

## Effectiveness of a programme in promoting positive behaviours and reducing negative emotions among undergraduate students

**Magda M. Algameel\***, Prince Sattam bin Abdulaziz University, College of Applied Medical Sciences Department of Nursing sciences, Wadi Alldawasir, Saudi Arabia <https://orcid.org/0000-0001-6615-3016>

**Ali A. Albzia**, Prince Sattam bin Abdulaziz University, College of Applied Medical Sciences Department of Nursing sciences, Wadi Alldawasir, Saudi Arabia <https://orcid.org/0000-0002-7127-4119>

**Sahar A. Abd-ElMohsen**, Prince Sattam bin Abdulaziz University, College of Applied Medical Sciences Department of Nursing sciences, Wadi Alldawasir, Saudi Arabia. <https://orcid.org/0000-0002-3706-7044>

**Mervat A. Abdul Gawad**, Prince Sattam bin Abdulaziz University, College of Education, Wadi Alldawasir, Saudi Arabia / Minia University, Faculty of Education, Egypt. <https://orcid.org/0000-0003-4652-0098>

### Suggested Citation:

Algameel, M, M., Albzia, A, Abd-ElMohsen, S. A. & Abdul Gawad, M. (2022). Effectiveness of a programme in promoting positive behaviours and reducing negative emotions among undergraduate students. *Cypriot Journal of Educational Science*. 17(11), 4019-4031. <https://doi.org/10.18844/cjes.v17i11.7805>

Received from July 20, 2022; revised from September 15, 2022; accepted from November 03, 2022

©2022 by the authors. Licensee Birlesik Dunya Yenilik Arastirma ve Yayıncılık Merkezi, North Nicosia, Cyprus. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

### Abstract

Many studies have reported high rates of mental health problems among undergraduate students aged 18–24 years all over the world. The current study aimed at determining the level of negative emotions among students and evaluating the effect of a positive reinforcement programme on reducing negative emotions among undergraduate female students. The results demonstrated that the most prevalent negative emotions that had the highest scores among students were anxiety and stress (mean = 42.53), excessive nervousness (mean = 42.93) and anger (mean = 38.06), with a total mean score of 123.53. There were also statistically significant differences between the scores of the experimental group members, in favour of the post-measurement. The study concluded that anxiety and stress, excessive nervousness and anger were the most negative emotions among the study sample, and the applied programme proved its efficacy in reducing negative emotions among students.

Keywords: Positive behaviours, negative emotions, undergraduate students, psychological effects, promoting behaviours.

---

\* ADDRESS OF CORRESPONDENCE: Magda M. Algameel, Prince Sattam bin Abdulaziz University, College of Applied Medical Sciences, Department of Nursing sciences, (Postal Code;18616), Wadi Alldawasir, Saudi Arabia  
Email address: [magdaalgameel@yahoo.com](mailto:magdaalgameel@yahoo.com)

## Introduction

A previous research has proved that emotions are linked directly to learning outcomes and academic achievement (Boekaerts & Pekrun, 2015; Khesht-Masjedi et al., 2019). A broad variety of affective states have been studied (Azevedo et al., 2019) and different emotions (e.g., boredom, confusion or frustration) are experienced commonly in learning settings (D'Mello, 2013).

Positive emotions increase happiness, which might be a protector against various physical and mental health problems such as depression and anxiety. Happy people live longer and have better relationships and marriages. They are more successful in their academic and business lives (Myers & Diener; 2018; Otaghi et al., 2020; Rezaee et al., 2016; Steptoe, 2019; Walsh et al., 2018; Kihlstrom et al., 2016).

Negative affect refers to pervasive individual differences in negative emotionality and self-concept. It contains undesirable emotions, such as guilt, unhappiness, anxiety, fear, hate, embarrassment, depression, jealousy and regret, which create dissatisfaction in individuals and negatively affect their mental state (Asıcı et al., 2020; Cropanzano et al., 2003; Diener & Larsen, 1993; Diener et al., 1999; Rishi et al., 2021).

Individuals with high levels of negative emotions are more aggressive, feel guilty and scared, have low self-respect and find it difficult adapt (Barrett, 1997; Diener, 2000).

There are 350 million people who suffer annually from depression (Kaur et al., 2014). Besides, young adults experience various emotional, behavioural, economic, academic and social conflicts (Kaya et al., 2007). The prevalence of depression and stress is higher among university students (Adewuya et al., 2006; Daniel, 2013; Kumaraswamy, 2013) because they are coping with academic and social demands in preparation for their professional careers (Uehara et al., 2010).

