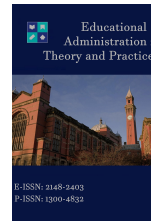




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The Impact of Corona Pandemic on Students' Mental Health from the Educational Counselors' Viewpoint

Khowla A. Ghnaim ¹, Nagham M. Abu-Albasal ^{2*}, Mohammad A. Sakarneh ³,
Rima A. Alkhrissat ⁴

<p>Article History</p> <p>Article Submission 29 November 2022</p> <p>Revised Submission 26 December 2022</p> <p>Article Accepted 01 March 2023</p>	<p>Abstract</p> <p>Corona pandemic has left negative impacts all over the world in general and Jordan in particular. Part of the negative impacts left by the pandemic are the psychological and emotional effects on schools' students. This study aimed to identify the impact of the Corona pandemic on the students' mental health in public schools in the Qasbah of Salt from the educational counselors' viewpoint. Seventy counselors participated in this study. To achieve the study's objectives, the researchers developed a questionnaire consisting of (42) items within three domains: Eating and sleeping disorders, psychological problems, depression, and obsessive-compulsive disorder. SPSS program was used to analyze the collected data. The results showed that corona pandemic has a medium effect on students' mental health in the areas of obsessive-compulsive disorder, psychological problems and depression and that eating and sleep disorders were high among students. There were no statistically significant gender differences among the counselors. However, there were statistically significant differences due to the experience favoring those with ten years or above. Furthermore, statistically significant differences were evident due to the educational qualification favoring those with graduate studies degrees. Based on these results, future suggestions for research, policy and practices are presented.</p> <p>Keywords: Corona Pandemic; Educational Counselors; Jordan; Mental Health; Public Schools</p>
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¹ Associate Professor, Department of Special Education, Al Balqa Applied University, Al-Salt, Jordan, khowlagh@bau.edu.jo

^{2*} Associate Professor, Department of Special Education, Al Balqa Applied University, Al-Salt, Jordan, naghamabualbasal@bau.edu.jo

³ Professor, Department of Special Education, Al Balqa Applied University, Al-Salt, Jordan, msakarneh@bau.edu.jo

⁴ Graduate Student, Department of Psychology, Al-Ahliyya Amman University, Amman, Jordan,
rimaalkhrissat@gmail.com

Introduction

The major crisis of the century is the Corona pandemic. It affected the whole life's aspects. Worldwide statistics indicate that the number of infections reached in mid-September 2020 more than 29 million cases and more than 900,000 deaths with the growth in daily infections with the Coronavirus suffering from the consequences of this pandemic. The Middle East region is one of the regions that heavily affected by the pandemic at all sectors especially the education sector (Economic & Social Council of Jordan, 2020).

Social and mental health problems were closely tangled and manifested in individual mental health such as depression and alcohol addiction (Al-Swelmyeen & Sakarneh, 2020). Problems resulting from emergencies can be shown as sadness, distress, and anxiety (Sakarneh et al., 2019). For example, over one billion people worldwide suffer from the quarantine and forced closures brought on by the Corona epidemic. According to psychologists and researchers who have all come to the same conclusion about the high rates of anxiety, tension, and emotion. Consequently, the impact of mental health on society is profound (Saad, 2020).

A report by the Center for Strategic Studies at the University of Jordan (2020) on the economic, social, and psychological effects of the Corona crisis showed that: Sixty-six per cent of citizens have high to medium anxiety and fear from the Coronavirus. Forty-two per cent of citizens are psychologically affected due to the spread of the Coronavirus. The imposition of the curfew has a high impact on thirty-eight per cent of the citizens. Eighty-nine per cent felt sad and frustrated because of seeing places of worship closed as a safety step to avoid the spread of the Coronavirus. Sixty-four per cent of citizens believe that imposing a curfew and disrupting all government and private institutions will lead to family disputes and violations (Center for Strategic Studies, 2020).

