



# The psychological impact of the COVID-19 pandemic on the anxiety levels of Arab college students in Israel

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**Abstract-** The COVID-19 pandemic first arrived in Israel on February 27, 2020. During the course of the pandemic, as of now, over 350,000 have been infected, and over 3,000 have died. The spreading virus caused not only health risks, but triggered economic and social difficulties, and unbearable psychological and emotional stress among the population in general, and among academic students in particular. The present research aimed to assess the consequent anxiety level among Arab students in Israel, and to examine the correlation between anxiety level and other variables (such as steady income, financial support from the family, concerns about academic delays, day-to-day life, and so on). Questionnaires included the 7-item generalized anxiety disorder questionnaire (GAD-7) and demographic data. 437 questionnaires were analyzed. The results showed that 19% of the respondents experienced severe anxiety, 29.5% moderate anxiety, and 34.1% mild anxiety. It was also found that students with economic worries, i.e., no steady income and lack of financial support from the family, reported mild to moderate anxiety. Correlations analysis indicated that anxiety about academic delays and economic worries, intentions to drop out or freeze studies, and effects on daily life – were positively correlated with anxiety symptoms, whereas a steady income and financial support were negatively correlated with anxiety.

**Keywords:** COVID-19, anxiety level, Arab students

## I. INTRODUCTION

The corona virus disease (COVID-19) spread swiftly through China and the rest of the world, causing severe acute respiratory infection (Bao et al., 2020). This massive infectious health event caused enormous pressure on the world population (Gao et al., 2020). The pandemic triggered not only the risk of dying from the viral infection, but also unbearable psychological stress for people in China and throughout the world (Duan & Zhu, 2020; Xiao, 2020).

The first studies conducted on this pandemic found a wide range of implications on mental health (Schiff et al., 2020). Studies have shown that people feel anxious about getting sick and dying (Kim et al., 2018; Rubin, Potts, & Michie, 2010), exhibit symptoms of anxiety and depression (Gao et al., 2020; Wang et al., 2020), suffer self-blame for infecting others (Sim et al., 2010), and certain groups experience phenomena of stigmatization and discrimination (Van Bavel et al., 2020).

The continuous spread of the disease has resulted in colleges and universities all over the world, Israel included, opting for distance learning (Schiff et al., 2020), which required students' swift adjustment to a new reality, and it stands to reason that it created emotional, social and economic needs, which would probably affect their mental health. Guiding students to effectively regulate their emotions during times of emergency or crisis, and trying to prevent depression and suicidal tendencies, have become an essential and important part of the colleges' and universities' role.

The aim of the present study was to assess the resultant anxiety level among Arab students in Israel, and to examine the correlation between their anxiety level and other variables.

The Arab citizens of Israel are about 20% of the general population (1.7 million). Arab society is an ethnic, religious, lingual, cultural and national minority (Gonen-Avital, 2016; Smootha, 2010, Tarabia & Abu-Rabia, 2016), and is an integral part of Israeli society. The Arab minority is made up of 82% Muslims, 9% Christians, and 9% Druze, but nevertheless are a homogenic minority. They speak the same language, and adhere to the same social codes (Peleg, 2009; Toma, 2016), and are typically a fairly patriarchal and collectivist society (Manor, 2018).

In the 2019-2020 academic year, there were 60 higher education institutions in Israel, with 327,300 students. The relative portion of Arab students was 19.2% undergraduate students, 14.6% graduate

students, and 7.2% doctoral students (Central Bureau of Statistics, 2020). In recent years, encouraged by the Israeli Council for Higher Education (CHE), the integration of Arab students in higher education has increased. For instance, in 2019/2020, over 50,000 Arab students began their studies, thus reinforcing the positive trend of breaking barriers on the road to higher education (Maayan, 2020). However, the corona crisis and its repercussions on the nature of learning jeopardizes these trends. Arab society has been hit especially hard by the pandemic, and, as a result, more students suffer from lack of income, collapse under the economic burden, and drop out.

Academic institutions in Israel have made arrangements to deal with the challenges, but it seems that not enough attention is paid to long-term implications for students in general, and for Arab students in particular. The shift to distance learning worries Arab students, who fear they might not be able to continue their education following the pandemic. This population is specifically struggling with faulty internet infrastructures, shortage of computers, and lack of home-study space. Distance learning also exacerbates difficulties to understand the learning materials. These difficulties and others are serious obstacles and barriers to Arab students' studies in academic institutions in Israel.