The burden is exacerbated by the challenges of learning to have independent lives, forming new relationships and emotional adjustments, especially in new environments (Kaur et al., 2014; Verma et al., 2014). University students' performance is affected by symptoms of depression (Stark & Brookman, 1994), anxiety (Anson et al., 1984) and stress (Dusselier et al., 2005).

Depression restricts students' social, occupational and interpersonal functioning (Onya et al., 2013). Students with depression have several academic problems, such as lack of concentration and loss of interest in studies. Furthermore, they face emotional difficulties such as inferiority complexes, irritation and disturbed sleep (Kumaraswamy, 2013). Depression is also closely linked to loneliness and an increased risk of suicide and substance abuse among students (Daniel, 2013; Hojat, 1998; Inglés et al., 2015).

### 1.1. Conceptual framework

Emotions play a central role in the complex, multifaceted learning process (Tyng et al., 2017). According to Boekaerts and Pekrun (2015), emotions are directly related to learning outcomes and academic achievement.

University students are increasingly prone to stress, anxiety and depression, which increase their psychological morbidity and influence their academic performance (Tosevski et al., 2010; McDaniel & Einstein, 2020).

Bower and Forgas (2003) stated that the intensity of emotional states reaches to distort attention and influences the way in which people interpret and recover information. Also, in a study by Ross et al. (2005), a positive correlation was found between stress and depression and a negative correlation between self-esteem and depression.

### *1.2. Related research*

Psychological well-being is directly related to people's mental health, as they behave according to their emotional state. Research has found that psychologically healthy people tend to have better attitudes at work, and they manage their time and handle stress more effectively (Winefield et al., 2002).

A study conducted at Jizan University, KSA, found that about 31% of undergraduate students are psychologically distressed. This finding necessitates the need for rigorous efforts to develop proper screening and intervention programmes targeting this population (Sani et al., 2012).

### *1.3. Purpose of the study*

The current study aims at:

1. Determining the level of negative emotions among Saudi university students;
2. Evaluating the effect of a positive reinforcement programme on reducing negative emotions among undergraduate female university students.

## **2. Method and materials**

The current study utilised the comparative descriptive research approach to compare the students' scores on negative emotions before and after applying for the proposed programme.

### *2.1. Research model*

The quasi experimental (pre-post) design was utilised in this study.

### *2.2. Participants*

The basic study sample was selected according to the following steps:

1. The negative emotions scale of the three dimensions (anxiety and stress, nervousness and anger) was applied to female students of the College of Education in Wadi Al-Dawasir (seventh and eighth levels) and students of Applied Medical Sciences College (second and fourth levels), whose ages ranged between 18 and 22 years.
2. The whole research community consisted of 52 female students from both colleges. The students who got the highest scores on the negative emotions scale as a whole and in the three dimensions and who lacked positive behaviours, such as self-confidence, satisfaction, competence and merit, were retained. Thus, a total of 22 students were selected from those who meet these conditions: 15 female students from the College of Applied Medical Sciences and 7 female students from the College of Education.
3. Only female students of the College of Applied Medical Sciences were retained and participated in the proposed programme for the following reasons:
  - a. Ensuring the homogeneity of the sample.
  - b. Those in charge of training are researchers at the College of Applied Medical Sciences.

- c. Three female students from the College of Education refused to participate in the programme, thus reducing the number of female students at the College of Education and they were excluded.
  - d. The training was conducted in the halls of the College of Applied Medical Sciences.
4. Description of the basic sample: The basic study sample consisted of 15 female students from the College of Applied Medical Sciences, who obtained the highest scores on the negative emotions scale used in the current study and who fell within the statistically higher quartile [mean age = 19.53, standard deviations (SD) = 1.35], in the second level (nine students) and the fourth level (six students).
  5. The study setting was Prince Sattam bin Abdulaziz University in Wadi Al-Dawasir (female sections).
  6. Data were collected during a period of 2 months starting from first February 2022 to the end of March 2022.

### 2.3. Ethical considerations

Verbal consent was obtained from each student after explaining the purpose of the study. Privacy was maintained during the process of data collection. Confidentiality of the collected data and anonymity were guaranteed.

