The Correlation between Alexithymia with Gender among Nursing Students

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ABSTRACT

Background: alexithymia is a psychological condition characterized by the inability to recognize and express emotions verbally or non-verbally. People who experience alexithymia often have difficulty identifying and expressing their emotions appropriately and clearly.

Purpose: the purpose of this study was to determine relationship of alexithymia with gender among nursing students in Universitas Padjadjaran.

Methods: the population of this study was active students in the Bachelor's program of the Faculty of Nursing, Universitas Padjadjaran, Jatinangor/Garut and Pangandaran campus, who experienced social media addiction and are in the class of 2017, 2018, 2019, and 2020. The instrument used was the Toronto Alexithymia Scale-20 (TAS-20). Total sample was 590 students. This instrument was an instrument containing 20 statement items used to assess the level of alexithymia.

Results: based on the results of the analysis of the data obtained, there is a relationship between the alexithymia level variable and gender with a sig value relationship. with a positive correlation coefficient value of 0.285, which means that the strength of the relationship between the two variables is sufficient.

Conclusion: there is an adequate and positive relationship between gender and the level of alexithymia among nursing students in Universitas Padjadjaran.

Keywords:
Alexithymia; gender; nursing; students.

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BACKGROUND
In general, emotions can arise accidentally and unconsciously. The word "emotion" comes from the Latin word consisting of the word "movere", which means to move or move, and the word "e" which gives the meaning to move away, which implies a tendency in action. However, there are situations where emotions become automatic and cause a person to be unable to express their emotions, which is a condition known as alexithymia (Donges & Suslow, 2017).

According to research by Lyvers, et al. (2018), alexithymia is characterized by three main things, namely difficulties in identifying emotions (Difficulty Identifying Feelings), difficulties in expressing emotions (Difficulty Describing Feelings), and lack of emotional imagination (Externally Oriented Thinking). People with alexithymia may have difficulty recognizing their own feelings, for example, being unable to distinguish between fear and anxiety, or being unable to recognize feelings of joy or sadness.

Second, difficulty in describing emotions or Difficulty Describing Feelings. People with alexithymia may find it difficult to verbally describe their feelings, and may use very simple or general descriptions, such as "good" or "bad."

Third, external orientation or Externally Oriented Thinking. People with alexithymia may focus more on external events and information than on their own internal emotional experiences. They may have difficulty understanding their own thoughts and feelings, as well as difficulty reading and understanding other people's feelings.

Alexithymia can be a major problem faced by students when studying lectures. This problem can even be said to be more serious than academic and non-academic problems. This is because the nature of the problem in someone who experiences alexithymia will feel that they are not experiencing any problems and are not aware of the events they are experiencing. (Alzahrani et al., 2020). Health students often experience emotional difficulties (Popa-Velea et al., 2017), and health students will tend to experience more alexithymia due to the academic burden they face during lectures consisting of various types and learning methods (Alzahrani et al., 2020).

The causes of alexithymia are still not known with certainty and are still not understood. Trauma can cause affective disorders or regression, namely the loss of a person's ability to experience or express emotions appropriately and healthily. This will relate to the level of a person's ability to understand their situation and feelings personally.

Apart from trauma, several other factors that can cause alexithymia include genetic factors, certain medical conditions such as autism and psychological disorders such as depression or anxiety. Increased stress, hormonal imbalance, or exposure to toxins can also affect a person's level of stability and awareness to know and express their emotions (Goerlich 2018).

Previous study show that childhood trauma events can seriously affect a person's mental health (Yosep, Hikmat, Mardhiyah, et al., 2023). Traumatic events in childhood can trigger a prolonged stress response, which can affect the development of the brain and central nervous system (Yosep, Hikmat, & Mardhiyah, 2023b).
This will affect the level of individual ability to be able to have stable emotions, cognitive abilities, attitudes, behaviors and some mental disorders that may occur as well as the possibility of alexithymia (Yosep et al., 2021). In addition, alexithymia can also be caused by a deficit in cognitive-affective development, where according to Lane and Schwartz's theory, people with alexithymia may experience impaired cognitive development so that they have poor emotional awareness (Timoney & Holder, 2013; Harjanah, 2018).