Therefore, this study examined the level of anxiety and mental health of the Arab students during the pandemic. The research assessed the mental state of Arab students in academia, and also aimed to provide a theoretic basis for psychological, emotional, social and educational interventions. Additionally, this study can serve as a basis for disseminating national-governmental policy for coping with crisis, together with preparing a future plan for effectively dealing with mental crisis among academic students.

The present study has been performed almost in parallel to similar studies with the same tools in many academic institutions in Israel and abroad. The findings serve as a research basis, through which we can share findings and build multivariate models to explain distress and resilience at times of global crisis, while finding the similar and dissimilar between countries and institutions.

It should be noted that the 7-item generalized anxiety disorder questionnaire (GAD-7) (Toussaint et al., 2020) was used to assess the students' anxiety levels. This is a self-report questionnaire, developed to provide initial treatment, and it helps to diagnose specific disorders. The questionnaire takes less than three minutes to complete, and is quite common in current research.

## II. METHODOLOGY

### 2.1 Research population

The research population included Arab male and female undergraduate students in colleges and universities in Israel, who live in Arab villages and towns, and in mixed cities. The sample included 437 respondents (a 100% response rate), of which 86.3% were women (N=377) and 13.7% were men (N=60). The mean age of the respondents was 22.54 (SD=4.37). 75.5% were enrolled in colleges (N=330) and 24.5% in universities (N=107). The participants came from all religions (Muslim, Christian and Druze), and varied social status and age groups. Table 1 describes the basic demographics of the research population.

Table 1. *Demographics of research population*

Variable		N	%
Gender	Male	377	86.3
	Female	60	13.7
Marital status	Single	356	81.5
	Married	78	17.8
	Divorced	3	0.7
Year of studies	First	140	32.0
	Second	116	26.5
	Third	10	22.9
	Fourth	81	18.5
Type of academic institution	College	330	75.5
	University	107	24.5
Religion	Muslim	362	82.8
	Christian	42	9.6

	Druze	33	7.6
Region	North	374	85.6
	Center	46	10.5
	South	10	2.3
	Jerusalem	7	1.6
Place of residence	Town	162	37.2
	Village	246	56.4
	Mixed city	28	6.4

## 2.2 Tools

The questionnaire included the 7-item generalized anxiety disorder questionnaire (GAD-7) and questions about the respondents' demographic data and state of mind: gender, marital status, year of studies, type of academic institution, region, place of residence, steady income, source of income, emotional-social support, support of academic institution, concern about delays, and effect on day-to-day life. The questionnaires were anonymous to preserve confidentiality.

The GAD-7 questionnaire includes seven items on a scale of 0=*not at all* to 3=*nearly every day*. The total score is between 0 and 21; the higher the score, the more the respondents felt anxiety during the past few weeks. This questionnaire has high internal reliability (Cronbach's  $\alpha = 0.911$ ).

## 2.3 Procedure

Following approval from the research authority and ethics committee of the colleges and universities, the questionnaires were distributed through the institution's academic email system or through the individual WhatsApp groups.

Responses were analyzed by means of chi-square tests, in which the independent variable was anxiety level (none/mild/moderate/severe). Other variables that affect anxiety levels were also examined by means of chi-square tests. The relationship between gender and the research variables was also tested. In addition, Spearman's rank correlation coefficient was calculated to examine the correlations between the research variables.

## 2.4 Ethics

The research authorities and ethics committees of the colleges and universities approved the research. The goals of the study were explained to the participants, and they all gave their informed consent to participate in the study.

## III. RESULTS

Table 2 shows the distribution of anxiety levels among the research population during the corona pandemic. 17.4% of the participants did not experience any anxiety, but 34.1% experienced mild anxiety, 29.5% moderate anxiety, and 19% severe anxiety. In addition, chi-square tests examined the differences between male and female students, and no significant differences were found ( $p > 0.05$ ). In other words, the findings indicate that gender had no significant effect on anxiety. Men and women experienced similar levels of anxiety.

Table 2. *Distribution of anxiety level among respondents*

Anxiety level	General		By gender				$X^2$ 2.07	$p$ 0.56
	N	%	Male		Female			
	N	%	N	%	N	%		
No anxiety	76	17.4	65	17.2	11	18.3		
Mild anxiety	146	34.1	132	35.0	17	28.3		
Moderate anxiety	129	29.5	112	29.7	17	28.3		
Severe anxiety	83	19	68	18.0	15	25.0		

Table 3 depicts the levels of anxiety by the various research variables. Chi-square tests were conducted, in which the independent variable was level of anxiety (none, mild, moderate, severe). Eight distinct significant categories emerged.