### 2.4. Data collection tools

Two tools were utilised in this study:

1. Negative emotions scale for university students.
2. A programme promoting positive behaviours related to mental health.

#### 2.4.1. Negative emotions scale (by the researchers, 2022)

The scale was developed through reviewing previous studies, literature and measures of negative emotions by the researchers. It was divided into three dimensions: anxiety and stress, excessive nervousness and anger to achieve the study objectives. After reviewing the Arab and foreign theoretical frameworks and standards concentrating on negative emotions, 34 statements were formulated before arbitration, and they were categorised into 3 dimensions: anxiety and stress, excessive nervousness and anger. The instructions ask students to choose from five alternatives according to their point of view (5 = strongly agree; 4 = agree; 3 = neutral; 2 = disagree; and 1 = strongly disagree).

The psychometric properties of the negative emotions scale were verified. The scale was presented in its initial form to five mental health and psychology professors as arbitrators to determine the suitability of the statements to measure the negative emotions of university students. They agreed on the scale statements while paraphrasing some of them.

### 2.5. Data analysis

The researchers applied the negative emotions scale to select a research sample of university students who got the highest quartiles in these emotions, provided that the scores were higher in all the negative emotions of interest to the study.

The programme used in the study was applied to the research sample and to obtain the pre- and post-test scores for comparison between them to identify the impact of the programme on reducing negative emotions among university students.

The scale was applied to the pilot study sample consisting of 65 female students from Prince Sattam bin Abdulaziz University, Faculties of Applied Medical Sciences and Education (mean age = 19.23 years, SD = 0.985).

The construct validity was verified through calculating the correlation of the degree of each item with the dimension it belongs to as the correlation coefficients ranged between 0.381 and 0.830. The correlation of the three negative emotions with the total score of the scale was also calculated. They are as follows: 0.921, 0.741 and 0.874; and all correlation coefficients were statistically significant at 0.01.

The scale factorial validity was verified after ensuring the suitability of the sample and the scale nature for this statistical method with Kaiser–Meyer–Olkin (KMO) to verify the suitability of the sample for factorial analysis and Bartlett's test to ensure the suitability of the scale to this type of analysis. The factorial analysis of the 34 items was conducted using the Hotelling principal components method. The researchers followed the 'Guttman' criterion to determine the number of factors, where the factor is essential if its latent root is 1 or more than 1. Then the factors were rotated orthogonally by the Varimax method. The factor analysis resulted in three factors identified were loaded with 34 items, with a factor loading more than 0.30 as follows: the first factor was anxiety and stress, which was loaded with 12 items and a factor loading of items ranging between 0.418 and 0.841 and a latent root of 5.399; the second factor was excessive nervousness, which was loaded with 13 items and a factor loading of items ranging between 0.396 and 0.844 and a latent root of 6.494; and the third factor was anger, which was loaded with 9 items, with a factor loading of items ranging between 0.360 and 0.814 and a latent root of 4.440. Thus, the number of the scale items in its final form (34) was distributed into the scale's three factors. The total score of the scale ranged between 34 and 170.

To ensure scale reliability, Cronbach's alpha internal consistency and the split-half methods were calculated on the pilot study sample of 65 students from Prince Sattam bin Abdulaziz University. The reliability coefficients were 0.833, 0.911, 0.866 and 0.952, respectively, for Cronbach's alpha and 0.906, 0.879, 0.910 and 0.868, respectively, in Spearman Brown's split-half. Thus, it is clear that the negative emotions scale and its three dimensions have a high degree of validity and reliability, which was used in the basic study.

#### *2.5.1. Preparation phase*

This phase consists of the pre-assessment of each participant, setting preparation, getting to know each other, establishing a guiding relationship and introducing the programme.

#### *2.5.2. Developmental phase*

The programme objectives and methodology were prepared after reviewing all relevant and recent literature.

#### *2.5.3. Implementation phase*

Each student who participated in the study was interviewed individually to collect the necessary data. The programme was distributed over 6 weeks, during which 11 training sessions were held (each session ranged from 60 to 90 minutes), with one session per day for the whole group, starting with

identifying the programme expectations and breaking the ice. The components and schedule of the programme are presented in Table 1.