As for mental health, the survey showed that a third of the participants negatively looked at the future during the home quarantine period. Thirty-two per cent suffered from high or medium stress, including anxiety and depression. Thirty-nine per cent of females suffered from severe or moderate psychological stress compared to twenty-five per cent of males (Center for Strategic Studies, 2020). People of all ages have experienced psychological anxiety due to the Coronavirus. Millions of individuals were infected, many of whom died, forcing people to remain in their houses. Flights were suspended and it became a matter of life or death. Many became victims of the fear of infection and inadequate adaptability due to the rapid social media transmission of the epidemic's news and the absence of a vaccine or treatment. Due to its highly contagious capacity and many victims, this virus led to a state of mass hysteria. It caused many economic losses, job losses, general panic, anxiety, stress, obsessions, depression, and post-traumatic stress. This caused some scholars to coin the term "corona phobia", whose consequences were seen in a wide range of symptoms of psychological disorders that individuals in society began to experience (Hefnawi, 2020).

Because of the extent of the outbreak of this epidemic, the World Health Organization (WHO) declared it a health pandemic. Therefore, the WHO's assessment of the epidemiological situation was hazardous which led some to describe the twenty-first century as the era of the Corona pandemic. It considered the age of mental illness and that psychological and social preparation for this epidemic is a necessity of global nature (Dubey et al., 2020).

The Corona pandemic has negatively affected people's physical, mental, financial well-being, disrupting and paralyzing their lives. One of the most significant psychological effects was the home quarantine and the inability to leave the house other than out of need. Social distance in regular interpersonal interactions runs counter to communication one of the most important social activities in people's lives. The concept of "house quarantine" is comparable to the deprivation of freedom. According to theories describing psychological and social stress such as psychological loneliness and isolation, anxiety, sleep and eating problems. The home quarantine also affects an individual's psychological behavior (Asmari, 2020).

Children and adults who contract the Coronavirus can suffer from anxiety symptoms and other psychological problems similar to those that plagued the world at the time. The repercussions of the Corona crisis extended beyond the physical manifestations of the symptoms caused by the Coronavirus. It affected psychological conditions due to the incorrect actions and

attitudes of many in addressing the Coronavirus outbreak. Children and teenagers may suffer harm as a result of the panic that the Coronavirus causes inside the family. Children and young people who do not attend school or leave the house to play and hang out with friends due to the harmful effects of quarantine on the spread of the Coronavirus suffer severe negative impacts on their cognitive capacities and feelings (Doumi, 2020).

The spread of the Coronavirus and its repercussions such as home quarantine and social distancing affected individuals' mental health. As a result, many people experienced fear of isolation and mental illness, anxiety and increased doubt about the validity of information. Also, aggressiveness in dealing with others (Rxopy, 2020).

The spread of the Coronavirus without a known cure or vaccination resulted in the coining of the phrase "home quarantine". However, home quarantine during the COVID-19 pandemic can be psychologically brutal for several reasons. One of the main reasons is that it can cause feelings of isolation and loneliness. Individuals were separated from their friends and family for an extended period. Additionally, being cooped up in a small living space for an extended period can lead to claustrophobia and anxiety. Furthermore, being under quarantine can disrupt people's daily routines and activities. On the other hand, people are also sociable making it difficult to distance themselves from others (Tadmuri, Fawaz, Hamiyah, 2020). As a result, it is imperative to consider mental health issues and investigate psychological distress and the likelihood of developing depression among individuals.

It is essential under the shadow of these circumstances for members of society and school students to enjoy mental health. Therefore, this study came to explore the impact of the Corona pandemic on the mental health of students in public schools in Jordan.

The researchers noticed through their work and visits to some schools that many students encounter fear, anxiety and panic due to the Corona pandemic. In addition, it formed new pressures on the field of education. On March 17 2020, the Ministry of Education announced a state of emergency to confront the spread of the Coronavirus. Such exceptional circumstances led to disrupting schools' daily routines in the Kingdom. Students who could not attend school due to the epidemic lived in isolation and spent a lot of time online instead of doing their homework. This had a variety of negative physiological and psychological repercussions including anxiety, stress, fear and depression. Fiqi and Aboel-Fetouh's (2020) study confirmed that students suffer from different psychological problems due to the spread of the Corona pandemic. Health and psychological problems can manifest in various forms, such as psychological loneliness, depression, obsessive-compulsive disorder, boredom and sleep disorders. Diagnosed mental disorders can cause significant damage to children, adolescents and education achievement. These disorders include attention deficit hyperactivity disorder (ADHD), anxiety, autism spectrum disorder (ASD), bipolar disorder, depression, eating disorders, intellectual disabilities and schizophrenia. Therefore, it is essential to explore the views of educational counselors on the impact of the Corona pandemic on students' mental health because of the critical role they play within the school context. Furthermore, it provides information to build counseling programs for students who suffer from mental health problems due to the Corona crisis inside the school. It also emphasizes the educational counselor's role in following up and solving these problems.

