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Work Engagement and Psychological Distress of Health professionals during the COVID-19 pandemic

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Abstract

Aims: to describe the level of work engagement of active healthcare professionals during the COVID-19 pandemic, and its relationship with psychological distress according to the professional category.

Background: Healthcare professionals working on the front line of the COVID-19 pandemic are at risk of psychological distress, and work engagement could be a positive attitude that could serve as a protective factor.

Methods: cross-sectional observational study of 1459 healthcare professionals. Psychological distress was measured with the General Health Questionnaire and work engagement with the Utrecht Work Engagement Scale. Data were analysed with bivariate analyses and correlations.

Results: Psychological distress was reported by 80.6% of healthcare professionals. Work engagement as high with a total mean score of 5.04 (SD=1.14). The results showed that distressed professionals showed significantly lower levels of work engagement.

Conclusions: The present study identified psychological distress and work engagement experienced by healthcare professionals during the COVID-19 pandemic. Most of the variables included in the study revealed a significant relationship with psychological distress and work engagement.

Implications for Nursing Management: The relationship between the working conditions with psychological distress and work engagement suggests that improvements in the workplace are needed to promote protective measure for the mental health of healthcare professionals.

Keywords: psychological distress; work engagement; COVID-19; coronavirus; healthcare professionals; nurses.

Background

The health crisis triggered by COVID-19 has a strong impact on the mental health of the general population (Wang et al., 2020) and healthcare professionals (Chew et al., 2020). These workers face an unprecedented dramatic public health situation, which implies a professional challenge. They must deal with increased care burden, fear of self-contagion and of infecting close relatives, often-changing protocols and personal protective equipment, care for critically ill and rapidly deteriorating patients, and difficult decision making related to the treatment and distribution of resources (Walton et al., 2020). The reality of healthcare professionals is stressful and threatening due to the growing number of confirmed and suspected COVID-19 cases, the overwhelming workload, the shortage of personal protective equipment, comprehensive media coverage, specific medicines, and the feeling of not receiving adequate support (Lai et al., 2020). The vulnerability of this group may be aggravated by expanded shifts, an increase in critically ill patients, and the care of patients in situations of extreme severity while putting their own health at risk (Santarone et al., 2020).

In this scenario, the mental health of healthcare professionals working in the front line may be affected, presenting anxiety, depression, insomnia, psychological distress, post-traumatic stress, vicarious trauma, and burnout (Preti et al., 2020). The risk factors of psychological distress for healthcare professionals would be: being female, nurse (Lai et al., 2020), young,

inexperienced (Kisely et al., 2020), working on the front line with COVID-19 patients, working in the geographic focus of infection (Lai et al., 2020), parenting dependent children or having an infected family member (Kisely et al., 2020), receiving negative messages from family and friends (Que et al., 2020), a longer quarantine, lack of practical support, and stigma (Kisely et al., 2020) as well as paying attention to negative information of the pandemic (Que et al., 2020). As protective factors the practice of physical exercise (Que et al., 2020), clarity in communication, availability of personal protective equipment, seeking appropriate rest, and practical and psychological support are described (Kisely et al., 2020). In this sense, there are authors who defend the psychological care of healthcare professionals as an essential part of the fight against the COVID-19 pandemic. Effective response to the health crisis should include mental health care for health professionals as a particularly vulnerable group (Dubey et al., 2020).

Work Engagement is described as a positive and satisfactory mental state related to work, expressed in three dimensions: vigour, dedication, and absorption. Vigour refers to the desire to invest effort in one's work; dedication is related to participation; and absorption is related to concentration and being absorbed in one's work (García-Sierra et al., 2016). Work engagement is a multiaxial concept; the multiple factors that influence work engagement are related to organisational climate (e.g. leadership, structural empowerment), job resources (e.g. interpersonal and social relations, workload, environment,

organization of work and tasks), professional resources (e.g. professional practice, autonomy, role and identity, professional practice, and development), personal resources (e.g. psychological, relational skills), job demands (e.g. work pressure, physical, mental, and emotional demands, adverse environment), and demographic variables (Keyko et al., 2016)