Table 1. Schedule of the Programme

Weeks	Session title	Contents	Educational materials
First	Programme expectations	Introducing participants to the concept of self-confidence and the causes of poor self-confidence. Barriers to self-confidence	PowerPoint using personal laptop
	Breaking the ice Understanding the concept of self-confidence		Handout lecture, group discussion, dialogue, role-playing, modelling and duties.
Second	How to solve the problems	Exercises to increase self-confidence	Role-play Discussion
Third	Self-competence and efficiency	Concept of self-competence, dimensions and types. How to develop your efficiency Definition and factors leading to psychological satisfaction and obstacles	Multiple visual materials with pictures to help the students understand the contents.
Fourth	Psychological satisfaction	How to increase your satisfaction with yourself	
Fifth	Coping strategies to overcome Fast raging	Exercise to control themselves and homework	Videos lecture, discussion, dialogue, PowerPoint presentation.
Sixth	Stress management	Learn students' stress management techniques such as coping mechanisms by practicing deep breathing exercises and meditation	Evaluation sheet handout and leaflets Posters Videos

#### 2.5.4. Evaluation phase

At the end of the programme, a post-test was carried out using the same tools as in the pre-test, immediately after the end of the programme.

#### 2.5. Data analysis

The SPSS version 21 programme was used to carry out statistical analyses such as the differences between the research group in the pre- and post-test, averages, SD and comparisons to test the validity of the study's hypotheses.

### 3. Results

Table 2. The Default and Statistical Means and the Significance of the Difference between them on the Negative Emotions Scale

Mean	Anxiety and stress	Excessive nervousness	Anger	The whole scale	T	Significance
Statistical default	42.53	42.93	38.06	123.53	445.849	0.01
	36	39	27	102		

The statistical mean of the negative emotions scale for female students of Prince Sattam bin Abdulaziz University is higher than the default average of the scale and its three dimensions. Besides, the t-test was calculated between the default and statistical means and the value was statistically significant, as shown in Table 2.

Table 3 The Differences between the Mean Scores of the Experimental Group on the Negative Emotions Scale and Its Dimensions in the Pre- and Post- Measurements (n = 15)

Variables	Pre-measurement		Post-measurement		t-value
	Mean	SD	Mean	SD	
Anxiety and stress	42.53	7.07	32.13	4.18	6.89
Excessive nervousness	42.93	7.55	25.60	9.56	5.46
Anger	38.06	5.28	19.46	7.70	8.13
The whole scale	123.5	12.7	77.20	19.58	10.11
	3	9			

\*\* Significant at (0.01).

There were statistically significant differences between the scores of the experimental group members, in favour of the post-measurement, as illustrated in Table 3.

#### 4. Discussion

The undergraduate stage is a challenging and sensitive period wherein students have reported high levels of psychological distress (Eskin et al., 2016; Shamsuddin et al., 2013; Yusoff et al., 2011).

Our findings from 65 female university students revealed that the most negative emotions were anxiety and stress (mean = 42.53), excessive nervousness (mean = 42.93) and anger (mean = 38.06), with a total mean score of 123.53. This result is consistent with the results of other studies conducted in Saudi Arabia among medical students, indicating the prevalence of mental distress due to the stressful medical education and training environment (Alkot, 2017; Hamdan-Mansour et al., 2015; Ibrahim et al., 2013; Wahed & Hassan, 2017).

The prevalence of anxiety in this study agrees with the results of a study which was conducted in Pakistan by Rab et al. (2008), which reported higher rates of anxiety (43.7%). Our results differ from the results of a study which was conducted on undergraduate students at Jazan University by Hakami (2018), who found that about 31% of the students had psychological distress.

From the researchers' points of view, this might be attributed to the fact that the life of female university students is full of violent and intense emotions. They often experience anxiety, distress and sadness. We occasionally find them rebellious and critical of everything surrounding them without being able to control themselves and their emotions. Female university students strive for emotional independence from parents and other adults to form an independent personality that is capable of living a free emotional life. This is what extremely frustrated them as a result of their inability to have

complete independence from others. For this reason, their reactions are strong and their emotions are severe and disproportionate to the severity of the frustration they have been exposed to.

Additionally, shyness and tendency to introversion, isolation and introversion are observed among university students as a result of the rapid physical and sexual changes that raise their doubt and confusion. The behaviour of female university students at this stage is also characterised by instability. They move quickly from a state of joy and happiness to a state of despair and hopelessness, from a state of self-confidence to a lack of self-confidence and from extreme religiosity to suspicion and atheism due to lack of experience. Furthermore, female university students suffer from anxiety and fear of losing safety due to their conflicting needs and intense struggles. They love others and want to be accepted by them, but they are afraid to approach others because they feel inferior and inexperienced.

