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Psychological preparedness and resilience of Palestinians' university staff during COVID-19 pandemic: A cross-sectional online survey

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Abstract

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Abstract

Background

The COVID-19 pandemic has posed a significant threat to the worldwide population. Although several studies have been conducted targeting the diverse population, such as healthcare professionals and students, no study available to date sheds light on the academic and administrative staff who have experienced stress due to daily academic activities, such as using online platforms for teaching and learning.

Objectives

This study aims to investigate the resilience and psychological preparedness of Palestinian university staff during the COVID-19 pandemic.

Methods

A cross-sectional online survey mode was applied. A convenience sampling was used to present academic and administrative university staff in Palestine. An invitation link was sent to participants via the university portal, including the questionnaires. A modified Psychological Preparedness for Disaster Threats Scale (PPDTS) and Ego-Resilience scale (ER11) were used for collecting data. Descriptive statistics were utilized to present participants' characteristics and outcome measures. Pearson correlation coefficient was utilized as appropriate to examine the association between variables.

Results

The mean age of the study participants was 39.21±11.32 years. About 52.8% of participants experienced stress from COVID-19, and only 20% of participants had previous disaster training. Findings revealed that the mean score of the PPDTS and ER11 was 35.82±13.57 and 28.75±8.15, respectively, indicating that the participants had a moderate level of psychological preparedness and resilience. Psychological preparedness and resilience were positively correlated to each other ($r = 0.731$, $p < 0.001$).

Conclusions

Disaster training was associated with better preparedness and higher resilience among university staff. Future training and enhancements in training delivery modes are warranted to foster better resilience and preparedness among staff to deal with such a pandemic. This study also contributes to goal three of the Sustainable Development Goals 2030, as we emphasize that with better resilience and preparedness, university staff will have better health and well-being in the community.

Keywords: Resilience; psychological preparedness; COVID-19 pandemic; university staff

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Psychological preparedness and resilience of Palestinians' university staff during COVID-19 pandemic: A cross-sectional online survey

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Background

Disasters are one of the primary sources of psychological pain and distress (Makwana, 2019). Coronavirus (COVID-19) is a disaster at an unprecedented rate with global consequences (Pfefferbaum & North, 2020). It has posed a significant threat to the worldwide population (Varshney, Parel, Raizada, & Sarin, 2020). Responses to the disaster are varied, including adverse consequences on the psychological status of people exposed to these events (Makwana, 2019). Evidence has underscored the high prevalence of mental health problems in countries exposed to disasters and trauma-related experiences (Skryabina, Betts, Reedy, Riley, & Amlôt, 2020; Hannah Zulch, 2019b).

Since 29th December 2019, the first confirmed COVID-19 cases in China,(Carlos, Dela Cruz, Cao, Pasnick, & Jamil, 2020) worldwide countries have suffered from high number of morbidity and mortality of COVID-19 cases (Abu-Odah et al., 2021). Approximately 4,633 million people had died after contracting the respiratory virus; the total numbers of positive tested cases have surpassed more than 224,8 million people. The aforementioned data are derived from the Johns Hopkins University Coronavirus Resource Center's COVID-19 Map and the World Health Organization's (WHO) Coronavirus Disease (COVID-19) status bulletins., as well as according to the world coronavirus meter on 11st September 2021 (Johns Hopkins University Medicine, 2020; World Health Organization, 2020). Palestine is one of the worldwide countries that encountered the COVID-19 pandemic, where the first case was recorded in the West Bank on 5th March 2020 (United Nations Office for the Coordination of Humanitarian Affairs, 2020). The first two cases in Gaza Strip were reported on 21st March 2020 (Palestinian Ministry of Health, 2020). There are 224,8 million infected cases and 594,5 per million deaths recorded in Palestine (United Nation, 2019).