Therefore, the current study tried to answer the main research question: What is the impact of Corona pandemic on student's mental health from the point of view of educational counselors in the Qasbah of Salt? The following sub-questions are derived from the main question:

- (1) Do educational counselors' viewpoints on the level of students' mental health problems differ by gender?
- (2) Do educational counselors' viewpoints on the level of students' mental health problems differ by experience?
- (3) Do educational counselors' viewpoints on the level of students' mental health problems differ by qualifications?

Literature Review

The literature on the psychological effects of COVID-19 is relatively recent. Soufan et al. (2022) conducted a study to find out the impact of Covid 19 on mental health in Syria compared to a sample of Arab countries. The study's results showed that anxiety levels increased due to the pandemic. The average score of the anxiety scale increased by 5.50 points in Syria and by 4.6 in some Arab countries. In addition, a study conducted by Sakarneh (2021) aimed to identify the impact of Covid-19 and the lockdown effect on families of students with special education needs. The results revolved around the main themes; behavior problems, psychological distress for the parents, and difficulty delivering rigid content and schedules. A study by Han et al. (2021) aimed to know the relationship between awareness of the risk of COVID-19 to emotions and mental health. The study's results indicated that a higher awareness of the danger of Covid-19 was associated with increased negative emotions. In addition, the results showed an inverse correlation between risk perception and mental health.

A study by Sarmini (2021) aimed to reveal the prevalence of mental disorders in light of the Corona pandemic and its relationship to psychological resilience among university students in northwestern Syria. The results concluded that mental illness is prevalent in 36.7% of university students. Obsessive-compulsive disorder is one of the most common disorders reaching (63.8%), depression (43.7%), hysteria (41.9%), anxiety (36.7%), phobias (27.9%) and physical anxiety (17.5%). Also, individuals with low psychological resilience suffer from fear, anxiety, obsessive-compulsive disorder, physical anxiety, and hysteria but not depression. Wahaibi et al. (2021) conducted a study to identify the level of psychological anxiety about COVID-19 among Omani, Bahraini and Residents' families. The results showed that the level of anxiety was moderate. The study also showed no differences in the level of anxiety between Omani and Bahraini families in general.

Cao et al. (2020) attempted to determine the psychological impact of the Corona pandemic on university students from the College of Medicine in China. Of the respondents, 0.9% suffer from severe anxiety, 2.7% from moderate anxiety, and 21.3% from mild anxiety. In addition, the results indicated that the presence of relatives or acquaintances infected with Corona was a risk factor for increasing students' anxiety. Furthermore, the results showed delays in academic activities were positively associated with anxiety symptoms.

Elmer et al. (2020) conducted a study to observe the students' social networks and mental health before and during the coronavirus pandemic using longitudinal data collected since 2018. The researchers analyzed the change in multiple network dimensions such as interaction, friendship, social support and participation. The mental health indicators were depression, anxiety, stress and loneliness. This was within two groups that included (214) students who suffered from the crisis. Additional comparisons were made with a previous group that did not witness the situation (n=54) students. After the comparison, it was found that the networks of interaction and participation in the study became few. Moreover, the students' stress, anxiety, loneliness and depression were exacerbated compared to before the crisis. Fears of losing social life turned into fears about health, family and friends. The analysis indicated that the specific fears of Corona, isolation in social networks, lack of interaction, emotional support and isolation were associated with adverse mental health pathways. It found that female students have a low level of mental health especially concerning social integration and the stresses associated with the epidemic.