They also love high ideals and suffer for life's lack of values and principles. All of these factors contributed to the high rate of feeling negative emotions among the sample of female university students, who require counselling and therapeutic intervention to reduce such negative emotions through positive psychological support presented in the programme utilised in the current study.

The present study also demonstrated statistically significant differences between the scores of the experimental group members after application of the programme; these differences are due to the effectiveness of the programme utilised in the study and evidence of its ability to reduce negative emotions among the experimental group.

The counselling programme affects the counselling group through its sessions, and this is evident through their scores on the negative emotions scale, their attendance and their interaction during the programme sessions. The results of this hypothesis can also be interpreted in light of the programme sessions' evaluation form, which illustrated the suitability of the sessions and content for the programme's objective.

The participation of the counselling group members in the sessions of the programme also helped in spreading the spirit of perseverance, initiative and positivity among them. Thus, the researchers found great interest among most of the counselling sample members during the sessions and focus on following up and participating in all sessions. The activities and homework were of great importance, as they helped the sample members accept the programme.

The diversity of the programme's counselling techniques utilised in the current study serves the objective of the study that helped in reducing negative emotions among the study sample. Some of these techniques focus directly on actual social situations, such as the techniques of attacking shyness, persistence in troublesome situations and adopting self-instruction. Other techniques deal with different thoughts and patterns of thinking, such as stopping negative thoughts, cognitive reconstruction, proposing advantages and disadvantages and adopting positive self-instructions. In addition to the skills and methods that were trained in the programme on how to be friendly with others were how to create successful positive relationships and how to maintain them.

The researchers also emphasised through the counselling programme, the necessity of using these methods in public life and following up on the problems and difficulties that encounter each member of the group in his relations with people, and the continuous search for different and diverse solutions to these problems through collective counselling, training and activities and benefiting from the experiences of the other.



The programme techniques of cognitive behavioural counselling aim at convincing the individuals that their negative thoughts, expectations and self-expressions are the ones causing maladaptive reactions. Thus, there is a need to modify the distorted cognitive and behavioural aspects of the individual and work to replace them with more adaptive and appropriate ways of thinking and searching for a solution to their problems to choose from among the most effective responses. In the study programme, the Rational Emotive Behavioural Counselling deals with group members' insight into what irrational beliefs are and the need to defeat them, while behavioural counselling helps in providing the counselling group members with the rules and foundations of adaptive behaviour, which is consistent with the values, customs and traditions of the community.

The programme's nature helps in hypothesising more effective adaptive models and behaviours that model appropriate types and patterns of behaviour that help reduce negative emotions. The group counselling was also of great significance in helping to achieve the objective of the study, which was to reduce the negative emotions of the group members. Group counselling was important in starting to achieve this objective through building effective social relationships within the sessions and the rapprochement and communication of group members with each other. Hence, the programme has absorbed these various types of psychological counselling, selecting the most appropriate and successful methods that help in reducing negative emotions in the sample of the study.

## **5. Conclusion**

This study found that anxiety and stress, excessive nervousness and anger were the most negative emotions among the study sample, and the applied programme proved its efficacy in reducing negative emotions among undergraduate students.

## **6. Recommendations**

Based on the results of the study, the following are recommended:

1. Regarding the necessity of paying attention to studying the negative emotions of university students because of their great impact on the different aspects of life for them, it is preferable to study the negative emotions other than those mentioned in the current study.
2. Applying the negative emotions scale used in the current study to a larger segment of university students, as well as to male students.
3. The necessity of promoting positive behaviours among university students by using effective diagnostic and therapeutic approaches, such as cognitive behavioural therapy and brief therapy to develop such behaviours among university students.
4. Applying the programme used to a larger number of university students through psychological and academic counselling units in faculties by specialised and trained faculty members.
5. Conducting the study on other groups of society, such as secondary and middle school students.
6. Conducting more scientific studies on positive behaviours and negative emotions other than those mentioned in the current study.

## **Conflict of interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Source of Funding

The funding is supported by Prince Sattam bin Abdulaziz University [Deanship of Scientific Research, Number of research project 2021/03/19084]

### Acknowledgements

The authors extend their appreciation to the Deputyship for Research & innovation, Ministry of Education in Saudi Arabia for funding this research work through the project 2021/03/19084.

