# Alexithymia and its relation with Social Media among nursing students

**Asmaa Atef Thabit Ahmed[1], Mawaheb Mahmoud Zaki[2] and Fathyea Abdallah shams El-Din [3]**
[1]Demonstrator of Psychiatric and Mental Health Nursing, Sohag University,
[2]Assistant Professor of Psychiatric and Mental Health Nursing, Benha University, Egypt
[3]Lecturer of Psychiatric and Mental Health Nursing, Benha University, Egypt
Corresponding author email: asmaaatef069@gmail.com
Phone number: 002-01021343504

## Abstract

**Back ground:** Nursing students need to be aware of the optimal use of the social media because they spend a lot of time conducting scientific research that complements the academic curriculum, but when a nursing student becomes unable to control the use of the platform's, this leads to internet addiction and this will affect their physical, psychological and social health . **Aim:** This study aimed to explore the relation between alexithymia and social media among nursing students. .**Design:** Correlational research design was used in the current study. **Sample:** quota sample Consists of 352 Nursing was chosen from the four- grades students of Faculty of Nursing, Benha University. **Tools:** Three tools were used (**1st tool**): Structured Interview Questionnaire sheet. (**2nd tool**): Toronto Alexithymia Scale**. (3rd tool):** Social Media Scale Student Form**. Results:** nearly half (48.6%) of the studied students have moderate level of social media addiction and more than half (51.1%) of the studied students have possible alexithymia level. **Conclusion:** there was a highly statistically positive correlation between total level of social media addiction and total level of alexithymia. **Recommendations:** The hazards and determinants of social media addiction should be added to the educational curricula and the methods that must be followed to avoid its adverse effects on physical, psychological, and social well.

*Key words:* Alexithymia, Nursing Students, and Social Media

## Introduction

Nowadays, social media is a crucial aspect of life, particularly for students. In keeping with this, previous research found that more than half of pupils had a moderate level of internet addiction. It also demonstrates that students prefer to be online 24 hours a day, which defines students' addiction to social media. The influence of social media usage on their academic achievement is both positive and negative. Many colleges throughout the world have changed their curricula. Distance education is becoming increasingly popular. Students and teachers might readily engage with one another via social media. Social networking sites such as Facebook, Twitter, What's Up, and Instagram divert students' attention away from their studies, negatively impacting their academic grades. *Kaptangil* & **Calisir** (*,2023).*

Social media has altered the way we engage with one another online. It enables us to learn what's going on in the world in real time, to connect with one another and remain in contact with long-distance pals, and to have access to an infinite quantity of knowledge at our fingertips. In many ways, social media has enabled many people to connect with others online, making the globe appear more approachable. It is sometimes difficult for pupils to distinguish between time spent online for educational and non-educational purposes. As a result, students have to recognize and distinguish between excessive internet usage and internet addiction, and appropriate treatments and strategies must be employed to identify and minimize social media use. *Shehata & Abdeldaim, (2021).*

Social media addiction is a behavioral addiction characterized by being too obsessed with social media, being driven by an uncontrolled want to log on to or use social media, and investing so much time and effort to social media that it impacts other vital life areas. Excessive Internet use may have a detrimental impact on a student's life, causing them to experience family troubles and lose social communication. Because nursing is centered on delivering comprehensive health care utilizing current technologies, including internet technology, nurses must teach students how to avoid being hooked to the Internet so that we may construct a healthy professional life*. Shaban, (2022).*

Previous research shows that alexithymia is associated with the development of addictive behaviors *Hao & Jin , (2020 ).*People with alexithymia have difficulty in expressing their emotions and thus they have fewer close relationships, poor social support networks and often feel disconnected from others *Frye.cox & Hess,(2020).* All these factors amplify the feeling of loneliness. Also the direct effect of alexithymia on loneliness and found out that this strong association was a result of lack of trust in others.

