel less pressured. Spirituality also plays a key role in expressing feelings, providing comfort, encouraging individuals to get closer to God, and accepting their shortcomings as trials of life from God [20, 21]. Islamic spirituality can motivate and encourage every individual to do good deeds that are beneficial to himself and others. Islamic spiritual therapy has been proven effective for preventing depression, psychological disorders, [20] and reducing stress [21].

The relationship between spiritual level and the incidence of depression in students who studied both Salaf and general sciences

The study result indicates a significant relationship between spiritual level and the incidence of depression in eleventh-grade students who only studied Salaf. The dif-

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ferences between the group of students who studied Salaf and the students who studied both Salaf and general sciences were based on their activities and education. The students who studied Salaf and general sciences were having more activities and educational burdens. It may give more pressure on students. Stressful life events often precede episodes of depressive disorder [18]. In addition, students with this particular academic program tend to experience depression [2].

The relationship between characteristics of the research subject and the incidence of depression

Gender was associated with the incidence of depression amongst all eleventh-grade students at the Al-Hidayat Krasak Demak Islamic Boarding School. When looking at further detailed data, in eleventh-grade students who only studied Salaf, gender wasn't related to the incidence of depression. Meanwhile, there is a relationship between gender and the incidence of depression in eleventh-grade students who studied both Salaf and general science.

This result is in line with the research from Sequeira et al., which stated that gender during adolescence plays a role in the incidence of depression. The study also showed that gender was a predictor of depression [22]. According to Baldursdottir et al., girls in their adolescence tend to have a higher level of depression compared to boys. This could be due to the lower level of physical activity in women [23]. A similar thing was reported by Langvik et al., that women have a higher incidence of depression rather than men because insomnia is more common in women [24].

Our study doesn't find a significant relationship between sociodemographic characteristics and the incidence of depression. In accordance with our result, Bhattarai et

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al. also stated that there was no significant relationship between sociodemographic characteristics, such as age, gender, parental education, and the incidence of depression [25]. Similar findings were observed amongst the undergraduate students at Pokhara Metropolitan, where age and gender were not associated with students' depression levels [26]. Another study in Iran also found that parents' marital status and parental education level were unrelated to student depression in adolescents [27].

Differential test for the level of spirituality and the incidence of depression on subjects who only studied Salaf and subjects who studied both Salaf and general sciences The study was conducted in two groups, namely the group of students who only studied Salaf and the group of students who studied both Salaf and general sciences. Both groups are the eleventh graders at the Al-Hidayat Islamic Boarding School, Krasak Demak. In this study, there were no significant differences in terms of spiritual level among both groups.

One of the reasons why there were no differences in the spirituality level between both groups was that they started the same learning and religious activities early in the morning. In Al-Hidayat Islamic Boarding School Krasak Demak, religious activities were an obligated program in both groups to obtain a high spiritual level. For the students in both groups, routined religious activities can connect individuals with God through prayer and reading the Al Quran, hadiths, and other religious books. Secondly, the two groups both lived in Islamic boarding schools. Environmental factors are known to influence the incidence of depression in students. This statement was supported by Hakiqi's study, which stated that depression levels in teenagers can be influenced by environmental factors, such as residency [28]. Another study by Arsita,

et al. also found that the level of depression between the students who study in Islamic boarding schools and students who study in schools is different [29]. Because both groups live in the same residency, therefore there's also no difference in the incidence of depression.

Limitation: This study didn't examine other factors influencing the incidence of depression such as psychosocial factors, including psychodynamics in depression, life events, and environmental stress, as well as students' personality.

Conclusions

In the study, the incidence of depression amongst eleventh-grade students of Al-Hidayat Islamic Boarding School Krasak Demak was 12%. The spiritual level of eleventh graders at the Al-Hidayat Krasak Demak Islamic Boarding School are varied. Most of them are having high spiritual levels, while the rest of it, is having a moderate level of spirituality. The results show a relationship between spiritual level and the incidence of depression in eleventh graders at the Al-Hidayat Krasak Islamic Boarding School. The two groups of students don't have a significant difference in spiritual level and the incidence of depression. This study suggested the need for further research related to psychosocial factors that may affect the incidence of depression in students.

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