Table 3. *Levels of anxiety by research variables*

Variable	Total	No anxiety	Mild anxiety	Moderate anxiety	Severe anxiety	X <sup>2</sup>	p	
Place of residence	Village	191	29	62	57	43	3.44	0.33
		43.7%	15.2%	32.5%	29.8%	22.5%		
	City	246	47	87	72	40		
		56.3%	19.1%	35.4%	29.3%	16.3%		
Year of studies	First	140	33	49	36	22	20.55	0.015
		32.0%	23.6%	35.0%	25.7%	15.7%		
	Second	116	20	30	40	26		
		26.5%	17.2%	25.9%	34.5%	22.4%		
	Third	100	11	35	27	27		
	22.9%	11.0%	35.0%	27.0%	27.0%			
	Fourth	81	12	35	26	8		
		18.5%	14.8%	43.2%	32.1%	9.9%		
Steady income	Yes	251	106	64	35	46	22.88	0.001
		57.4%	42.2%	25.5%	13.9%	18.3%		
	No	186	43	65	48	30		
		42.6%	23.1%	34.9%	25.8%	16.1%		
Financial support from family	Yes	281	57	104	66	54	15.47	0.001
		64.3%	20.3%	37.0%	23.5%	19.2%		
	No	156	19	45	63	29		
		35.7%	12.2%	28.8%	40.4%	18.6%		
Social-emotional support	Yes	283	46	100	82	55	1.12	0.77
		64.8%	16.3%	35.3%	29.0%	19.4%		
	No	154	30	49	47	28		
		35.2%	19.5%	31.8%	30.5%	18.2%		
Support from academic institution	Yes	86	16	35	23	12	3.17	0.37
		19.7%	18.6%	40.7%	26.7%	14.0%		
	No	351	60	114	106	71		
		80.3%	17.1%	32.5%	30.2%	20.2%		
Infected by corona virus	Yes	29	3	14	10	2	5.37	0.15
		6.6%	10.3%	48.3%	34.5%	6.9%		
	No	408	73	135	119	81		
		93.4%	17.9%	33.1%	29.2%	19.9%		
Friend or relative infected	Yes	39	84	84	46	39	4.46	0.26
		15.4%	33.2%	33.2%	18.2%	15.4%		
	No	37	65	45	37	37		
		20.1%	35.3%	24.5%	20.1%	20.1%		
Economic worries	Yes	388	59	132	116	81	16.13	0.001
		88.8%	15.2%	34.0%	29.9%	20.9%		
	No	49	17	17	13	2		
		11.2%	34.7%	34.7%	26.5%	4.1%		
Concerns about academic delays	Yes	351	42	126	116	67	39.42	0.001
		80.3%	12.0%	35.9%	33.0%	19.1%		
	No	86	34	23	13	16		
		19.7%	39.5%	26.7%	15.1%	18.6%		
Dropout intentions	Yes	182	15	51	55	61	53.08	0.001
		41.6%	8.2%	28.0%	30.2%	33.5%		
	No	255	61	98	74	22		
		58.4%	23.9%	38.4%	29.0%	8.6%		
Intentions	Yes	148	11	41	45	51	43.69	0.001

Variable	Total	No anxiety	Mild anxiety	Moderate anxiety	Severe anxiety	X <sup>2</sup>	p
to freeze studies	33.9%	7.4%	27.7%	30.4%	34.5%		
No	289	65	108	84	32		
	66.1%	22.5%	37.4%	29.1%	11.1%		
Effect on everyday life	393	56	137	119	81	28.97	0.001
Yes	89.9%	14.2%	34.9%	30.3%	20.6%		
No	44	20	12	10	2		
	10.1%	45.5%	27.3%	22.7%	4.5%		
Sought treatment	27	2	8	10	7	4.00	0.38
Yes	6.2%	7.4%	29.6%	37.0%	25.9%		
No	410	74	141	119	76		
	93.8%	18.0%	34.4%	29.0%	18.5%		

a) Year of studies

It was found that the most frequent level of anxiety during the first year of studies was mild anxiety (35%). However, during the second year 34.5% experienced moderate anxiety, and during the third year 27% experienced moderate and severe anxiety combined. During the fourth year, 43.2% experienced mild anxiety. It seems that levels of anxiety increased during the second and third years, and then diminished during the fourth year.