The study by Xiaoyan et al. (2020) aimed to determine the level of cognition, psychological state, anxiety, and depression among university students during the spread of the Corona epidemic. The results showed statistically significant differences between the two types of university students (males and females) in feelings of anxiety and panic from exposure to risks. The levels of anxiety and depression among university students were higher than the levels of national standards. In addition, it found that panic over the epidemiological situation constituted a risk factor for anxiety. The study of Fiqi & Aboel-Fetouh (2020) aimed to identify the nature of some psychological problems caused by the Coronavirus. It was concluded that boredom is one of university students' most common psychological problems. Furthermore, there are statistically significant differences in psychological problems due to gender and age.

Tadmuri et al. (2020) examined the level of mental health of the Lebanese during the period of the spread of the Corona pandemic. It was concluded that the Lebanese have a reasonable mental health degree. There were statistically significant differences in mental health due to age group, economic and social level and employment status. The study by Liu, X. Y. et al. (2020) aimed to identify the factors influencing medical worker anxiety in China during the Covid-19 outbreak. The study found high levels of fear, anxiety and depression for medical staff on the front lines and those in close contact with infected patients including work in the respiratory, emergency, infectious disease and intensive care units.

The current study is one of the few studies perhaps the only one that dealt with the impact of the Corona pandemic in Jordan. It explored and discussed such impact on the mental health of students in public schools in Jordan from the point of view of educational counselors.

Methodology

The descriptive (survey) approach was used to explore the impact of the Corona pandemic on students' mental health in public schools in the Qasbah of Salt from the point of view of educational counselors. All the educational counselors (n=70) in the Qasbah of Salt participated in this study for the academic year 2021-2022. (Table 1) shows the demographic characteristics of the participants.

Table 1. Demographic characteristics of the study's participants

Variable	Categories	N	Ratio
Gender	Female	44	63%
	Male	26	37%
Experience	< 10 years	48	69%
	> 10 years	22	31%
Academic Qualification	Postgraduate	28	40%
	Bachelor	42	60%
Total		70	100%

The study variable includes the following:

(1) The independent variables are:

The gender has two levels (male and female).

The educational experience (less than ten years; more than ten years).

The academic qualification (Postgraduate Studies and Bachelor's).

(2) The dependent variable is:

Mental health problems resulting from the Corona pandemic among students in public schools in the Qasbah of Salt from the point of view of educational counselors.

The Study Tool

The study tool consisted of a questionnaire that the researchers developed the light of their experience and from the related educational literature on mental health and the Corona pandemic, such as the study (Fiqui & Aboel-Fetouh, 2020; Tadmuri et al., 2020; Ashi & Kanash, 2021; Wadaa & Al-Adamat, 2020).

The questionnaire consisted of two parts:

Part one: demographic data related to the sample members regarding gender, years of experience and educational qualification.

Part two: consisted of (42) items graded according to the five-point Likert scale (very high, high, moderate, low and very low). It was divided into (3) domains:

The first domain: sleep and eating disorders, included (17) items.

The second domain: psychological problems and boredom, included (16) items.

The third domain: obsessive-compulsive disorder, included (9) items.

To verify the validity of the tool and to judge the suitability of the paragraphs and the soundness of the language, the researchers consulted a group of six referees as follows: two professors in the field of special education, two professors in the field of measurement and evaluation and two educational counselors specialized. Some items were modified and added based on the referees' opinions and suggestions. Accordingly, the tool's final version consisted of (42) items.

Two methods were used to ensure the tool's reliability; the first was a test-retest where the questionnaire was applied to (10) educational counselors from outside the study sample. Then, the questionnaire was re-applied after two weeks, and the reliability coefficient reached (81.0). The second internal consistency measures were computed using Cronbach's alpha method. Table 2 shows the ratios, and these ratios were considered appropriate for the study.

Table 2. Internal consistency coefficient Alpha Cronbach

Domain	Number of Items	Internal consistency
Sleep and eating disorders	17	0.90
Psychological problems and boredom	16	0.89
Obsessive-compulsive disorder	9	0.93
Total	42	0.91

Data Collection and Analysis

After validating the validity and reliability of the tool, the researchers visited the Directorate of Education of Al Salt Qasbah to obtain consent for carrying the study out in the field. Then, the researchers were provided with the names of the schools and the counsellors. After that, the researchers visited the identified schools, met the principals and the counselors, and explained the purpose of the study. As a result, seventy counsellors willingly responded to the questionnaire.