Healthcare professionals actively working during the coronavirus health crisis are subjected to pressure conditions that can affect their professional performance and the quality of the care provided. Barello et al. (2020) described high levels of burnout among healthcare workers who were in contact with patients infected with COVID-19. On the other hand, Alharbi et al. (2020) describe the risk of fatigue compassion to which professionals are exposed in the fight against the pandemic. Walton et al. (2020) noted that the magnitude and severity of the pandemic, the absence of treatment, and the scarcity of means have forced professionals to make difficult and frustrating decisions, with the consequent risk of moral distress.

In this sense, work engagement could help in the coping of this difficult and stressful situation lived by professionals. As a result of work engagement, higher quality of health care has been identified, although this depends on contextual factors such as structural empowerment and social support, and predisposing factors such as effectiveness and optimism (García-Sierra et al., 2016). Work engagement has been revealed as a protective factor against burnout in all its dimensions (emotional fatigue, depersonalisation, and personal fulfilment), and

also related to quality of care (Van Bogaert et al., 2017). In addition, people with high levels of work engagement develop less moral distress, avoiding the emotional discomfort of not being able to act according to what they consider to be right (Lawrence, 2011). A relationship has also been found between work engagement and compassion satisfaction that could help healthcare professionals cope with the physical, emotional, intellectual, and spiritual burden that comes with compassionate patient-centred care (Mason et al., 2014)

For all the above, work engagement could be a useful coping skill for healthcare professionals in the face of the current dramatic situation and future situations alike. The objective of this study was to describe the level of work engagement and psychological distress of active healthcare professionals during the COVID-19 pandemic and to describe the relationship between both constructs according to the professional category.

Methods

Design.

Cross-sectional descriptive correlational study (Gray et al., 2016).

Participants.

For this study, a sample of convenience was made up of 1459 healthcare professionals (nurses, doctors, and allied health professionals) who were actively working during the COVID-19 pandemic in private and public hospitals and primary care centres disseminated throughout Spain. The inclusion criteria were

being of legal age (18 years or older) and accepting the informed consent. Those professionals who did not reside in Spain at the time of their participation in the study or were non-active workers (e.g. on a sick leave, unemployed, retired) were excluded.

Measuring instruments.

For data collection, a self-developed questionnaire was designed, based on evidence from similar studies conducted in previous pandemics. The first version of the questionnaire was reviewed by a panel of 10 experts consisting of doctors, nurses, and psychologists who assessed the content validity of the instrument. Once the experts' inputs were incorporated, the questionnaire underwent a piloting involving 57 participants chosen by convenience. The questionnaire was accepted and no difficulty in the development, completion, or understanding of the items was found.

The questionnaire included sociodemographic variables (sex, age, marital status, latest completed studies, employment status, active work centre profile, level of care, and years of experience); variables related to the participants' working conditions.

Psychological distress was assessed through the General Health Questionnaire (Goldberg et al., 1997). It is a scale designed to evaluate the mental health and emotional well-being based on 12 items, which can be answered with four response options, scoring 0 points with options 1 or 2, or one point with

options 3 or 4. The overall score ranges from 0 to 12. The GHQ12 is a one-dimensional instrument that responds to a one-factor structure. A cut-off point of 3 was agreed, considering the presence of psychological distress in those subjects with scores higher than or equal to 3. In this study, the GHQ showed good reliability as the internal consistency index (Cronbach's α) obtained was 0.832.