The substantial number of illnesses and fatalities in the country has had a significant influence on the population's health (Makwana, 2019; Setyo Palupi & Noor Rahman Himawan, 2020). People living in an affected community may experience psychological problems at the time of the pandemic (Freedy, Shaw, Jarrell, & Masters, 1992; Setyo Palupi & Noor Rahman Himawan, 2020). The psychological effects of pandemics can cause trauma, stress, and PTSD. They also can induce psychological shocks and repugnant circumstances for people who encounter them. Thus, affected people need to be well-prepared psychologically and possess the ability to reverse this critical situation in a healthy way (Setyo Palupi & Noor Rahman Himawan, 2020).

Psychological preparedness, the well-founded cognitive awareness and the expectations to deal with emotional reactions in an unfavorable situation have pretended a convincing relevance during a health disaster of this significance (Malkina-Pykh & Pykh, 2015). Psychological preparedness is defined as "a state of awareness, anticipation and readiness of person in threat situation for any unexpected and emotional arousal, person owns psychological response, and the ability to manage that situation" (Hannah Zulch, 2019a). This ability, coined as "resilience", positively influences one's mental health, physical health, and general well-being (van Ijzendoorn et al., 2011; Walsh, Dawson, & Mattingly, 2010). With psychological preparedness and resilience, people may enhance the protective factors (e.g., coping strategies, internal locus of control, and social skills) against such stressful and traumatic events. Connor and Davidson(Connor & Davidson, 2003) had suggested that resilience is of multidimensional

characteristics and will present when the protective factors hinder the adverse events. In addition, according to Connor and Davidson,(Connor & Davidson, 2003) successful and unsuccessful adaptation to internal and external stressors will influence coping with these stressors. Moreover, the presence of psychological preparedness assists people in confronting the risk of such traumatic events(Roudini, Khankeh, & Witruk, 2017). Therefore, citizens are urged to prepare psychologically against the long-term psychological effects of such a health crisis.

Several studies were conducted to examine the psychological preparedness to COVID-19; for instance, Villani et al. (2021) investigated the influence of COVID-19 psychological well-being on the Italian university students and found that students are at high risk of developing of psychological distress. While Afulani et al., (2021) focused on assessing the psychological preparedness of Ghanaians healthcare workers. Findings showed that workplace workers did not prepare very well to combat to such pandemics and experienced a high level of stress. Despite the important finings of previous studies, no study has shed light on the academic and administrative staff who have experienced stress due to daily academic activities, such as using online platforms for teaching and learning.

In Palestine, all schools and higher education institutions ceased face-to-face education and are urged to use the online platforms for teaching and learning, e.g., Moodle and Zoom. With the current change and conditions of the Palestinian country, people are uncertain and do not have a clear vision for the future. The academic and administrative staff are part of the population, and they too have many other responsibilities, including caring for their families, social relationships and preparing their classes through online platforms. Consequently, academic staff face daily stressors and are uncertain about their lives in the upcoming days. Therefore, this study aimed at investigating resilience and psychological preparedness during COVID 19 amongst university staff. The obtained results will inform a structural framework for the development and implementation of prospective educational training in the future.

Methods

Study design

A cross-sectional online survey research design was applied in this study. The survey was designed in accordance with the “Checklist for Reporting Results of Internet E-Surveys (CHERRIES)” (Eysenbach, 2012)

Subjects

Academics and administrative staff working at An Najah National University were invited to participate in this study.

Sampling and setting

Convenience sampling was utilized to represent the entire academic and administrative staff from An Najah National University in the West Bank-Palestine. Sample size calculation performed based on online raosoft sample size calculator, in which population is 1500, margin of error 5%, 95% confidence level. The minimum sample size needed was 306, with attrition rate is 10%, then the required sample was 337 participants.

Participants were eligible in this study if they had worked full-time at the respected university and agreed to participate in the study. Staff personnel who were affected by COVID_19 were excluded as this study looked for preparedness for this pandemic.

Ethics approval

Ethical approval from the Institutional Review Board of An Najah National University was obtained before the study commencement. Needed information about the study was provided on the first page of the survey, and filling out the survey instrument implies consent to participate. When the data entry was completed, the data collected was stored in an encrypted computer file to which only the researchers could strictly access.