### References

- Abdul Razek, A. (2011). The stages and steps of designing and implementing e-training on the Internet. *E-Learning Journal*, 1(7), 22–40.
- Adewuya, A. O., Ola, B. A., & Afolabi, O. O. (2006). Validity of the patient health questionnaire (PHQ-9) as a screening tool for depression amongst Nigerian university students. *Journal of Affective Disorders*, 96(1-2), 89–93. <https://doi.org/10.1016/j.jad.2006.05.021>
- Alkot, M. M., Alnewirah, A. Y., Bagasi, A. T., Alshehri, A. A., & Bawazeer, N. A. (2017). Depression among medical versus non-medical students in umm al-qura university, makkah al-mukaramah, Saudi Arabia. *American Journal of Psychiatry and Neuroscience*, 5(1), 1–5. <https://doi.org/10.17712/nsj.2021.2.20200127>
- Anson, O., Bernstein, J., & Hobfoll, S. E. (1984). Anxiety and performance in two ego threatening situations. *Journal of Personality Assessment*, 48(2), 168-172. [https://psycnet.apa.org/doi/10.1207/s15327752jpa4802\\_11](https://psycnet.apa.org/doi/10.1207/s15327752jpa4802_11)
- ASICI, E., Arslan, U., & Uygur, S. S. (2020). Positive and negative affect in university students: The predictive roles of rumination, mindfulness and demographic variables. *Educational Research and Development Journal*, 23(2), 1–21.
- Azevedo, R., Mudrick, N. V., Taub, M., & Bradbury, A. E. (2019). Self-regulation in computer-assisted learning systems. In J. Dunlosky, & K. Rawson (Eds.), *Handbook of cognition and education*, Cambridge University Press.
- Barrett, L. F. (1997). The relationships among momentary emotion experiences, personality descriptions, and retrospective ratings of emotion. *Personality and Social Psychology Bulletin*, 23(10), 1100–1110. <https://doi.org/10.1177/01461672972310010>
- Boekaerts, M., & Pekrun, R. (2015). Emotions and emotion regulation in academic settings. In *Handbook of educational psychology* (pp. 90–104). Routledge.
- Bower, G. H., & Forgas, J. P. (2003). Afecto, memoria y cognición social. *E. Eich, J. Kihlstrom, G. Bower, J. Forgas, y P. Niedenthal, Cognición y Emoción*, 83-169.
- Cropanzano, R., Weiss, H. M., Hale, J. M., & Reb, J. (2003). The structure of affect: Reconsidering the relationship between negative and positive affectivity. *Journal of Management*, 29(6), 831–857. [https://doi.org/10.1016/S0149-2063\(03\)00081-3](https://doi.org/10.1016/S0149-2063(03)00081-3)