To evaluate work engagement, the Utrecht Work Engagement Scale was used in its short version (Schaufeli et al., 2006). This self-administered instrument consists of nine items with Likert-type response scales ranging from 0 (Never) to 6 (Always), distributed over three dimensions: vigour, dedication and absorption. Vigour refers to the presence of high levels of energy and resilience, willingness to devote efforts, to not feel fatigue easily, and to be persistent in the face of difficulties; dedication refers to the purpose or significance of the work, to feel enthusiastic, proud, and inspired by the work done; and absorption refers to feeling so joyful and immersed in work that time passes quickly and the person forgets what is happening around them. As a result, the score was calculated in each dimension, adding the items of each dimension and dividing the result by the number of items that make up each dimension. The UWES-9 is a reliable instrument; for this study, a Cronbach's alpha of 0.924 was obtained. The internal consistency indexes shown in the different dimensions were: $\alpha = 0.843$ for vigour, $\alpha = 0.861$ for dedication, and $\alpha = 0.794$ for absorption.

In summary, three instruments were used: an ad-hoc questionnaire for sociodemographic data and working conditions; the General Health Questionnaire (Cronbach's α = 0.832); and the Utrecht Work Engagement Scale (Cronbach's α = 0.924).

Procedure.

The questionnaire was distributed online through the survey platform Qualtrics®. Healthcare institutions such as professional registration bodies, healthcare unions, scientific associations and hospitals were invited to participate in the study. The institutions which agreed to participate after evaluating the project sent an invitation email including the participant information sheet and a link to the questionnaire to the email lists of professional groups included in their records. The participants were invited to disseminate the questionnaire among their work colleagues so as to trigger a snowball effect. Participants completed the survey from different electronic devices (Tablet, personal computer, and mobile phone) with internet access. Data collection took place between March 26 (13 days after the start of the alarm) and April 26.

Data analysis.

For the descriptive analysis, statistics such as frequency, mean, and standard deviation were used depending on the type of variable. In order to assess the existence of statistically significant differences, bivariate analyses were carried

out including Chi-Squared Test, Student's T-Test, Analysis of Variance -ANOVA- (with Bonferroni test for multiple comparisons), and correlations. Cohen's d or Cramer's V effect size measurements were also included (cut-off points: 0 to 0.19, negligible; 0.20 to 0.49, small; 0.50 to 0.79, medium; from 0.80 onwards, high), and Partial Eta Squared (cut-off points: 0.01 to 0.05, small; 0.06 to 0.13, moderate; 0.14 onwards, large). All analyses were carried out with the SPSS 26.0 statistical software (IBM, Armonk, NY).

Ethical considerations.

All participants obtained information on the purpose and procedure of the study and stated their desire to voluntarily participate through the informed consent. Professionals participated voluntarily, giving their informed consent at the beginning of the questionnaire by selecting the appropriate item. No personal information that could help identify the participants was collected (name, address...). Qualtrics® records the data anonymously; it is not possible to recognise the responses of each participant. An online database is generated that is accessed with a password that only two members of the research team know.

Participation in the study did not imply any risk or benefit for the participants. Data were anonymously collected and recorded, maintaining at all times the confidentiality of the information. This study has the favourable report of a Research Ethics Committee.

Results

Sociodemographic data.

The sample consisted of 1459 health professionals. The mean age was 41.03 years (SD = 11.21). 80.9% of the participants were women and 65.80% were married or living as a couple. Based on the level of education, most participants (61.9%) held a Diploma/Graduation/Degree, and 31.7% had Master or Doctoral studies. Regarding the employment situation, 87.7% were working full-time, while 12.3% were part-time workers. As regards the professional profile, most of the sample was composed of nurses (68.6%) and, to a lesser extent, doctors (14.7%). 75.3% of the participants were working in a public centre, and 64.8% had more than 10 years of experience in their profession. The sociodemographic characteristics of the participants are summarised in Table 1.

[Insert table 1]

Psychological distress.

Table 2 details the mean scores and standard deviations of the participants' responses to the General Health Questionnaire. Considering the cut-off point three or more, 80.6% of healthcare professionals showed psychological distress. Based on the professional categories, the results showed significant differences. The mean score of the total scale was significantly higher among the group of nurses, as compared to the rest of the professional categories ($F = 14.187$; $p < .001$; $\eta 2 = 0.019$). However, the effect size was low.