Procedure

After obtaining ethical approvals, the general email administrator at the university was contacted to send the survey invitation link to participants via the university portal (e.g., ZAJEL) containing the survey's details. This reinforced the invitation that the respective administrators were tasked to disseminate the survey to the participants. By this process, the researchers were blinded to any personal particulars such as names, thus maintaining the confidentiality and anonymity of the study participants.

Data Collection

After accepting the invitation, staff members declared that they had read the information presented and that the data collected from their replies was solely for research purposes. Subsequently, staff employees who agreed to participate were then given access to the survey link. The first page of the survey contained information on the study as well as assurance statements about the confidentiality and anonymity of their responses. Following their consent, they filled out the following sections of the survey—completion and submission of the survey imply permission.

After two weeks of the first invitation, another reminder was posted to the respected administrator to announce the survey again as “notification reminder”. Furthermore, two weeks after the first reminder, a second reminder was sent.

Study Instruments

A self-administered online survey link was adopted to collect data in this study. The survey content was divided into three sections, and it took about 10–15 minutes to complete. The *first section* was about the demographic items of participants. The researchers developed this closed-ended socio-demographic questions that comprised of 15 questions related to age, gender, living place, material status, level of education completed, workplace and department, teaching experience, current position, working hours per week and the hours that the participants spend with their family every day, hours that spend to follow the COVID-19 through TV, or other sources and finally type of training related that the participants took, if yes what it is and when.

The *second section* was Psychological Preparedness for Disaster Threat Scale (PPDTS) (HR Zulch, Reser, & Creed, 2012). It includes 18 questions on a 4-point Likert-type scale (1 = not at all true of me to 4 = exactly true of me). The scale showed excellent scale reliability, with a Cronbach's alpha value of .93 (HR Zulch et al., 2012). Also, the scale showed high internal consistency (α = .931). Permission to use and modify the PPDTS has been obtained from the authors.

The *third section* was Ego-Resiliency (ER11) scale (Farkas & Orosz, 2015). The ER11 was further validated based on the original scale ER89 (Letzring, Block, & Funder, 2005). ER11 is a scale with 11 items and has three sub-scales: "integrated performance under stress, active engagement with the world, and repertoire of (social, personal and cognitive) problem-solving strategies". The ER11 showed good scale reliability (α = .84) (Farkas & Orosz, 2015). The scale Cronbach's alpha was .802 for this study. Permission has been obtained from the correspondence author to use the scale.

Data Analyses

The statistical software SPSS v. 25 (IBM Corp, 2017) was used for data analysis. Descriptive statistics (percentage, mean, and standard deviation) were used to describe the staff characteristics and their responses on psychological preparedness and resilience scales. Pearson's correlation was utilized to assess the association between outcome variables and continuous independent variables. Independent sample t-test and one-way ANOVA was conducted to assess relationships between outcome variables and categorical independent variables. Finally, multiple linear regression was used to estimate the relationship between outcome variables and independent variables.

Results

Participants' characteristics

About 267 participants were included in the analysis with a response rate of 79.2%. Most of them (66.7%) were male, with a mean of 39.21 years, and had a master and PhD degree (71.6%). Regarding COVID-19, more than half of the respondents (52.8%) felt stress from COVID-19. Only 19.9% of participants had previous disaster training. The majority of respondents (76.4%) used e-learning approaches for students. Further details are found in table 1.

Psychological Preparedness

Findings revealed that the mean score of the PPDTS was 35.82±13.57, indicating that the participants had a moderate level of psychological preparedness (Table 1). Although participants perceived themselves as knowledgeable about psychological preparedness for COVID-19, the majority (74.5%) showed a lack of familiarity and the allocation of materials related to psychological preparedness. Only 47.2% of participants were aware of the household preparedness procedures required to keep safe in the event of a disaster. Males showed higher PPDTS compared to females (36.57±13.64; 34.34±13.39, respectively). The frequencies of PPDTS items are presented in table 2.