In general, according to Mattila et al. (2009, dalam Harjanah, 2018) the incidence of alexithymia in men shows a higher rate, which can reach 9% -17% and in women the incidence rate only reaches 5% -10%. Previous research studies state that there are several differences in the prevalence of alexithymia events that occur in college students. The results of the first study conducted by Alzahrani et al. (2020) showed that as many as 347 health students, 49% of them suffer from alexithymia, with a frequency distribution of 51% for males and 49% for females. Furthermore, another study discussing the same matter, namely alexithymia in medical students in China, showed that 297 out of 1,886 (15.7%) had a tendency to alexithymia with a higher incidence rate in males than females (Yosep, Hikmat, & Mardhiyah, 2023a; Zhu et al., 2017).

Alexithymia is a condition that is not classified as a mental illness, according to the Diagnostic and Statistical Manual of Mental Disorders 5, this condition tends to be associated with several mental health problems, for example anxiety disorders, depression, and even personality disorders. In addition, there are several studies showing that alexithymia may be a risk factor in producing compulsive behaviors such as internet or social media addiction. People who experience alexithymia tend to find it difficult to identify or express their emotions, so they may seek diversion or comfort from internet or social media addiction (Lyvers et al., 2019).

Addiction to social media can result in various psychosocial and psychopathological problems such as depression, social anxiety, loneliness (Mersin et al., 2020; Youssef et al., 2020). Addiction to social media can also cause stress as stated by Lyvers et al. (2016) seperti dikutip oleh (Mahapatra & Sharma, 2018). In addition, social media addiction can affect student academics, where 70.6% of students with moderate social media addiction have problems with their academic performance (Beyene, 2018).

Students with scores on the TAS-20 can indeed be used to evaluate a person's level of alexithymia. If a student has a high score on the TAS-20, it can indicate that he or she has difficulty identifying or describing their emotions. This condition can affect interpersonal relationships, mental health, and maladaptive coping. (Alzahrani et al., 2020), decreased individual capacity to analyze and show their emotions (Timoney & Holder, 2013) compared to students without alexithymia (lower TAS-20 score).

Alexithymia has characteristics related to a decreased ability to identify, show, and express one's own emotions and a lack of ability to understand the emotions of others. This will affect the inhibition of an individual's ability to establish and carry out healthy and close social interactions with others. In addition, difficulties in expressing emotions can also cause
someone with alexithymia to feel less supported socially and weaker in social relationship skills. (Mersin et al., 2020).

People with alexithymia are also considered to have low empathy skills, namely the ability to see other people's perspectives and points of view to understand their feelings (Goerlich, 2018). This happens because a person is unable to position himself when interacting with other people. (Thompson, 2009; Harjanah, 2018).

Therefore, nurses can also provide appropriate therapeutic interventions for individuals who have been diagnosed with alexithymia. Individual therapy that focuses on developing emotional skills can help individuals with alexithymia to better understand, identify, and express their emotions. Group therapy can also help individuals to learn and practice in a safe and supportive social context.

Nurses can also help individuals with alexithymia to develop social and interpersonal skills. This can be done through intervention programs that focus on developing communication skills, conflict management, and developing healthy and positive interpersonal relationships. In addition, nurses can also act as facilitators or liaisons between individuals with alexithymia and other resources such as psychologists or psychiatrists for further therapy if needed.

**OBJECTIVE**
The purpose of this study was to determine relationship of alexithymia with gender among nursing students in Universitas Padjadjaran.

**METHODS**
This research used quantitative methods with a correlation descriptive design and used a cross sectional research design. This research was located on the campus of the Faculty of Nursing, Padjadjaran University.

The population of this study was active undergraduate students in the Faculty of Nursing, Padjadjaran University, Jatinangor/Garut and Pangandaran campuses who experienced addiction to social media and how many in the 2017, 2018, 2019 and 2020 batches, with a total of 590 people. The sampling technique used was total sampling, in order to obtain a total sample of 590 people. The inclusion criteria for this study were active undergraduate students in the Faculty of Nursing, Padjadjaran University who were in the class of 2017, 2018, 2019 and 2020, Jatinangor/Garut and Pangandaran campuses who experienced addiction to social media.