[Insert table 2]

Work Engagement.

Table 3 presents the mean scores of the participants in each of the dimensions of the Utrecht scale. The mean score obtained in the total scale was 5.04 (SD = 1.14). The dedication dimension scored higher (M = 4.31; SD = 1.25), while the lowest score was obtained in the vigour dimension (M = 3.67; SD = 1.32). When assessing the results according to professional categories, differences were found in the vigour dimension, with significantly lower scores for nurses (M = 3.61; SD = 1.31), as compared to the other categories (F = 3.556; p = .029; ŋ2 = 0.005).

[Insert table 3]

Relationship among variables.

Table 4 presents the results of psychological distress and work engagement assessment as regards the variables related to the work centre. Most of the variables included in the study revealed a significant relationship with psychological distress and work engagement ($p<0.05$).

[Insert table 4]

Regarding the relationship between psychological distress and work engagement of the participants, the results showed significantly lower scores for all Utrecht Work Engagement Scale items in the group of subjects that presented

psychological distress. The analysis according to the professional category showed similar results, with significantly lower work engagement levels among participants with psychological distress (Table 5).

[Insert table 5]

Discussion

The main objective of this study was to describe the level of work engagement among active healthcare professionals during the COVID-19 pandemic, and its relationship with psychological distress. The results showed that most of the participants had psychological distress, as in similar studies conducted during the COVID-19 pandemic (Preti et al., 2020; Que et al., 2020). The distress was significantly higher among nurses, who were also the most distressed professional group in the study of Pappa et al. (2020). Nurses hold the most direct and continuous professional contact with patients. Thus, this result was expected as a positive relationship, that has been previously identified, between risk exposure and healthcare professionals' psychological distress (Lai et al., 2020; Preti et al., 2020). Our results also revealed a high level of work engagement among frontline healthcare workers during the COVID-19 pandemic. Participants declared a higher level of WE than the one obtained in similar studies (Mason et al., 2014; Othman & Nasurdin, 2019; Buchanan et al., 2018; Jeve et al., 2015; Wan et al., 2018). Evidence supports that job characteristics influence work engagement. According to Othman & Nasurdin (2019), nurses

who perceived having sufficient autonomy in their jobs, task identity, feedback, and task significance become more engaged in their work. Favourable working conditions and a supportive and positive work environment promote a sense of responsibility and meaning of work that intrinsically motivates nurses to commit to their work (Wan et al., 2018). However, the context during the pandemic described by the first-line healthcare professionals in our study differs, so the high level of WE identified was not expected. This could be explained by the strong component of vocation in the nursing profession. As described by Emerson (2017), "calling" in Nursing is considered a passionate intrinsic motivation to engage in nursing practice, as a way of achieving one's own purpose in life. Nurses with a solid feeling of calling may improve their work meaningfulness, work engagement, career commitment, personal well-being, and satisfaction. Furthermore, the high level of WE expressed by the participants could be a reflection of effective leadership on the part of their managers, as there is evidence that shows the positive influence of authentic and transformational leadership and manager support on the WE of workers (Garcia-Sierra et al., 2016; Keyko et al., 2016).

Our results showed that the risk perception by professionals was high. In particular, 64.6% of participants avoided contact with their relatives due to the risk of contagion this could imply. This perception of risk was significantly higher among nurses than among other professionals, outcome that coincides with similar previous studies, which attributed to nurses being most frequently

in contact with patients (Lai et al., 2020). The fear expressed by health professionals of infecting their relatives with COVID-19 has already been described. According to Dubey et al. (2020), the risk of developing anxiety is considerably higher among those professionals who return home after their working day, due to the fear of transmitting the disease to their relatives, especially in the case of the elderly, chronically ill, or other population at risk. According to Chen et al. (2020), healthcare professionals are more worried about bringing the virus home and with the concern they may cause to their beloved ones than with contracting the disease themselves. Interventions have been suggested to reduce the feeling of vulnerability of healthcare professionals, such as availability of personal protective equipment, providing training and education about infectious diseases, applying infection control procedures and preventive measures, designing mobility circuits for infected patients, or reducing plant occupation providing alternative accommodation for professionals so as to reduce the risk of contagion to their families (Kisely et al., 2020).