Resilience

Most respondents had moderate levels of resilience with a mean score of 28.75±8.15, with relatively higher scores of items related to "Repertoire of (social, personal and cognitive) problem-solving strategies" (17.5±3.30) in comparison with items related to "Active engagement with the world" and "Integrated performance under stress" (15.5±2.22 & 7.1±1.56 respectively). Table 3 presents the frequencies of the 11 items of the Ego-resiliency scale based on the participants' responses. The mean resilience for males and females is nearly equal (28.69±8.27; 28.89±7.96, respectively).

The relationships between study variables

Psychological preparedness and resilience were statistically significant correlated to each other ($r = 0.731$, $p < 0.001$). A significant correlation was also found between these variables, hours spent with family/day, age, and years of experience (Table 4).

The independent sample t-test showed statistically significant relationship between psychological preparedness and being care provider $t(265) = 12.9$, $p = .000$, and feeling stress from COVID $t(265) = 7.06$, $p = .008$. Also, between psychological preparedness and having disaster training $t(265) = 4.56$, $p = .034$. Resilience did not show any significant relationship with other variables using independent sample t-test. Further, One-way ANOVA test did not show any significant relationship between outcome variables and other independent variables.

Multiple linear regression was run to predict psychological preparedness from hours spent with family/day, age, years of experience, being care provider, feeling stress from COVID, and having disaster training. Feeling stress from COVID and having disaster training statistically significantly predicted psychological preparedness F (6, 251) = 2.137, $p < .05$, $R^2 = .561$. Also, the regression was run to predict resilience from hours spent with family/day, age, and years of experience. Age and years of experience statistically significantly predicted resilience $F(3, 254) = 2.122$, $p < .05$, $R^2 = .499$

Discussion

According to the findings of the current study, respondents reported moderate level of psychological preparedness and resilience during the COVID-19 pandemic. Psychological preparedness is correlated with resilience; both concepts are related and in somehow one influences another. These findings are similar to Said, Molassiotis, and Chiang study (2020), which found that respondent nurses had moderate level of psychological preparedness. The moderate level of psychological preparedness and resilience may be arising from the daily armed conflict in Palestinian lands. These frequent armed conflicts could have led people to better adapt and cope with crisis; hence they generally have better preparedness and resilience. In addition, the staff may participate actively in seeking out information through different sources such as the World Health Organization.

Disaster training was associated with better preparedness and higher resilience. Training related to disasters is essential to healthcare providers and for the community (Said & Chiang, 2020). In addition, resources such as personal protective equipment are essential for people to protect against this pandemic. Over the world, preparedness for COVID-19 is questionable as some people in different communities do not accept the idea of its fatality, have a lack of public information, false information, and myths about COVID-19. A recent USA study that

investigated the preparedness of the health agencies for the COVID-19 pandemic revealed that these agencies faced many challenges, particularly among urban agencies, due to the lack of resources (Shang et al., 2020). Similarly, a study conducted in Vietnam showed a moderate local authority and community adaptation capacity on epidemics and disasters. This study is consistent with our study results that psychological preparedness among staff is at a moderate level. Tang et al. found a significance between adverse psychological outcomes and training among nurses and doctors when dealing with patients during the Asian lineage avian influenza (H7N9) epidemic (Tang, Pan, Yuan, & Zha, 2016).

The study findings also revealed that age and years of experience are correlated with having high resilience level. This could be attributed to personal experiences enriched with age, leading to better resilience (MacLeod, Musich, Hawkins, Alsgaard, & Wicker, 2016). A better resilience also leads to a better quality of life and hence coping with stress (Yazdi-Ravandi et al., 2013). Age and work experience correlated with psychological preparedness. It is probable that the experience provided the staff with a feeling of purpose, belonging, identity, and success, hence making them more resistant to stressors, demands, disputes, and obstacles that may affect their mental health. Indeed, this condition would have influence on building resilience and better preparedness. The results of the mentioned correlation are consistent Said et al., study who found that both variables had a significant influence on psychological preparedness (Said et al., 2020). In addition, it was found that younger staff were more vulnerable to psychological impact during emergency SARS outbreaks (Wu et al., 2009).