A five-point Likert scale was used with (very high, high, moderate, low and very low) grades. The following numerical estimates (12345) were given to the degree of educational counselors' assessment of students' mental health problems, judgment criteria were based on the following scores, and the following gradation was used: 4.5 -5 very high, 3.5 - less than 4.5 high, 2.5 - less than 3.5 moderate, 1.5 - 2.5 Low and 1- less than 1.5 is very low.

To analyze the collected data, a questionnaire was quantitatively analyzed by utilizing the SPSS Program. The program was used to answer the first question by extracting the means and standard deviations of the questionnaire's items. To answer the second, third and fourth questions, t-tests were used.

Results

The main research question is what is the impact of the Corona pandemic on students' mental health from the educational counselors' point of view in the Qasbah of Salt?

To answer this question, means and standard deviations were extracted. Then, the mental health problems within each domain were arranged according to their means and standard deviations, as shown in Table 3.

Table 3. Means and standard deviations of the degrees of the problems in each domain

Domain	Mean	STD	Degree
Sleep and eating disorders	3.56	1.04	High
Psychological problems and depression	3.29	0.87	Moderate
Obsessive-compulsive disorder	3.04	0.73	Moderate
Total	3.30	0.88	Moderate

Table 3 shows the mean scores for each domain as follows: Sleep and eating disorders (3.56), psychological problems and depression (3.29), and obsessive-compulsive disorder (3.04), while the overall mean score of the scale was (3.30). All these values were moderate except for sleep and

eating disorders, which came to a high degree.

The First Sub-Question

Do educational counselors' viewpoints on the level of students' mental health problems differ by gender? The T-test was used to answer this question, as shown in Table 4.

Table 4. Results of the t-test by gender variable

Domain	Gender	N	Mean	STD	DF	T value	Sig
Sleep and eating disorders	Male	26	2.58	0.32	68	1.385	0.178*
	Female	44	2.67	0.37			
Psychological problems and depression	Male	26	2.83	0.35	68	1.782	0.089*
	Female	44	2.53	0.42			
Obsessive-compulsive disorder	Male	26	2.26	0.45	68	2.301	0.489*
	Female	44	2.14	0.41			
The tool as a whole	Male	26	2.54	0.37	68	2.84	0.739*
	Female	44	2.46	0.40			

*significant at $\alpha \leq 0.05$

Table 4 shows no statistically significant gender differences in the educational counselors' responses to the scale. The value of the T-test reached (2.84), which is a non-statistically significant value at ($\alpha=0.05$).

The Second Sub-Question

Do educational counselors' viewpoints on the level of students' mental health problems differ by experience? A t-test was used to answer this question, as shown in Table 5.

Table 5. Results of the (T) test by experience variable

Domain	Years of Experience	N	Mean	STD	DF	T value	Sig
Sleep and eating disorders	< 10 years	22	2.09	0.21	68	1.481	0.129*
	> 10 years	48	2.15	0.27			
Psychological problems and depression	< 10 years	22	2.29	0.26	68	1.991	0.042*
	> 10 years	48	2.38	0.21			
Obsessive-compulsive disorder	< 10 years	22	1.96	0.27	68	4.825	0*
	> 10 years	48	2.17	0.36			
Total	< 10 years	22	1.486	0.18	68	4.861	0*
	> 10 years	48	2.233	0.19			

*significant at $\alpha \leq 0.05$

The results of the (t-test) indicated statistically significant experience differences. This difference favors the participants with long experience in counseling (more than ten years) compared with the participants with experience (less than ten years). The calculated (T) value was (4.861).

The Third Sub-Question

Do educational counselors' viewpoints on the level of students' mental health problems differ by qualifications? A t-test was used to answer this question, as shown in Table 6.

Table 6. The results of the t-test by academic qualifications variable

Domain	Academic qualification	N	Mean	STD	DF	T value	Sig
Sleep and eating disorders	Postgraduate	28	2.58	0.93	68	2.203	0.139*
	Bachelor	42	2.84	0.95			
Psychological problems and depression	Postgraduate	28	2.71	0.86	68	9.119	0.014*
	Bachelor	42	2.96	0.81			
Obsessive-compulsive disorder	Postgraduate	28	2.88	0.93	68	6.317	0.019*
	Bachelor	42	3.26	0.86			
Total	Postgraduate	28	2.73	0.90	68	3.17	0.031*
	Bachelor	42	2.98	0.87			

*significant at $\alpha \leq 0.05$

Table 6 shows the results of the t-test, which reveals statistically significant differences due to educational qualification. The calculated T value for the total score was (3.17) with statistical significance (0.31) favoring those with postgraduate studies.