b) Steady income

Among participants with a steady income, the prevalent levels of anxiety were none (42.2%) and mild (25.5%), whereas among those without a steady income, 34.9% experienced mild anxiety and 25.8% experienced moderate anxiety. This indicates a significant negative relationship between steady income and level of anxiety.

c) Financial support from family

Among 37% of the participants who enjoyed financial support from their families, the prevalent anxiety was mild, while among those without financial support from their families, 40.4% experienced moderate anxiety. This indicates a significant negative relationship between financial support and level of anxiety.

d) Economic worries

Among participants with economic worries, 34% experienced mild anxiety and 29.9% experienced moderate anxiety. Among those with no economic worries, 34.7% experienced no significant anxiety and 34.7% experienced mild anxiety, indicating a positive significant relationship between the variables. It should be noted that on the questionnaire this variable was explained as: no work, no income, unemployment and non-payment of debts.

e) Concerns about academic delays

Among participants with concerns about academic delays, 34% experienced mild anxiety and 29.9% experienced moderate anxiety, whereas among students without these concerns, 39.5% experienced no anxiety and 26.7% experienced mild anxiety, indicating a positive significant relationship between the variables. It should be noted that the respondents were informed on the questionnaire that this variable included successful scholastic achievements, submitting assignments, attending lectures, difficulties understanding study materials, distance learning and internet failures, no library access, and technical malfunctions.

f) Dropout intentions

The frequent level of anxiety among respondents with dropout intentions was severe anxiety (33.5%), and the frequent level of anxiety among respondents with no dropout intentions was mild anxiety (38.4%), indicating a positive significant relationship between the dropout intentions and anxiety level.

g) Intentions to freeze studies

The frequent level of anxiety among respondents with intentions to freeze studies was severe anxiety (34.5%), and the frequent level of anxiety among respondents with no such intentions was mild anxiety

(37.4%), indicating a positive significant relationship between the intentions to freeze studies and anxiety level.

h) Effect on everyday life

Effect on everyday life included aspects such as entertainment, studies, participation in social events, mobility, and personal development. Among respondents who felt an effect on their everyday life, 34.9% experienced mild anxiety and 30.3% moderate anxiety. Among those who did not, the frequent levels of anxiety were none (45.5%) or mild (27.3%). This indicates a significant positive relationship between anxiety level and effect on everyday life.

Table 4 exhibits the correlations between the main variables of this study. The variables: financial support from the family, economic worries, support from the academic institution, and effect on everyday life were found to have a significant relationship with many other variables. Financial support from the family significantly correlated with economic concerns ( $r=-0.146$ ), dropout intentions ( $r=-0.166$ ), intentions to freeze studies ( $r=-0.419$ ), emotional support ( $r=0.294$ ), and support from academic institution ( $r=0.240$ ). The variable economic worries significantly correlated with concerns about academic delays ( $r=0.223$ ), dropout intentions ( $r=0.199$ ), effect on everyday life ( $r=0.169$ ), and support from academic institution ( $r=-0.095$ ). Effect on everyday life significantly correlated with year of studies ( $r=-0.088$ ), economic worries ( $r=0.169$ ), concern about academic delays ( $r=0.119$ ), and dropout intentions ( $r=0.098$ ). The variable support from academic institution significantly correlated with steady income ( $r=0.084$ ), financial support from family ( $r=0.240$ ), economic worries ( $r=-0.095$ ), concerns about academic delays ( $r=-0.157$ ), dropout intentions ( $r=-0.116$ ), intentions to freeze studies ( $r=-0.290$ ), and emotional support from family and friends ( $r=0.185$ ).

Table 4. Correlations between research variables

	1	2	3	4	5	6	7	8	9	10	11
1. Year of studies	-										
2. Steady income	.057	-									
3. Financial support from family	.098*	.151**	-								
4. Economic worries	.036	.180**	.146**	-							
5. Concerns about academic delays	.009	-.026	-.070	.223**	-						
6. Dropout intentions	.010	-.015	.166**	.199**	.186**	-					
7. Intentions to freeze studies	.195	-.114	.419**	.124	.124	.855**	-				
8. Effect on everyday life	.088*	-.047	.004	.169**	.119**	.098*	.086	-			
9. Social-emotional support	.028	.046	.294**	.027	-.002	-.041	.142	.041	-		
10. Support from academic institution	.040	.084*	.240**	.095*	.157**	.116**	.290*	.042	.185**	-	
11. Sought treatment	.026	.071	-.007	.063	.034	.093*	.020	.008	.010	.086*	-

Notes: \* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$

In addition, further analysis examined the correlations between the main research variables and gender. No significant difference was found between male and female students.