Respondents' staff who rendered caring roles perceived higher stress than staff who did not care providers. Higher stress might be related to fear of COVID-19 transmission from affected people to these staff. Therefore, those staff providing care might be self-consumed with focusing on preventive measures to protect themselves and their families. The results related to stress are consistent with Kisely et al. (2020) study which has shown that the staff who were in contact with patients during the outbreaks had greater levels of psychological distress and traumatic stress. Moreover, it was found that healthcare staff had adverse psychological outcomes after exposure to H7N9 patients (Tang et al., 2016). Other findings by Towers et al. (2015) showed that fear was frequently reported as a common emotional feeling among the general population throughout the outbreak and other Ebola epidemics. This highlights that the new viruses, particularly those without a distinguished cure, could provoke widespread fear and panic in the community (Huremović, 2019). Additionally, Chua et al.(2004) identified a significant relation level between both health care workers in community controls and psychological stress during the severe acute respiratory syndrome (SARS) outbreak.

The current study revealed a significant inverse relationship between psychological preparedness and feelings of stress from the COVID-19 pandemic. Risk perception may influence stress, thus affecting such preparedness. Also, misinformation could be the source of this stress experience (Banerjee, 2020). Our result is congruent with the findings of Dubey et al. (2020) study, which concluded that the non-essential healthcare staff who are not directly involved in the care of COVID-19 patients might experience feelings of worthlessness and isolation during the crisis hence developing stress feelings and anxiety symptoms. Furthermore, Chen et al.(2020) found that during the COVID-19 pandemic, the majority of medical staff in China felt either stressed, anxious, or upset.

Despite reports on the shortage of personal disaster preparedness protective equipment, the surveyed university staff generally report having sufficient knowledge of household preparedness measures. They possess the ability to locate the disaster materials during the COVID-19 pandemic to support their level of response to infectious disease events and preventive measures in combating the virus. Moreover, the survey identified other areas related to preparedness for the COVID-19 pandemic that could be vastly improved. For example, warning system messages on the possible risk of a viral outbreak are necessary for every individual to better manage and cope with the pandemic.

Males demonstrated greater psychological preparedness than females, possibly due to the perception that men are more mentally prepared for disasters as gender roles and cultural expectations, in which men are frequently associated with attributes such as strength, stoicism, and acting as the protector in times of crisis. Additionally, other factors could affect this preparedness such as ability to deal with stressful situations, social support, understanding and managing emotions effectively, and the ability to respond to new challenges. However, further assessment for such differences is warranted in future studies.

Our results revealed that most study participants with moderate resilience have a repertoire of social, personal, and cognitive problem-solving strategies. This result calls attention to the fact that adaptive flexibility can only function when backed up by the appropriate preparedness and skills (Farkas & Orosz, 2015). The presence of resilience would enable an employee to manage the changes related to the COVID-19 pandemic; also, they may be able to adapt to the new circumstances related to that pandemic. For instance, Alkaissi et al. (2019) found that 40% of its employee nurses had moderate to high resilience, thrived in challenging and stressful working conditions in the clinical settings. Resilience will also benefit in achieving work satisfaction (Goh, Pfeffer, & Zenios, 2016) and thereby contribute to the enhancement in self-esteem, sense of control (Youssef & Luthans, 2007) and increased self-confidence (Ertekin Pinar, Yildirim, & Sayin, 2018). It is therefore worth mentioning that to effectively cope with the COVID-19 pandemic. Additionally, appropriate problem-solving strategies may also be required.

Generally speaking, strengthening mental health response to mitigate the negative consequences of such a pandemic is important, in addition to helping people to receive the necessary psychological support and ability to access to mental health care (Jaguga & Kwobah, 2020) to those in need. By this, it is possible that people would have better health and well-being, and this improvement can contribute to the SDGs, in particular goal three that focuses on improving health and well-being. Finally, the findings highlight the importance of psychological preparedness and resilience during the COVID-19 pandemic among the university staff. The new outbreak of the COVID-19 urges us to enrich literature related to psychological preparedness and building resilience to cope with such an unprecedented situation.