Discussion

The results of the main research question consistent with Fiqi & Aboel-Fetouh (2020), Soufan et al. (2022), which found that students suffer from low mental health and sleep and eating disorders in light of the spread of the Corona pandemic. Furthermore, the researchers attributed the spread of these psychological problems (boredom, monotony and depression) to the imposition of the long inclusive quarantine, including home quarantine, daily routine and following up on the news circulated by the media regarding the numbers of deaths and infections with the Coronavirus. Therefore, in addition to restricting children's freedom. The study result is consistent with those (Fiqi & Aboel-Fetouh, 2020; Tadmuri et al., 2020), which indicated that the Corona pandemic affected the mental health of students and caused depression and boredom.

Most students' lack the emotional support that they used to receive from their friends and instead live in a state of repression. Conditions suddenly altered and forcing them to exercise care and refrain from approaching them or shaking hands. Additionally, there have been media warnings against socializing, donning masks, and using other sterilization tools, in addition to the ominous and alarming news that has been reported. Students had anxieties and obsessions about interacting with people and their families for fear of contracting the virus. The findings of this study are consistent with those (Fiqi & Aboel-Fetouh 2020; Sarmini, 2021), which showed the Corona pandemic's effects on mental health and the spread of panic and anxiety, depression and obsessive-compulsive disorder among students.

The results of the first sub - question indicates that male and female counselors have the same perspective regarding the students' mental health problems following the Corona pandemic. The researchers attributed these results to the fact that the precautionary measures taken by the state as preventive measures affected all regardless of their gender. These measures were the leading cause of students feeling bored, depressed and obsessive-compulsive. This result agreed with the results (Sarmini, 2021) and differed from those (Fiqi & Aboel-Fetouh, 2020).

The results of the second sub-question may be attributed to the cumulative experience of educational counselors in the field of counseling which equipped them with the ability to identify mental health problems among students. In addition, the long experience can strengthen the relationship between the counselor and students, eventually helping them to identify their psychological issues. This result is consistent with the study (Fiqi & Aboel-Fetouh, 2020) which revealed statistically significant experience differences in the educational counselors' evaluation of students' mental health problems.

The researchers base their explanation for the findings of the third sub-question on the fact that postgraduate-level specialized university courses equip educational counselors with abundant

information on psychological adjustment and students' psychological and social well-being. Additionally, their solid intellectual standing enables them to stay up with scientific advancement and acquire new knowledge about the difficulties children confront in the classroom due to crises and epidemics as evidenced by scientific and technical progress. However, the current study has some limitations regarding the participants and the research method and tools that used in the study. The results cannot be generalized unless the same conditions are obtained.

Conclusion

This study aimed to identify the impact of the Corona pandemic on students' mental health from the viewpoint of educational counselors. The findings showed a medium effect of the Corona pandemic on the psychological health of students in the areas of obsessive-compulsive disorder, psychological problems and depression. In addition, the results showed that the sleep and eating disorders faced by students came to a high degree. Based on these results, future research, policy and practice measures should be taken. In light of these findings, counselors should create appropriate programs to address any mental health issues that arise among the students. Following up with students and addressing their mental health issues should be a top priority for them to have an influential role. They should also follow up with students to offer them psychological, moral, social, and mental health help once they return to class.

The Ministry of Education also has a significant role in creating training programs for counselors to address students' mental problems and provide them with effective remedies. The researchers recommend undertaking additional research to investigate other mental health problems students encountered during the pandemic or to find out whether counseling programs have effectively addressed the mental health problems students faced due to the consequences of the Coronavirus period.