Alexithymia is linked to the development of addictive behaviors'. Relevant field study links internet addiction (social media addiction) to Alexithymia in students and late teens. Alexithymics are more likely to become addicted to the internet than non-alexithymics. The intensity of addiction in university students is positively connected with alexithymia, although the direction and elements that may moderate this association

remain unknown. ***Soranidou & Papastylianou, (2019).***

## Significance of the study

Several studies revealed that, 58.7% 58.7% of the world's population, or 4.65 billion individuals, utilized social media platforms. Many people now rely heavily on social media as their primary means of receiving and processing news, and they often make important life choices on what they read there. It's safe to say that the Internet is now an integral part of almost every industry because to the meteoric rise in Internet users throughout the globe. Over 4.54 billion individuals throughout the world have access to the Internet, with 3.80 billion using social media and online video social apps ***Kurniawan, 2020 &Zmavc et al .,(2022).***

Furthermore, research has shown that college students have an overwhelming interest in social media. In the world, 330 million individuals are addicted to social media. Social media addiction has become a worldwide issue, and excessive usage among college students has caused alarm all around the world ***Gao et al.,( 2022).***

Nursing role in management of social media addiction:-  The role of psychiatric nurse in management of social media  addiction divided in three phases (Assessment, treatment, relapse phase). **In assessment phase**, the nurses' role is to encourage the client to assess their online activities. It's safe to say that the Internet is now an integral part of almost every industry because to the meteoric rise in Internet users throughout the globe. **In treatment phase**, The nurse encourages the student to adopt time management skills and assists him in identifying problem-solving strategies such as exploring reasons of loneliness and moving to social life real-world scenarios.. **In Relapse** phase, the nurse helps him to identify the   benefits of the recovery process, consequences of relapse, identify potential relapse triggers and develop alternative behaviors ***Shen, (2019).***

## Aim of the study

This study this study aimed to explore the relation between alexithymia and social media among nursing students.

## Research questions

Q1-What is the level of social media addiction among students of Faculty of Nursing?

Q2-What is the alexithymia among students of Faculty of Nursing?

Q3- Is there relationship between social media addiction and alexithymia among students in Faculty of Nursing?

## Subject and methods

### I. Technical Design

Technical design for this study included research design, research setting, research subject  and tools of data collection.

## Research Design

A  correlational research design was utilized to fulfill the aim of this study.

## Setting

This study was conducted at the Faculty of Nursing at Benha University, Qalyubia governorate.

## Sample type & technique

Convenience sample method was chosen from the four- grades students of   Faculty of Nursing, Benha University.

## Sample size

Quota sample of 352 students was chosen from the four- grades students of Faculty of Nursing, Benha University

## This sample should meet the following Inclusion criteria

- ▪ Both sex of students.
- ▪ All grade students.
- ▪ Free from psychiatric disorders.
- ▪ Willing to participate in this study.

## Tools of data collection

In order to fulfill the aim of this study, the data was collected by using the following four tools:-

**Tool I : A self-Administered Questionnaire :**

It was developed by the researcher and it included two parts:

**Part I: Personal data of students**:

It included student's age (years), sex, marital status, educational grade, residence, family income, parent's working status, and family stability .

**Part II:  Data related to social media use:**

Consists of four questions; (what are the most social media used, How many days do you use social media, what is duration of social media use,and   What is the most time you use social media?).

**Tool (II): Social Media Scale Student Form (SMAS-SF):**

This scale designed by ***Sahin,(2018)*** in an English language and translated by investigator into an Arabic language to determine the levels of social media addiction of students.It consisted  of 29 items. The scale was divided into four domains: virtual tolerance (5 items),virtual communication (9 items), virtual problem (9 items), and virtual information (6 items).The scale was on a three-point likert scale, ranging from  agree (3), strongly agree, (2) somewhat agree, (1) disagree"

All of the items in the scale are positive.  Total scale score ranged from 29-87. The higher scores indicate that agent perceives himself as a "social media addict".

## Scoring system

- Score of 52 or less (<60%) mean no social media addiction.
- Score from 53 to 56 (60-<65%) mean mild social media addiction.

- Score from 57 to 78 (65-<90%) mean moderate social media addiction.
- Score of 79 to 87 (≥90%)   indicate high social media addiction *Sahin,(2018).*

Researchers and experts in psychiatric nursing made translation and back translation. The Arabic version of the Social Media Scale Student Form was tested for content validity, revised by three psychiatric nursing experts.