Implications for research and practice

Given the importance of resilience and psychological preparedness for pandemics, some important focus points are for consideration. First, universities have to support employees' needs related to psychological issues in terms of frequent assessment and render timely psychological

support as necessary. Second, training for university staff to cope during pandemic situations can be developed, implemented, and then evaluated. One suggestion would be to prepare a comprehensive mental health response plan for COVID-19 by training health workers on different programs such as psychological first aid (PFA) that aim to minimize the initial distress induced by traumatic events and promote adaptive function and management in the short and long term. Furthermore, to provide psychological support for distressed employees in academic institutions. Third, further assessment of both studied outcomes at the advanced stage of COVID-19 and further investigation into what factors can influence resilience and such preparedness is worth exploring.

Limitations

The study has some limitations that are worth addressing. First, the sample size was relatively small and limited to one university. Future studies can consider a larger sample size. Second, the study mainly focused on correlating psychological preparedness and resilience. Future research could study other factors that could influence the development of both outcomes. Third, the study was conducted at the beginning phase of the COVID-19 pandemic in respected areas. Therefore, we cannot track any changes related to resilience as this outcome could be influenced over time as the pandemic persists. Finally, a lack of random sampling and the possibility of self-selection bias could potentially exist. Individuals who were possibly impacted by psychological reactions were unlikely to respond. Also, self-reported data, as in this study, inherently reflects self-perceptions that can be biased.

Conclusions

This study exhibited that psychological preparedness is affected positively by age and years of experience in the workforce. Overall, the psychological preparedness during COVID-19 is essential, and it urgently requires the integration of social, governmental, and global policies to ease its effect. Psychological preparedness for any disaster, in particular, management of a pandemic, must be strengthened by empowering the community, including universities' staff, through suitable training and support. Resilience was moderate and correlated with time spent with family, this finding highlights the importance of family presence and support during these difficult times.

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Competing interests

The authors have no conflicts of interest to declare for this report.

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Figure Legends

Table1: Demographic and characteristics of participants.

Variable		n	%
Gender	Male	178	66.7
	Female	89	33.3
Social Status	Single	51	19.1
	Married	209	78.3
	Widow	4	1.5
	Others	3	1.1
Number of children	No Children	29	13.9
	1-3	100	47.8
	More than 3	80	38.3
Education level	Diploma	11	4.1
	Bachelor	65	24.3
	Master	99	37.1
	PhD	92	34.5
Role in the work	Academic	105	39.3
	Administrative	85	31.8
	Academic and Administrative	17	6.4
	Academic and Clinical	60	22.5
Working as a Care provider	Yes	97	36.3
	No	170	63.7
Feel stress from COVID 19?	Yes	141	52.8
	No	126	47.2
Using e-learning with students?	Yes	204	76.4
	No	63	23.6
Have a Disaster training	Yes	53	19.9
	No	214	80.1
Variable		**Mean**	**SD**
Psychological preparedness (Range X-X)		35.82	13.57
Resilience (Range X- X)		28.75	8.15
Integrated performance under stress		*7.1*	*1.56*
Active engagement with the world		*15.5*	*2.22*
Repertoire of (social, personal, and cognitive) problem solving strategies		*17.5*	*3.30*
Age		39.21	11.32
Experience		12.27	8.94
Hours Following COVID-19 news/day		2.03	2.13
E-Learning per week		17.26	19.36
Hours spent with Family/day		9.27	7.36

Table 2: Frequency and percentages of psychological Preparedness for Disaster Threat Scale (PPDTS) among study participants