- Algameel, M. M., Albzia, A., Abd-ElMohsen, S. A. & Abdul Gawad, M. (2022). Effectiveness of a programme in promoting positive behaviours and reducing negative emotions among undergraduate students. *Cypriot Journal of Educational Science*, 17(11), 4019-4031. <https://doi.org/10.18844/cjes.v17i11.7805>
- Daniel, K. (2013). Loneliness and depression among university students in Kenya. *Global Journal of Human-Social Science Research*, 13(4), 11–18.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34. <https://doi.org/10.1037/0003-066X.55.1.34>
- Diener, E., & Larsen, R. J. (1993). The experience of emotional well-being. In L. Michael, Haviland-Jones, & M. Jeannette (Eds.), *Handbook of emotions* (pp. 405–415). Guilford.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276. <http://dx.doi.org/10.1037/0033-2909.125.2.276>
- D’Mello, S. (2013). A selective meta-analysis on the relative incidence of discrete affective states during learning with technology. *Journal of Educational Psychology*, 105(4), 1082. <https://psycnet.apa.org/doi/10.1037/a0032674>
- Dusselier, L., Dunn, B., Wang, Y., Shelley il, M. C., & Whalen, D. F. (2005). Personal, health, academic, and environmental predictors of stress for residence hall students. *Journal of American college health*, 54(1), 15–24. <https://doi.org/10.3200/jach.54.1.15-24>
- Eskin, M., Sun, J. M., Abuidhail, J., Yoshimasu, K., Kujan, O., Janghorbani, M., ... & Voracek, M. (2016). Suicidal behavior and psychological distress in university students: a 12-nation study. *Archives of Suicide Research*, 20(3), 369–388. <https://doi.org/10.1080/13811118.2015.1054055>
- Hakami, R. M. (2018). Prevalence of psychological distress among undergraduate students at Jazan University: A cross-sectional study. *Saudi Journal of Medicine & Medical Sciences*, 6(2), 82. [https://doi.org/10.4103/sjmms.sjmms\\_73\\_17](https://doi.org/10.4103/sjmms.sjmms_73_17)
- Hamdan-Mansour, A. M., Aboshaiqah, A. E., Thultheen, I. N., & Salim, W. M. (2015). Psychological wellbeing of Saudi patients diagnosed with chronic illnesses. *Psychology*, 6(01), 55. <http://dx.doi.org/10.4236/psych.2015.61006>
- Hojat, M. (1998). Satisfaction with early relationships with parents and psychosocial attributes in adulthood: Which parent contributes more? *The Journal of Genetic Psychology*, 159(2), 203–220. <https://doi.org/10.1080/00221329809596146>
- Ibrahim, N., Dania, A. K., Lamis, E. K., Ahd, A. H., & Asali, D. (2013). Prevalence and predictors of anxiety and depression among female medical students in King Abdulaziz University, Jeddah, Saudi Arabia. *Iranian Journal of Public Health*, 42(7), 726.
- Inglés, C. J., González-Maciá, C., García-Fernández, J. M., Vicent, M., & Martínez-Monteagudo, M. C. (2015). Current status of research on school refusal. *European Journal of Education and Psychology*, 8(1), 37–52. <https://doi.org/10.1016/j.ejeps.2015.10.005>
- Kaur, S., Deepti, S. S., & Lal, M. (2014). Prevalence and correlates of depression among college-going students of district Amritsar, India. *International Research Journal of Medicine and Medical Sciences*, 2(11), 5–9.
- Kaya, M., Genc, M., Kaya, B., & Pehlivan, E. (2007). Prevalence of depressive symptoms, ways of coping, and related factors among medical school and health services higher education students. *Turk Psikiyatri Dergisi*, 18(2), 137.
- Kihlstrom, G., Gower, J., Forgas, J. P., & Niedenthal P (Eds.). (2016). *Cognición y emoción* (pp. 83–169). Descléé De Brouwer.

- Algameel, M. M., Albzia, A., Abd-ElMohsen, S. A. & Abdul Gawad, M. (2022). Effectiveness of a programme in promoting positive behaviours and reducing negative emotions among undergraduate students. *Cypriot Journal of Educational Science*, 17(11), 4019-4031. <https://doi.org/10.18844/cjes.v17i11.7805>
- Kumaraswamy, N. (2013). Academic stress, anxiety, and depression among college students: A brief review. *International review of social sciences and humanities*, 5(1), 135–143.
- Khesht-Masjedi, M. F., Shokrgozar, S., Abdollahi, E., Habibi, B., Asghari, T., Ofoghi, R. S., & Pazhooman, S. (2019). The relationship between gender, age, anxiety, depression, and academic achievement among teenagers. *Journal of Family Medicine and Primary Care*, 8(3): 799–804. [https://doi.org/10.4103/jfmpc.jfmpc\\_103\\_18](https://doi.org/10.4103/jfmpc.jfmpc_103_18)
- McDaniel, M. A., & Einstein, G. O. (2020). Training learning strategies to promote self-regulation and transfer: The knowledge, belief, commitment, and planning framework. *Journal of the Association for Psychological Science*, 15(6), 1363–1381.
- Myers, D. G., & Diener, E. (2018). The scientific pursuit of happiness. *Perspectives on Psychological Science*, 13(2), 218–225. <https://doi.org/10.1177%2F1745691618765171>
- Onya, O. N., Stanley, P. C., & Stanley, P. C. (2013). Risk factors for depressive illness among elderly GOPD attendees at UPTH. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 5, 77–83. <https://doi.org/10.9790/0853-0527786>
- Otaghi, M., Sayehmiri, K., Valizadeh, R., & Tavan, H. (2020). Correlation between happiness and academic achievement in Iranian students: A meta-analysis letter. *Shiraz E-Medical Journal*, 21(3). <https://doi.org/10.5812/semj.94277>
- Rab, F., Mamdou, R., & Nasir, S. (2008). Rates of depression and anxiety among female medical students in Pakistan. *EMHJ-Eastern Mediterranean Health Journal*, 14(1), 126–133.
- Rezaee, M., Hedayati, A., Naghizadeh, M. M., Farjam, M., Sabet, H. R., & Paknahad, M. (2016). Correlation between happiness and depression according to beck depression and oxford happiness inventory among university students. *Galen Medical Journal*, 5(2), 75–81. <https://doi.org/10.31661/gmj.v5i2.598>
- Rishi, P., Banthiya, A., Singh, S., & Rahul. (2021). Correlates of holistic health linked to depression among professional students of india-need for de-stigmatization. *American Journal of Applied Psychology*, 9, 1–7. <https://doi.org/10.12691/ajap-9-1-1>
- Ross, R., Zeller, R., Srisaeng, P., Yimmee, S., Somchid, S., Sawatphanit, W. (2005). Depression, stress, emotional support, and self-esteem among baccalaureate nursing students in Thailand. *International Journal of Nursing Scholarship*, 2, 15. <https://doi.org/10.2202/1548-923x.1165>
- Sani, M., Mahfouz, M. S., Bani, I., Alsomily, A. H., Alagi, D., Alsomily, N. Y., & Asiri, S. (2012). Prevalence of stress among medical students in Jizan University, Kingdom of Saudi Arabia. *Gulf Medical Journal*, 1(1), 19–25.
- Shamsuddin, K., Fadzil, F., Ismail, W. S. W., Shah, S. A., Omar, K., Muhammad, N. A., ... & Mahadevan, R. (2013). Correlates of depression, anxiety, and stress among Malaysian university students. *Asian Journal of Psychiatry*, 6(4), 318–323. <https://doi.org/10.1016/j.ajp.2013.01.014>
- Stark, K. D. & Brookman, C. S. (1994). *Theory and family-school intervention*. In Fine, J.M. & Carlson, C. (Eds). *The Handbook of Family- school Intervention: A System Perspective*, Massachusetts: Allyn and Bacon.
- Stephoe, A. (2019). Happiness and health. *Annual Review of Public Health*, 40(1), 339–359. <https://doi.org/10.1146/annurev-publhealth-040218-044150>