## Reliability of the Tools

The tools' trustworthiness was assessed using Alpha Cronbach reliability analysis, which found that each tool was constructed from up of quite comparable items, as shown by the moderate to high reliability of each tool.

| Tools | No. of items | Alpha Cronbach |
|---|---|---|
| Toronto Alexithymia Scale | 20 | 0.955 |
| Social media | 29 | 0.897 |

## Pilot Study

Before starting of data collection pilot study was conducted to test the applicability of the tools, the feasibility of tools and estimate the time for collecting the date needed for collecting the data. It was conducted on 10% of the total sample (35 students) according to the selecting criteria. All students participated in the pilot study excluded from the actual study sample.

## Tool III: Toronto Alexithymia Scale (TAS):

It was developed by *Bagby et al., (1994)* in an English language and translated by investigator into an Arabic language*.* used to measures difficulty in identifying and describing emotions, which is a big part of  used to evaluate emotion of students It consisted of  20-item, and 3 subscales: "Difficulty describing feeling: 5 item (2, 4, 11, 12, and 17), "Difficulty identity feeling: 7 item (1, 3, 6, 7, 9, 13, and14); and "Externally oriented thinking, 8 items (5, 8,10, 15,16,18,19, and 20)".

## Scoring system

- Scores equal to or less than 30 (≤60%) mean no alexithymia.
- Scores of 31–40 (>60- 80%) mean possible alexithymia.
- Scores equal to or more than 41-50 (>80%) mean alexithymia *Bagby et al., (1994).*

## Content Validity of the tools

Some modifications were done in tool (1) Social Media  Scale  was modified were in the scoring system from 5point likert type is used in this scale: "(1) strongly disagree,(2)disagree ,(3)neither agree nor disagree ,(4)agree ,(5)strongly agree" to  3 point likert type is used in this scale: "(3) strongly agree, (2) somewhat agree, (1) disagree" and also tool(2) Toronto Alexithymia Scale was modified were in the scoring system from  5-point Likert-type scale (1 = strongly disagree; 2=Disagree ;3=neither agree nor disagree ;4=Agree;5 = strongly agree) to be as the following:  3-point Likert-type scale "(3) strongly agree, (2) somewhat agree, (1) disagree".

## Field Work

1. The investigator presented herself to the students who accepted to participate in this study and satisfied the inclusion criteria.
2. Before collecting each student's date, the investigator described the goal of the study.
3. Distributed the questionnaire and offered the tool to students to fill out, while the investigator was there to clarify the instrument and ensure that all questions were answered.
4. After receiving authorization from the Dean of the Faculty of Nursing at Benha University, data collecting began in early March 2022 and lasted until the end of May 2022. The pilot project lasted two weeks.
5. The investigator went to the chosen location three times per week on Saturday, Sunday, and Monday.
6.The days were divided according to the study schedules for each of the four grades to collect data from the studied students :-

- First grade on Saturday from 12 pm to 2 pm and Sunday from 2 pm to 3 pm for 4 weeks.
- Second grade on Sunday from 9 am to 11 am and Monday from 2 pm to 3 pm for 6weeks.
- Third grade on Saturday from 9 am to 11am and Monday from 12 pm to 1 pm for 3 weeks
- Fourth grade on Sunday from 12 pm to 1 pm to and Monday from 9 am to 11 am for7weeks.

7. The examined students completed the study tools independently, and each student needed around 10-15 minutes to complete the study tools and review them to ensure their completeness in order to avoid missing data. The average number of pupils questioned each day was between 9 and 10 per day.
8. After providing an explanation and comfort to the researched nursing student, the investigator took special measures (wearing a mask, keeping a safe distance, and using alcohol) according to corona virus conditions.

## III. Administrative design
## Administrative approval

An official permission letter was obtained from the dean of the Faculty of Nursing, Benha university to the vice dean for education and students affaires. A full explanation about the aim of the study was explained to the administration personal of the study setting to gain their cooperation during data collection.