#### IV. DISCUSSION

Studies have shown that public health emergencies can have various psychological effects such as anxiety, fear, and stress on students in higher education institutions (Mei et al., 2011). This research attempted to examine the mental health of academic students during the COVID-19 pandemic, and to study the factors that affect it. The findings indicated that 82.6% of the respondents – male and female Arab students in colleges and universities in Israel – experienced varying levels of anxiety. Of these, 19% felt severe anxiety, and 34.1% felt mild anxiety.

A number of differential variables related to COVID-19, which included economic protection and risk factors (e.g., steady income, financial support from the family, and economic worries), effects on day-to-day life, concerns about delaying academic studies, dropout intentions or intentions to freeze studies, were all positively related to the respondents' anxiety symptoms during the pandemic. The current findings support the results of a survey conducted by the Geo-Cartography Knowledge Group in June 2020 for the Edmond de Rothschild Foundation, which found that one third of the Arab students that were supposed to continue their academic education in the coming school year were considering to drop out or take a break. In contrast, in the Israeli general population, 84% of the students intended to continue and/or complete their studies. If nothing is done, the impressive achievement of integrating Arab students in academia during the recent decade – could be halted or regressed.

Similar studies noted that in addition to the national health situation, the pandemic will seriously affect the national economy and individuals' livelihood (Kernan, 2019). Because of the corona outbreak, quite a few families have lost their income, and students might feel anxious about paying their tuition fees (Peng et al., 2012). The current study has shown that the students perceived the economic aspect as significant, and it contributed to their anxiety levels, which can be explained by increased economic pressures (Liu, 2013). This interesting finding requires special attention to economic difficulties and their potential implications for academic studies. Unlike previous research (Moreno et al., 2019), this study found no significant differences for gender, which means that men and women experienced similar levels of stress and anxiety as a result of the pandemic.

Schiff and colleagues (2020) argued that the steps taken by the Israeli government to control the spread of the pandemic – imposing lockdowns, travel restrictions, closing entertainment venues, special restrictions on national holidays, and general restrictions imposed on day-to-day life – necessarily disrupted routine life, and increased anxiety. This argument was corroborated by the present study. Furthermore, colleges and universities had to switch to distance learning and teaching within a short time, which required swift adjustments to a new reality, and apparently created emotional, social, and economic needs (Schiff et al., 2020). This necessarily created exceptional difficulties for Arab students to cope with study assignments and with distance learning, and inevitably increased their levels of anxiety. Previous research (Brooks et al., 2020; Kwok et al., 2020; Tang et al., 2020) has shown that public health emergencies have a negative effect on the mental health of the general public, and on students' mental health in particular. The resulting increased anxiety levels were supported in the current study through the respondents' reports of difficulties to cope with assignments during this period and concerns about delays in their academic education.

The current findings pointed to both positive and negative correlations between anxiety level and many variables. The variables: financial support from the family, economic worries, support from the academic institution, and effect on everyday life were found to have a significant relationship with many other variables. Financial support from the family significantly negatively correlated with economic concerns, dropout intentions, intentions to freeze studies, and positively with emotional support, and support from academic institution. The variable economic worries significantly positively correlated with concerns about academic delays, dropout intentions, effect on everyday life, and negatively with support from academic institution. Effect on everyday life significantly negatively correlated with year of studies, and positively with economic worries, concern about academic delays, and dropout intentions. The variable support from academic institution significantly positively correlated with steady income, financial support

from family, emotional support from family and friends, and negatively with economic worries, concerns about academic delays, dropout intentions, and intentions to freeze studies.

In summary, public mental health in general, and students' mental health in particular, is significantly impacted by public health emergencies, and requires social and emotional support. The results of the current study showed that the relationship between anxiety and social-emotional support was negative, and this is corroborated by previous research (Chen et al., 2020; Thompson et al., 2016). Lack of social-emotional support negatively affects the students' resilience. Hence, providing social-emotional support not only reduces anxiety levels during the pandemic, but improves their mental ability to effectively and robustly cope with such a crisis. This conclusion emphasizes the importance of social-emotional support to mental health during emergency situations (Bai et al., 2005).