- Algameel, M. M., Albzia, A., Abd-ElMohsen, S. A. & Abdul Gawad, M. (2022). Effectiveness of a programme in promoting positive behaviours and reducing negative emotions among undergraduate students. *Cypriot Journal of Educational Science*. 17(11), 4019-4031. <https://doi.org/10.18844/cjes.v17i11.7805>
- Tosevski, D. L., Milovancevic, M. P., & Gajic, S. D. (2010). Personality and psychopathology of university students. *Current Opinion in Psychiatry*, 23(1), 48–52.
- Tyng, C. M., Amin, H. U., Saad, M. N., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in psychology*, 8, 1454. <https://doi.org/10.3389/fpsyg.2017.01454>
- Uehara, T., Takeuchi, K., Kubota, F., Oshima, K., & Ishikawa, O. (2010). The annual transition of major depressive episode in university students using a structured self-rating questionnaire. *Asia-Pacific Psychiatry*, 2(2), 99–104. <http://dx.doi.org/10.1111/j.1758-5872.2010.00063.x>
- Verma, N., Jain, M., & Roy, P. (2014). Assessment of magnitude and grades of depression among adolescents in Raipur City, India. *International Research Journal of Medicine and Medical Sciences*, 2(5), 10–13.
- Wahed, W. Y. A., & Hassan, S. K. (2017). Prevalence and associated factors of stress, anxiety and depression among medical Fayoum University students. *Alexandria Journal of Medicine*, 53(1), 77–84. <https://doi.org/10.1016/j.ajme.2016.01.005>
- Walsh, L. C., Boehm, J. K., & Lyubomirsky, S. (2018). Does happiness promote career success? Revisiting the evidence. *Journal of Career Assessment*, 26(2), 199–219. <https://doi.org/10.1177%2F1069072717751441>
- Winefield, A., Gillespie, N., Stough, K. C., Dua, J., & Hapuararchchi, J. (2002). *Occupational stress in Australian Universities: A national survey 2002*. National Tertiary Education Union.
- Yusoff, M., Yee L., Wei L., Meng L., Bin L., Siong T., & Fuad A. (2011). A study on stress, stressors and coping strategies among Malaysian medical students. *International Journal of Students' Research*. <https://doi.org/10.5549/IJSR.1.2.45-50>