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References

- Al Wahaibi, K. S., & Shehab, E. A. (2021). The Level of Psychological Anxiety of the Coronavirus Pandemic among Omani, Bahraini and Residents Families and their Relationship to some Demographic Variables. *Journal of Educational and Psychological Studies*, 15(2), 219-234.
- Al-Asmari, S. (2020). Mental health threats associated with home quarantine due to the emerging Coronavirus. *The Arab Journal for Security Studies*, 36(2), 278-266.
- Al-Swelmyeen, M. B., & Sakarneh, M. A. (2020). The effect of self-questioning strategy in developing independent thinking in teaching physics. *Cypriot Journal of Educational Sciences*, 15(3), 502-510. <https://doi.org/10.18844/cjes.v15i3>
- Ashi, Y. & Kanash, A. (2021). The Economic, Social and Psychological Effects of the Corona Pandemic in Morocco: A Contribution to Envisioning the New Development Model. *Political Orbits Journal*, 5(1), 106-121.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934.
- Center for Strategic Studies. (2020). *The economic, social and psychological effects of the Corona crisis*. Retrieved from <https://jcss.org/en/about-the-center/>
- Doumi, K. (2020). The psychological effects of psychological quarantine for the child and the family and ways to avoid it. *Journal of Studies in the Psychology of Deviance*, 5(1), 64-71.
- Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., ... & Lavie, C. J. (2020). Psychosocial impact of COVID-19. *Diabetes & Metabolic Syndrome: clinical research & reviews*, 14(5), 779-788.
- Economic & Social Council of Jordan. (2020). *Annual Report*. Retrieved from <http://www.esc.jo/ReportView.aspx?Id=133>
- Elmer, T., Mephram, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *Plos one*, 15(7), e0236337.
- Figqi, A. & Aboel-Fetouh, M. (2020). Psychological problems caused by Corona various COVID-19 among a sample of university students in Egypt. *Journal of Faculty of Education*, (74), 1047-1089.
- Han, Q., Zheng, B., Agostini, M., Bélanger, J. J., Gützkow, B., Kreienkamp, J., ... & PsyCorona Collaboration. (2021). Associations of risk perception of COVID-19 with emotion and mental health during the pandemic. *Journal of affective disorders*, 284, 247-255.
- Rxoby, P. (2020, May 16). *Psychiatrists fear 'tsunami' of mental illness after lockdown* [BBC news]. Retrieved from <https://www.bbc.com/news/health-52676981>
- Saad, K. (2020). The extent of the impact of some aspects of the precautionary measures to confront the Corona crisis on individuals' psychological and social security from the health practitioners' perspective in King Abdulaziz Medical City. *Journal of the College of Education*, 4(187), 210-255.
- Sakarneh, M. A. (2021). The impact of COVID-19 and lockdown on families of students with special education needs. *Cypriot Journal of Educational Sciences*, 16(3), 1010-1020.
- Sakarneh, M. A., Sabayleh, O. A., & Alramamneh, A. L. K. (2019). The sensory characteristics of children with autism spectrum disorder: Teachers' observation. *International Journal of Early Childhood Special Education*, 11(2), 105-115. <https://doi.org/10.20489/intjces.670459>
- Sarmini, I. (2021). Mental health and its relationship with the psychological resilience of university students during the coronavirus (covid-19) pandemic in northwestern Syria. *Arab Journal of the Arab American University*, 7(2), 123-148.
- Soufan, B., Bayrakdar, B. & Soufan, I. (2022). The impact of COVID-19 on mental health in Syria compared to a sample of Arab countries. In *A study of anxiety level variables before and during the outbreak of the COVID-19 pandemic*. Doha, Qatar: Q-Science, Hamad Bin Khalifa University Press.

Tadmuri, R., Fawaz, R., Hamia, H. (2020). The mental health of the Lebanese during the Corona pandemic (Covid-19) in the light of some demographic variables: A descriptive survey study on a sample of members of the Lebanese society. *Arab Journal for Scientific Publishing*, 25(1). 282-310.

Wadaa, N., Al-Adamat, O. (2020). Mental health crisis during the Corona COVID-19 pandemic among health workers (a comparative study between Iraq and Jordan). *Al-Balqa Journal for Research and Studies*, 23(2).113-122.

Liu, X. Y., Liu, J. X., & Zhong, X. N. (2020). Psychological State of College Students During COVID-19 Epidemic. *The Lancet Global Health*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3552814