## Ethical consideration:

The researcher was clarified objectives and the aim of the study to students. And all subjects were informed that participation in the study is voluntary and will assured anonymity and confidentiality of

the subject data. Selected subjects were informed that the content of tools was used for research purpose only and they are allowed to choose to participate or not in the study and that they have the right to withdraw from the study at any time.

## IV. Statistical design
The collected data were organized, coded, computerized, tabulated, and analyzed by using Statistical Package for Social Science (SPSS) program (version 25). Data were presented using descriptive statistics in the form of frequencies and percentage for categorical data: the arithmetic mean (X) and standard deviation (SD) for quantitative data. While the qualitative variables were compared using Chi Square test ( $X^2$ ) which used for relation tests and person correlation coefficient (r) was used for correlation analysis. The degree of significance was identified at:
- Significant result when P-value < 0.05.
- Highly significant result when .P-value < 0.001.
- Non-significant result when P-value > 0.05.

## Results
**Table 1** Shows that, the studied students **Mean ± SD** age is 20.71 ± 1.21years old, less than three quarters (71.1%) of the studied students aged from18-<23 years old , more than half of them

(54.5%) are female, 95.7% of them are single; while, more than one third of them (36.4%) are studied at fourth grade, furthermore, 91.5% of them have enough family income; also, more than half of them (56.5%) are residing at rural area, more than three quarters of their fathers (80.4%) are work and -94.6% of them consider their family are stable.

**Table (2)** Show that more than half (54.3%) of the studied students has moderate virtual information subscale. Moreover, more than half (54.3% & 51.4%) of them have moderate levels of communication & information subscale of social media addiction, respectively, while minority (0.56%) of them have high level of tolerance subscale of social media addiction.

**Figure (1)** shows that majority of the studied students (48.6%) had a moderate level of social media addiction. While a minority of them (2.0%) had high level of social media addiction.

**Figure (2)** shows that more than half of the studied students (51.1%) have a possible alexithymia 41.2% have alexithymia , and the minority (7.7%) have no alexithymia .

**Table (3)** shows that, there is a highly statistically positive correlation between total score of social media and total score of alexithymia at (p=<0.01)

## Results
**Table 1 : Frequency distribution of personal characteristics of nursing students ( n-352).**

| Personal characteristics | | No. | % |
|---|---|---|---|
| **Age (years)** | 18-<23 years old | 250 | 71.1 |
| | 23-26 years old | 102 | 28.9 |
| | **Mean ± SD** | 20.71 ± 1.21 | |
| **Sex** | Male | 160 | 45.5 |
| | Female | 192 | 54.5 |
| **Marital status** | Single | 337 | 95.7 |
| | Married | 15 | 4.3 |
| **Educational grade** | First grade | 64 | 18.2 |
| | Second grade | 104 | 29.5 |
| | Third grade | 56 | 15.9 |
| | Fourth grade | 128 | 36.4 |
| **Family income** | Enough | 322 | 91.5 |
| | Not Enough | 30 | 8.5 |
| **Residence** | Rural | 199 | 56.5 |
| | Urban | 153 | 43.5 |
| **Parents' working status** | **Mother** | | |
| | Work | 106 | 30.1 |
| | Not work | 246 | 69.9 |
| | **Father** | | |
| | Work | 283 | 80.4 |
| | Not work | 69 | 19.6 |
| **Do you consider your family is stable?** | Yes | 333 | 94.6 |
| | No | 19 | 5.4 |

**Table 2: Frequency distribution of the studied students according to total social media addiction sub-dimensions (n=352).**

| Total of social media addiction sub dimensions | No. | % | No. | % | No. | % | No. | % |
|---|---|---|---|---|---|---|---|---|
| Virtual tolerance sub-dimension | 160 | 45.5 | 11 | 3.12 | 179 | 50.8 | 2 | 0.56 |
| Virtual communication sub-dimension | 143 | 40.6 | 15 | 4.3 | 181 | 51.4 | 13 | 3.7 |
| Virtual problem sub dimension | 181 | 51.4 | 7 | 1.9 | 155 | 44.1 | 9 | 2.5 |
| Virtual information sub dimensions | 136 | 38.7 | 14 | 3.9 | 191 | 54.3 | 11 | 3.12 |