#### 4.1 Recommendations

The mental health of Arab students in higher education institutions in Israel is important and meaningful in any situation, and especially during emergency or crisis situations such as the corona pandemic. This issue requires help and support from society, families, colleges and universities, in cooperation with official government bodies, to provide high-quality mental health services in an attempt to strengthen students' resilience and ensure effective adaptive behavior at times of crisis.

The current results indicate the importance of financial support from the family and academic bodies, in addition to a steady income. These elements can provide protection against anxiety, and prevent dropping out of school, especially after a decade of almost double the number of Arab students, especially women, in academic education. This increase has made a considerable contribution to the social and economic development of Israel in general, and Arab society in particular. Financial support requires targeted allocation of budgets, as well as private-sector and college and/or university scholarship funds, which can guarantee continuous and systematic studies with no danger of dropouts or freezing.

The results also emphasize the need for programs and projects of vocational training and coping with crises – initiated by colleges and universities – during academic studies. It is also very important to establish mental-emotional intervention programs guided by experts. At the same time, educational support and digital literacy training should be provided to streamline distance learning, and prevent delays and setbacks.

A government framework in cooperation with the Council for Higher Education should be introduced, to set up an array of rules, and financial, educational and emotional support systems, which can address the mental needs and various concerns of all academic students, and especially Arab students, who suffer more in times of crisis.

#### 4.2 Limitations

This study focused on Arab students in Israel. In order to get a larger picture of the general student population, Jewish students should be investigated as well.

This study was conducted among undergraduate students. It is important to also investigate advanced degrees students, and construct a comparative array.

#### REFERENCES

1. Bao, Y., Sun, Y., Meng, S., Shi, J., Lu, L. 2020. 2019-nCoV epidemic: address mental health care to empower society. *Lancet* 395(10224), e37–e38. [https://doi.org/10.1016/S0140-6736\(20\)30309-3](https://doi.org/10.1016/S0140-6736(20)30309-3)
2. Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., Rubin, G. J. 2020. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
3. Central Bureau of Statistics 2020. Higher education in Israel – selected data for the 2019-2020 academic year (in Hebrew) (accessed 15 October 2020). <https://www.cbs.gov.il/he/mediarelease/pages/2020>
4. Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L., Sheng, C., Cai, Y., Li, X., Wang, J., Zhang, Z. 2020. Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry* 7(4), e15-e16. [https://doi.org/10.1016/S2215-0366\(20\)30078-X](https://doi.org/10.1016/S2215-0366(20)30078-X)