The instrument used was the Toronto Alexithymia Scale-20 (TAS-20) developed by Bagby, Parker, & Taylor (1994) and by Lenggo Geni (2020) which has been adapted and translated into Indonesian. This instrument is an instrument containing 20 statement items used to assess the level of alexithymia.

There were 3 subscales assessed, which consist of 7 Difficulty Identifying Feelings (DIF) statement items indicating difficulty in identifying and differentiating emotions, 5 Difficulty Identifying Feelings (DDF) statement items indicating difficulty in describing emotions, and 8 Externally statement items Oriented Thinking (EOT) characterizes a way of thinking that is
more focused on talking about objective external facts than talking about their feelings or the feelings of other people.

In his assessment, the level or level of alexithymia was assessed using a five-point Likert scale with details, namely 1 = Strongly Disagree (STS), 2 = Disagree (TS), 3 = Neutral (N), 4 = Agree (S), and 5 = Strongly Agree (SS).

**Table 1. Interpretation of TAS-20 instrument rating scores**

<table>
<thead>
<tr>
<th>Score</th>
<th>Alexithymic level</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 51</td>
<td>No alexithymia</td>
</tr>
<tr>
<td>52 – 60</td>
<td>Possible alexithymia</td>
</tr>
<tr>
<td>61 – 100</td>
<td>High alexithymia</td>
</tr>
</tbody>
</table>

The data collection method used was an online survey method using the Google Form link. Data collection was carried out by distributing the form link in each class group, and ensuring that each student filled it out. The data collection process was carried out on 10 – 25 May 2021. After the data is collected, data analysis will be carried out using univariate and bivariate analysis. Univariate analysis was carried out in describing the data by making a frequency distribution of each variable. Bivariate analysis was carried out to determine the relationship between variables using the Spearman test to find out the results of the correlation hypothesis and get the final results of the study.

This research has obtained a research permit with ethical number 392/UN6.KEP/EC/2021 and uses several principles of research ethics including autonomy or freedom for respondents to be available to be involved in the research process without coercion, justice or principles that treat all respondents with treatment the same beneficence or principles that discuss the usefulness of research, non-maleficence or principles which mean that research does not harm respondents, and confidentiality or principles related to the confidentiality of respondents' identities.

**RESULTS**

The research results obtained a sample of 590 respondents. The tabulation of data based on demographic data includes age, gender, class and campus location by respondents can be seen in the following table:

**Table 2. Frequency distribution of research respondents characteristics (n=590)**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 20</td>
<td>341</td>
<td>57,7</td>
</tr>
<tr>
<td>21 – 23</td>
<td>249</td>
<td>42,3</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>60</td>
<td>10,1</td>
</tr>
<tr>
<td>Women</td>
<td>539</td>
<td>89,9</td>
</tr>
</tbody>
</table>

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Demographic Variables

<table>
<thead>
<tr>
<th>Grade</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>164</td>
<td>27.9</td>
</tr>
<tr>
<td>2018</td>
<td>144</td>
<td>24.3</td>
</tr>
<tr>
<td>2019</td>
<td>130</td>
<td>22.1</td>
</tr>
<tr>
<td>2020</td>
<td>152</td>
<td>25.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Campus Location</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jatinangor/Garut</td>
<td>531</td>
<td>90.0</td>
</tr>
<tr>
<td>Pangandaran</td>
<td>59</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Based on the data in Table 2, it can be seen that the majority of respondents aged 18-20 years were 341 people (57.7%). Meanwhile, the majority of respondents were female, 530 people (89.9%). In terms of class categories, the majority of respondents were in the 2017 class of 164 people (27.9%). Meanwhile, in terms of campus location, the majority of respondents came from the Jatinangor/Garut campus as many as 531 people (90%).

Table 3. Frequency distribution of alexithymia levels (n=590)

<table>
<thead>
<tr>
<th>Category</th>
<th>F</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No alexithymia</td>
<td>140</td>
<td>23.6</td>
</tr>
<tr>
<td>Possible alexithymia</td>
<td>204</td>
<td>34.5</td>
</tr>
<tr>
<td>High alexithymia</td>
<td>246</td>
<td>41.9</td>
</tr>
</tbody>
</table>

Based on Table 3, it can be seen that as many as 246 people (41.9%) of the respondents are in the high alexithymia category. Other respondents were in the category of possible Alexithymia as many as 204 people (34.5%) and not Alexithymia as many as 140 people (23.6%).