**Figure (1) Percentage distribution of the studied students according to total level of social media (n=352).**



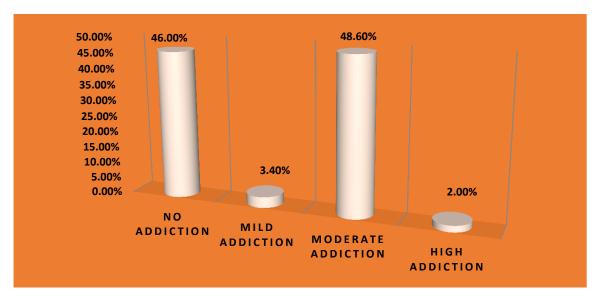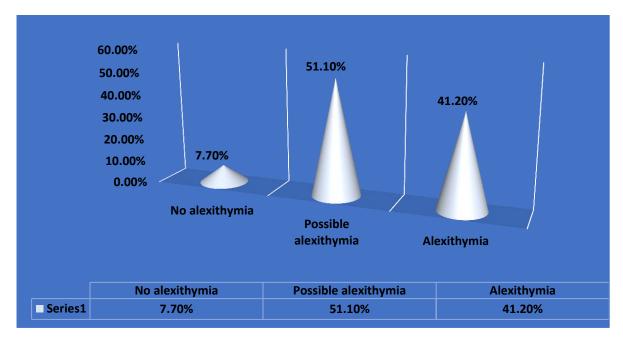**Figure (2) Percentage distribution of the Nursing students regarding alexithymia levels (n=352).**



| | No alexithymia | Possible alexithymia | Alexithymia |
|---|---|---|---|
| ■ Series1 | 7.70% | 51.10% | 41.20% |

**Table (3): Correlations matrix between total score of alexithymia and social media among the studied students (n=352).**

| Variables | Total social media addiction | | Total alexithymia | |
|---|---|---|---|---|
| | r | P-value | r | P-value |
| Total alexithymia | .342 | .000** | -- | - |
| Total social media | - | - | .342 | .000** |

(*) Statistically significant at p<0.05.      (**) highly statistically significant at p<0.01

## Discussion

Nursing is a profession that requires direct involvement with people, thus necessitating face-to-face communication. However, social media has become increasingly popular among nursing students in recent years. It is obvious that idle time spent on social media will have a negative impact on the nursing care provided. Excessive social media use leads to behavioural addiction, disconnection from real life, and worse academic accomplishment. People who are terrified of being without social media report feeling lonely when they are not using it. *Boluktas,(2022) and Xuan & Amat, (2021).*

In regards to the total level of social media addiction subscales, this study found that more than half of the studied students had moderate levels of information and communication subscale of social media addiction, while a minority of them had high levels of tolerance subscale of social media addiction.. This result was consistent with the findings of *Bhandarkar et al., (2021),* who conducted a study titled "Impact of social media on the academic success of undergraduate medical students" and found that more than half of the students studied had levels of the information & communication subscale of social media addiction. Furthermore, it was shown that a minority of them exhibited a high level of tolerance subscale of social media addiction.

On the other hand, contradicted the findings of *Filiz,(2022),* who conducted a study titled "Perceived Stress, Social Support, and the Use of Social Media in University Students During the COVID-19 Pandemic" and discovered that the majority of students had a high virtual tolerance level and almost two-thirds of them deployed virtual communication.

Regarding to the total level of social media addiction, this study revealed that, nearly half of the studied students had moderate level of social media addiction and less than half of them had not social media addiction while, minority of them had mild and high levels of social media addiction. As to the study, this might be because social media is defined as a medium used by nursing students for a variety of official teaching and learning goals. Reflections can be facilitated by using blogging, Facebook, or YouTube as a teaching technique for issues such as cultural competency, empathy, the therapeutic connection, transition to practise, and self care. As they prepare to enter the workforce, assist nursing students in exploring topics such as delegating and supervising, adjusting to change, risk and quality management, and legal and ethical challenges. As a result of these factors, nursing students spend more time on social media, leading to the risk of addiction.