5. Duan, L., Zhu, G. 2020. Psychological interventions for people affected by the COVID-19 epidemic. *The Lancet Psychiatry* 7(4), 300-302. [https://doi.org/10.1016/S2215-0366\(20\)30073-0](https://doi.org/10.1016/S2215-0366(20)30073-0)
6. Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., . . . Dai, J. 2020. Mental health problems and social media exposure during COVID-19 outbreak. *PLoS One*, 15(4), e0231924. <https://doi.org/10.1371/journal.pone.0231924>
7. Gonen-Avital, S. 2016. Cultural Diversity and its Implication on Parents' Attitudes Toward their Child's Learning Disability—An Outline of a Research Study. DOI: 10.14746/se.2016.40.19.
8. Kernan, W.D. 2019. Health-related impediments to learning among dental and oral surgery students. *J. Prev. Interv. Community* 47(1), 32–44. <https://doi.org/10.1080/10852352.2018.1547307>
9. Kim, H.-C., Yoo, S.-Y., Lee, B.-H., Lee, S. H., & Shin, H.-S. 2018. Psychiatric Findings in Suspected and Confirmed Middle East Respiratory Syndrome Patients Quarantined in Hospital: A Retrospective Chart Analysis. *Psychiatry Investigation* 15(4), 355-360. DOI:10.30773/pi.2017.10.25.1
10. Kwok, K.O., Wong, V., Wei, V.W.L., Wong, S.Y.S., Tang, J.W. 2020. Novel coronavirus (2019-nCoV) cases in Hong Kong and implications for further spread. *The Journal of Infection* 80(6), 671-693. DOI: 10.1016/j.jinf.2020.02.002
11. Liu, Z.F. 2013. A Study on the Relationship Between Adverse Family Experiences in Childhood and Emotional and Anxiety Disorders. Dalian Medical University.
12. Maayan, Y. 2020. One third of the Arab students might drop out because of the corona (in Hebrew) (accessed 20 September 2020). <https://www.themarket.com/opinion/1.9177028>
13. Mei, S.L., Yu, J.X., He, B.W., Li, J.Y. 2011. Psychological investigation of university students in a university in Jilin province. *Med Soc (Berkeley)* 24(05), 84–86.
14. Moreno, E., Muñoz-Navarro, R., Medrano, L.A., González-Blanch, C., Ruiz-Rodríguez, P., Limonero, J.T., Moretti, L.S., Cano-Vindel, A., Moriana, J.A. 2019. Factorial invariance of a computerized version of the GAD-7 across various demographic groups and over time in primary care patients. *J. Affect Disord.* 252, 114–121. <https://doi.org/10.1016/j.jad.2019.04.032>
15. Peleg, O. 2009. Test Anxiety, academic achievement, and self-esteem among Arab adolescents with and without learning disabilities. *Learning Disabilities Quarterly*, 32, 11-20. DOI: 10.2307/25474659
16. Peng, L., Zhang, J., Li, M., Li, P., Zhang, Y., Zuo, X., Miao, Y., Xu, Y. 2012. Negative life events and mental health of Chinese medical students: the effect of resilience, personality and social support. *Psychiatry Res.* 196(1), 138–141. DOI: 10.1016/j.psychres.2011.12.006
17. Rubin, G. J., Potts, H. W. W., & Michie, S. (2010). The impact of communications about swine flu (influenza A H1N1v) on public responses to the outbreak: results from 36 national telephone surveys in the UK. *Health Technology Assessment* 14(34), 183266. DOI:10.3310/hta14340-03
18. Schiff, M., Pat-Horenchik, R., Benbenisti, R. 2020. Life in the shadow of corona: Feelings and needs of students at the Hebrew University. Research report (in Hebrew). Hebrew University, Jerusalem.
19. Sim, K., Huak Chan, Y., Chong, P. N., Chua, H. C., Wen Soon, S. 2010. Psychosocial and coping responses within the community health care setting towards a national outbreak of an infectious disease. *Journal of Psychosomatic Research*, 68(2), 195202. doi: <https://doi.org/10.1016/j.jpsychores.2009.04.004>
20. Smooha, S. 2010. Arab–Jewish relations in Israel: Alienation and rapprochement. Institute of Peace, Washington DC.
21. Tang, B., Bragazzi, N.L., Li, Q., Tang, S., Xiao, Y., Wu, J. 2020. An updated estimation of the risk of transmission of the novel coronavirus (2019-nCov). *Infect Dis. Model* 5, 248–255. <https://doi.org/10.1016/j.idm.2020.02.001>
22. Tarabia, E., Abu-Rabia, S. 2016. Social Competency, Sense of Loneliness and Self-Image among Reading Disabled (RD) Arab Adolescents. *Creative Education*, 7(09), 1292-1313. DOI: 10.4236/ce.2016.79135
23. Thompson, G., McBride, R.B., Hosford, C.C., Halaas, G. 2016. Resilience among medical students: The role of coping style and social support. *Teach Learn Med.* 28(2), 174–182. DOI: 10.1080/10401334.2016.1146611
24. Toma, A. 2016. Children's education in the Arab village. *Megamot* 2, 130-138. (In Hebrew)
25. Toussaint, A., Hüsing, P., Gumz, A., Wingenfeld, K., Härter, M., Schramm, E., Löwe, B. 2020. Sensitivity to change and minimal clinically important difference of the 7-item generalized anxiety disorder questionnaire (GAD-7). *J Affect Disord.* 265, 395–401. DOI: 10.1016/j.jad.2020.01.032
26. Van Bavel, J. J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... Druckman, J. N. 2020) Using social and behavioural science to support COVID-19 pandemic response. *Nat Hum Behav.* 4(5), 460-471. <https://www.nature.com/articles/s41562-020-0884-z>

27. Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., Ho, R. C. 2020. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health* 17(5), 1729. DOI: <https://doi.org/10.3390/ijerph17051729>
28. Xiao, C., 2020. A novel approach of consultation on 2019 novel coronavirus (COVID-19)-related psychological and mental problems: Structured letter therapy. *Psychiatry Investig.* 17(2), 175–176. DOI: 10.30773/pi.2020.0047