Table 4. Frequency Distribution of Alexithymia Levels by Gender (n=590)

<table>
<thead>
<tr>
<th>Alexithymia results</th>
<th>No Alexithymia</th>
<th>Possible Alexithymia</th>
<th>High Alexithymia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Gender</td>
<td>f'</td>
<td>%</td>
<td>f'</td>
</tr>
<tr>
<td>Men</td>
<td>10</td>
<td>16.7</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>Women</td>
<td>130</td>
<td>24.5</td>
<td>183</td>
<td>34.5</td>
</tr>
</tbody>
</table>

Based on Table 4, it can be seen the results of research regarding the level of alexithymia based on sex in active students of the Faculty of Nursing, Padjadjaran University show that the percentage for the high alexithymia category is greater in male respondents, namely as much as 48.3%. Meanwhile, the percentage of the non-alexithymia category was greater in the female category, which was 24.5%.

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Table 5. Results of spearman's gender test with alexithymia levels

<table>
<thead>
<tr>
<th>Significance Value</th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.027</td>
<td>0.285</td>
</tr>
</tbody>
</table>

Based on Table 5. The significance value between gender and alexithymia is 0.027. This shows that there is a relationship between gender and alexithymia because the significance value is <0.05. While the strength level of the correlation is positive 0.285. Then the value of the relationship between the sexes with Alexithymia is related to the level of the correlation coefficient value is sufficient.

DISCUSSION

In this study, an analysis of the relationship between alexithymia and gender was carried out in active college students who are addicted to social media. The results of the analysis show that there is a significant relationship between alexithymia and gender in active students who are addicted to social media. It can be seen that based on the data in Table 2 that the majority of respondents aged 18-20 years were 341 people (57.7%). Meanwhile, the majority of respondents were female, 530 people (89.9%). In terms of class categories, the majority of respondents were in the 2017 class of 164 people (27.9%). Meanwhile, in terms of campus location, the majority of respondents came from the Jatinangor/Garut campus as many as 531 people (90%).

Table 3 shows the results of the frequency distribution of the level of alexithymia in active students of the Bachelor of Nursing program at the Faculty of Nursing, Padjadjaran University, Jatinangor/Garut and Pangandaran campuses who experience social media addiction and how many are in the 2017, 2018, 2019 and 2020 batches.

In Table 4 which discusses the frequency distribution of alexithymia levels based on gender, it is found that the alexithymia level in active students of the Faculty of Nursing, Padjadjaran University shows that the percentage for the high alexithymia category is greater in male respondents, namely 48.3%. Meanwhile, the percentage of the non-alexithymia category was greater in the female category, which was 24.5%.

Several previous studies have shown that women tend to have higher levels of alexithymia than men Messedi et al. (2017). Some studies even show significant differences in the ability to identify emotions between men and women, where women have a better ability to identify emotions. As many as 51% of men (or about 87 students out of 170 who experienced alexithymia) experienced alexithymia, while only 49% of women (or around 83 out of 170 students who experienced alexithymia) experienced it Alzahrani et al. (2020). Another study conducted on health students in China showed that of 1,886 students, 297 (or around 15.7%) had alexithymia tendencies (Zhu et al., 2017).

However, there are differences in the results of this study with previous research, namely research conducted by Hamaideh (2017) showing that as many as 24.6% of Jordanian University students experience alexithymia tendencies. In addition, the data stated that
women have a higher incidence of alexithymia than men. However, there is no specific mention of the percentage of alexithymia events in males and females. Research conducted by Youssef et al. (2020) showed different results, it can be seen that women have an average alexithymia score that is higher than men. Women have an average alexithymia score of $56.99 + 9.38$, while men have an average alexithymia score of $54.16 + 9.19$. This indicates that women tend to have more difficulties in recognizing and expressing emotions verbally compared to men.