These results were consistent with those of *Zaw and Azenal, (2021),* who did a research titled "Association between Social Media Addiction and Mental Health Among International Islamic University Malaysia (IIUM) Undergraduate Nursing Students." Also, *Fauzi et al.,(2021),* who conducted a study titled "Effect of social media addiction on academic performance among nursing students," and *Ahmed,(2021),* who conducted a study titled "Social media addiction and its relation to loneliness among adolescent" and mentioned that the majority of nursing students had moderately levels of social media addiction. It could be said that social media plays a considerable role in their life as it brings addiction to them.

According to the total alexithymia subscales , more than half  of the studied students had possible alexithymia related to difficulty identity feeling subscale. Moreover, more than two fifths of them had alexithymia related to difficulty identity feeling and  difficulty describing feeling subscale, from the researcher's point of view, this may be due to the majority of studied students have difficulty identity feeling because alexithymia leads to a lack of emotions, inadequate emotional response, and a lack of empathy causes communication disorders and physiological distress in students, nursing focuses on skills such as listening, understanding, respect, communication, and empathy. Good communication and empathy with the patient will improve the quality of nursing care. For this reason, the components of communication and the development of empathy skills in students are emphasized during the nursing education process.

These findings were consistent with the findings of *Salarian et al. (2019)*, who conducted a study titled "Predicting Social Adjustment in University Students based on Alexithymia and Psychological Vulnerability" and reported that nearly half of the students studied had alexithymia related to difficulty identity feeling subscale.  On the other hand, these findings contradicted those of *Mersin et al.,(2020)*, who conducted a study titled "Social media usage

and alexithymia in nursing students" and discovered that the majority of the students had a higher level of alexithymia in the difficulty identifying feeling and difficulty describing feeling subscales.

This study found a highly statistically significant positive correlation between total level of social media addiction and total level of alexithymia among the studied students. According to the researcher, this could be because alexithymic people have lower social skills, more difficulty establishing and maintaining interpersonal relationships, a lower perception of social support, and a higher level of anxiety in relational interactions, and thus perceive themselves as undesirable. From the standpoint of creating relationships, social media may be viewed as a safer and less hazardous environment.

This result was supported by *Ilter & Ovayolu,(2022)* conducted a study titled "The relations between the alexithymia levels and social media addictions of nursing students" and found a highly statistically significant positive correlation between total level of social media addiction and total level of alexithymia among nursing students. Individuals suffering with alexithymia may have difficulties identifying their feelings.

## Conclusion

Based on the results of the study, it is concluded that the present study revealed that nearly half of the studied students had moderate level of social media addiction and more than half of the studied students had possible alexithymia level and less than one fifth of them had mild level of loneliness.

## Recommendations

### For student's

1- Early detection of social media addiction in children using internet addiction in order to give early treatment and avoid health risks.
2- Providing an instructional curriculum for students on how to use social media properly.
3- Organising seminars and workshops to raise awareness among university students about the dangers of social media addiction.

### For university

1- The hazards and -determinants of Internet technology, as well as the measures that must be followed to minimise detrimental effects on physical, psychological, and social well-being, should be incorporated in school curricula.
2- Establishment of counselling institutes at universities to identify students with psychological issues early on.
3- Make and distribute brochures to university students to raise awareness about the dangers of social media addiction.

### For further researchers

1- Further research on social media addiction is needed to fully understand how to prevent behavioral indications of addiction and problematic use among university students.

## References

1- **Ahmed, S. (2021):** Social media addiction and its relation to loneliness among adolescent. Journal of Humanities and Social Sciences Research 28 (1), pp: 1-17**.**

2- **Bagby ,R. , Parker, J., & Taylor , G. (1994):** The twenty-item Toronto Alexithymia Scale I. Item selection and cross- validation of the factor structure. Journal of psychosomatic research, 38(1), 23-32.

3- **Boluktas, R. (2022):** social media addiction and related factors among turkish nursing students. kocaeli medical journal. Vol.10, No. 3.