Item	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)	Mean rank
I am familiar with the COVID-19 pandemic preparedness materials available to me	24 (9)	175 (65.5)	-	59 (22.1)	9 (3.4)	2.45
I know which household preparedness measures are needed to stay safe in a very severe situation arise by COVID-19 pandemic.	16 (6)	125 (46.8)	-	99 (37.1)	27 (10.1)	2.99
I know how to adequately prepare my home for the forthcoming disasters or pandemics.	30 (11.2)	136 (50.9)	-	78 (29.2)	32 (8.6)	2.73
I know what to look out for in my home and workplace if an emergency situation should develop.	49 (18.4)	135 (50.6)	-	69 (25.8)	14 (5.2)	2.49
I am familiar with the COVID-19 pandemic warning system messages.	52 (19.5)	149 (55.8)	-	55 (20.6)	11 (4.1)	2.34
I am confident that I know what to do and what actions to take in COVID-19 pandemic.	47 (17.6)	145 (54.3)	-	63 (23.6)	12 (4.5)	2.43
I would be able to locate the pandemic preparedness materials in a pandemic situation easily.	51 (19.1)	158 (59.2)	-	47 (17.6)	11 (4.1)	2.28
I am knowledgeable about the impact that COVID-19 pandemic can have on my home.	91 (34.1)	88 (33)	-	60 (22.5)	28 (10.5)	2.42
I know what the difference is between disasters or pandemics.	88 (33)	106 (39.7)	-	59 (22.1)	14 (5.2)	2.27
I am familiar with the pandemic signs of an approaching pandemic.	94 (35.2)	111 (41.6)	-	48 (18)	14 (5.2)	2.16
I think I am able to manage my feelings pretty well in difficult and challenging situations.	91 (34.1)	93 (34.8)	-	55 (20.6)	28 (10.5)	2.39
In a pandemic situation, I would be able to cope with my anxiety and fear.	101 (37.8)	93 (34.8)	-	50 (18.7)	23 (8.6)	2.25
I seem to be able to stay cool and calm in most difficult situations.	106 (39.7)	90 (33.7)	-	44 (16.5)	27 (10.1)	2.24
I feel reasonably confident in my own ability to deal with stressful situations that I might find myself in.	98 (36.7)	96 (36)	-	47 (17.6)	26 (9.7)	2.28
When necessary, I can talk myself through challenging situations.	103 (38.6)	108 (40.4)	-	38 (14.2)	18 (6.7)	2.1

Table 3: Frequency and percentages of Ego-resiliency scale (ER11) among participants

Item	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)	Mean rank
I enjoy dealing with new and unusual situations	80 (30)	111 (41.6)	-	59 (22.1)	17 (6.4)	2.33
I enjoy trying new foods I have never tasted before	88 (33)	127 (47.6)	-	38 (14.2)	14 (5.2)	2.11
I like to take different paths to familiar places	71 (26.6)	105 (39.3)	-	68 (25.5)	23 (8.6)	2.5
I am more curious than most people	69 (25.8)	133 (49.8)	-	40 (15)	25 (9.4)	2.33
I like to do new and different things	59 (22.1)	95 (35.6)	-	86 (32.2)	27 (10.1)	2.73
I quickly get over and recover from being startled	28 (10.5)	156 (58.4)	-	59 (22.1)	24 (9)	2.61
I get over my anger at someone reasonably quickly	30 (11.2)	224 (83.9)	-	8 (3)	5 (1.9)	2
I usually succeed in making a favorable impression on people	5 (1.9)	167 (62.5)	-	77 (28.8)	18 (6.7)	2.76
I am regarded as a very energetic person	2 (0.7)	116 (43.4)	-	118 (44.2)	31 (11.6)	3.22
My daily life is full of things that keep me interested	1 (0.4)	130 (48.7)	-	105 (39.3)	31 (11.6)	3.13
I would be willing to describe myself as a pretty "strong" personality	8 (3)	128 (47.9)	-	110 (41.2)	21 (7.9)	3.03

Table 4: correlation between demographic variables, Psychological Preparedness *COVID-19*, Ego-resiliency scale (ER11), and other variables.

Variable	1	2	3	4	5	6	7
1. Psychological preparedness	1						
2. Resilience	.731**	1					
3. Age	.035*	.54*	1				
4. Years of Experience	.058*	.492*	.832**	1			
5. Hours Following COVID-19 news/day	.061	.048	-.055	.028	1		
6. E-Learning per week	.024	.069	.347*	.336*	-.575	1	
7. Hours spent with Family/day	.551*	0.675*	-.011	.111	-.422**	-.461**	1

* Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).