Alexithymia is a personality characteristic characterized by difficulty identifying and expressing emotions verbally or physically, as well as a lack of awareness and understanding of internal emotional experiences. People who experience alexithymia are often more focused on external events and use a different cognitive style in processing emotional information (Donges & Suslow, 2017; Lyvers et al., 2018). Alexithymia can also be interpreted as a condition in which a person has difficulty understanding and recognizing their own and other people's feelings or emotions. People who experience alexithymia may find it difficult to verbalize their feelings or be unable to feel emotions on a deep level. This can affect their ability to communicate with others and understand interpersonal relationships (Holman et al., 2018; Lyvers et al., 2016; Mersin et al., 2020).

According to the Basic Concepts of Nursing (KDM) put forward by Virginia Henderson, one of the basic human needs is the need to communicate and express emotions, the need to share needs, worries, fears, opinions and feelings with others. In this context, a person's inability to express their emotions may indicate that their emotional condition is unhealthy (Budiono, 2016; Youssef et al., 2020). Someone with a high alexithymia score tends to have less social skills and has difficulty building interpersonal relationships, which can lead to social interaction anxiety due to their inability to interpret or respond to other people's emotions appropriately (Lyvers et al., 2018).

Based on the results of correlation testing using Spearman's rank which can be seen in Table 5 above, it can be concluded that there is a relationship between gender and alexithymia in students who experience social media addiction in the Undergraduate Program in the Faculty of Nursing, Padjadjaran University, Jatinangor/Garut campus, and Pangandaran class of 2017, 2018, 2019, and 2020. This can be seen from the scores The significance obtained is 0.027 which is below the alpha value (0.05). Thus, the alternative hypothesis (H1) is accepted and the null hypothesis (H0) is rejected, so it can be concluded that gender has an effect on the level of alexithymia in students who experience social media addiction in the Undergraduate Program of the Faculty of Nursing, University of Padjadjaran, Jatinangor/Garut campus, and Pangandaran class of 2017, 2018, 2019, and 2020.

The strength of the relationship can be seen from the value of the positive correlation coefficient of 0.285, which means that the strength of the relationship in this study is moderately related. The independent variable which is gender can be said to be able to influence the dependent variable, namely alexithymia in active students in the Bachelor of Nursing program, Padjadjaran University, Jatinangor/Garut and Pangandaran campuses who experience social media addiction and how many are in the 2017, 2018, 2019 and 2020 batches.
As a nursing student, good and effective communication skills are very important in implementing optimal nursing care. This is because nursing students are required to interact with various types of patients with different health conditions (Lyvers et al., 2018).

If nursing students experience difficulties in communicating, this can affect the quality of nursing care provided. Therefore, nursing students need to be trained in effective communication skills, especially for students who experience alexithymia, so that they can provide optimal nursing care to patients and their families. Optimal communication is also important in making the right decisions in patient nursing care. In many cases, it is necessary for the nurse to work closely with the rest of the healthcare team in determining the right treatment plan for the patient. Effective communication can help ensure that decisions are made based on a clear understanding of patient needs, health conditions, and patient values and preferences (Mersin et al., 2020; Youssef et al., 2020). Therefore, it is important for nurses to develop good communication and collaboration skills in an interprofessional context, so that they can work together with other members of the healthcare team to provide the best and safest nursing care for patients (Rahmawati & Halim, 2018; Scimeca et al., 2014).

However, in this study there were several limitations, including during the data collection process, there were several respondents who did not fill out the questionnaire that the researcher had distributed through their respective batch groups. The research was conducted during a pandemic, so researchers contacted respondents online. Busy factors and the density of lecture schedules can affect the participation of respondents in research. In addition, there are other factors such as the lack of motivation or interest of the respondents in participating in research, or perhaps the discomfort in expressing sensitive issues such as alexithymia. Therefore, it is important to pay attention to these factors in research planning and data collection in order to minimize bias and obtain more accurate results.

CONCLUSION
There is an adequate relationship between gender and the level of alexithymia active students in the Bachelor of Nursing program, Padjadjaran University, Jatinangor/Garut and Pangandaran campuses who experience social media addiction and how many are in the 2017, 2018, 2019 and 2020 batches. Therefore, it is important for nurses to develop good communication and collaboration skills in an interprofessional context, so that they can work together with other members of the healthcare team to provide the best and safest nursing care for patients. It is hoped that in future research can be carried out using a larger and wider population and sample, research can be carried out not only for nursing students but for other health students.

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