4- **Frye-Cox, N., &Hess, C. (2020):** Alexithymia and marital quality the mediating roles of loneliness and intimate communication .J fam Psycgol;27(2):203.

5- **Gao, L., Chan, T. ., Roslan, S.(2022):** Prediction of Youtube Addiction among University Students from Uses and Gratifications Approach. Asian People Journal, 5(2), 16-28.http://dx.doi.org/10.37231/apj.2022.5.1.358

6- **Gazo ,A.,Ahmad M., Mahasneh, A. .,Mohammed, H., Abood,M. & Muhediat, F. (2020):**Social Self-Efficacy and its Relationship to Loneliness and Internet Addiction among Hashemite University Students. International Journal of Higher Education Vol. 9, No. 2; 2020.

7- **Hao, Z., & Jin. L. (2020):** Alexithymia and Problematic Mobile Phone Use: A Moderated Mediation Model. Front. Psychol. 11:541507. doi: 10.3389/fpsyg.2020.541507.

8- *Ilter& Ovayolu,(2022):* The relations between the alexithymia levels and social media addictions of nursing students. Perspect Psychiatr Care, Vol. 15, No. 10.

9- **Kaptangil, O., & Çalisir, O. (2023 ):** the mediating role of social media addiction in the relationship between digital citizenship and cyber bullying. Congress hosted by-change & shaping the future: proceeding book (p. 44). holistence publications.

10- **Kurniawan, T. (2020):** Digital literacy strategy in the industrial revolution era 4.0. Journal of Innovative Studies on Character and Education, 4(1), 127-136.

11- **Mersin, S.,Ibrahimoglu, O., Saray Kiliç, H., & Bayrak Kahraman, B. (2020):** Social media usage and alexithymia in nursing students. Perspectives in Psychiatric Care, 56(2), 401–408, doi.org/10.1111/ppc.12448.

12- **Ozsat, K., Işıktas, S., & Şenol, H. (2022):** Investigation of the effect of social media addiction levels of university students on virtual environment loneliness levels. Journal Of Educational Technology & Online Learning, 5(4), 1030-1040.

13- **Sahin, C. (2018):** Social Media Addiction Scale-Student Form: The Reliability and Validity. Turkish Online Journal of Educational Technology,17 (1),169-182.

14- **SalarianF., Homayouni, A., & Sadeghi, J. (2019):** Predicting Social Adjustment in University Students based on Alexithymia and Psychological Vulnerability. Sociological Studies of Youth, 10(35), 97-106.

15- **Shaban,M. (2022):** Social Media Addiction Among Nursing Students Publisher: Lambert Academic Publishing ISBN: 978-620-5-52664-4 Vol. 7, No. 2

16- **Shehata,M. & Abdeldaim ,E..(2021):** Internet addiction among medical and non-medical students during COVID-19 pandemic, Tanta University, Egypt. Environmental Science and Pollution Research Vol. 8, No. 3

17- **Shen, L. (2019):** Therapeutic approaches for Internet addiction. *Multifaceted approach to digital addiction and its treatment* (pp. 230–259). Information Science R doi.org/10.4018/978-152258449-0.ch011.

18- **Soranidou, P.,& Papastylianou,A.(2019):** Relationship of Internet Addiction with Alexithymia and Childhood's Perceived Parentingin University Students. international journal of psychology , 23 (2) 7-19.

19- **Xuan, Y., & Amat, M. (2021):** The Gender Differences in the Relationships Between Self-Esteem and Life Satisfaction with Social Media Addiction Among University Students. journal of Asian Social Science (ASS) Vol. 17, No. 11 . DOI:10.5539/ass.v17n11p48. **Fauzi, R., Saaiddin, N., Ibrahim, N., & Abdullah, S. (2021):** Effect of social media addiction on academic performance among nursing students . The Malaysian Journal of Nursing(MJN), 13(1),39.https://doi.org/10.31674/mjn.2021.v13i01.001

20- **Zaw, C., & Azenal, N. (2021):** Association between Social Media Addiction and Mental Health Among International Islamic University Malaysia (IIUM) Undergraduate Nursing Students. INTERNATIONAL journal of care scholars, 4(supp1), 32–39.