The healthcare professionals that participated in our study mostly agreed that the health crisis has led to an increase in workload, significantly among nurses and those with psychological distress, although it did not correlate with the declared WE. High numbers of affected patients, the severity of symptoms, and prolonged hospital stays make an increase in workload unavoidable (Walton et al., 2020). According to Que et al. (2020), nurses with a high care workload are

more vulnerable to mental impacts such as depression, anxiety, or insomnia. The workload influences the physical and mental well-being of workers (Pappa et al., 2020) and contributes to the psychological pressure they are subjected to (Lai et al., 2020). Excessive workload can cause healthcare professionals to neglect their relationships with friends and family outside of work, even though social support is a stress-protective factor (Blake et al., 2020). To alleviate the overburden and help healthcare workers respond to the exceptional labour demands brought about by the pandemic, Kisely et al. (2020) have proposed measures to be taken by organisations such as balanced shifts with regular breaks, avoiding mandatory care of coronavirus patients, reorganising the hospital structure to optimise human resources and redistribute wards, and implementing safety measures to deal with patients who are reluctant to cooperate. Walton et al. (2020) suggested providing food and drink to workers, as well as facilitating their rest; ensuring that staff do not exceed the working hours that are deemed safe; foreseeing staff reinforcements so that professionals can take annual vacations and breaks; resolving accommodation or transport difficulties; dynamic workload management and clear expectations for each role; or addressing the organization's resource inequalities.

According to our results, almost all of the workplace-related variables included in the study were related to the level of psychological distress and work engagement of the participants. The work environment has a strong impact on workers' mental health, especially in extreme situations of high professional

demand. This impact manifests itself in high levels of stress, anxiety, depression, insomnia, and burnout (Preti et al., 2020; Barello et al., 2020; Pappa et al., 2020). On the other hand, the relationship between working conditions and work engagement has been extensively studied regarding healthcare workers. Othman et al. (2019) identified a positive relationship between work engagement and job autonomy, job feedback, task identity, and task significance, so they could be considered relevant factors in predicting work engagement. Watanabe & Yamauchi (2018) studied the relationship between work engagement and overtime among nurses; the results indicated that when nurses were forced to work longer hours to alleviate the care overload of the service, their mental health and work engagement were reduced. However, voluntarily working overtime, motivated by personal development and fulfilment, fostered work engagement. On the other hand, Cho et al. (2006) described the influence of structural empowerment on work engagement development, as access to information, resources and support for workers promotes work engagement.

The participants in the present study who showed higher levels of work engagement in all its dimensions were those who did not declare psychological distress. Interventions aimed at promoting work engagement among healthcare workers could therefore protect them from the psychological distress caused by the coronavirus health crisis. Mueller et al. (2018) designed an online course with the aim of promoting work engagement between participants, which has proven effective for the development of work engagement, empathy and resilience.

According to Cao & Chen (2019). et al., training activities aimed at resilience and empathy could contribute to the development of work engagement, given the relationship between these competencies. Silver et al. (2018) tested the favoring effect of mindfulness on work engagement development while reducing burnout and compassion fatigue. Also, Lawrence (2011) recommends promoting critical reflective practice as it has been shown to promote work engagement and reduce moral distress. Buchanan et al. (2018) found significant improvements in the work engagement of healthcare workers following an intervention based on acupuncture.

This study has some limitations such as the non-randomised sample, so caution is recommended in generalising the results. On the other hand, the distribution of groups according to professional categories is asymmetrical.

Conclusions

The present study identified psychological distress and work engagement experienced by healthcare professionals during the COVID-19 pandemic. Most of the variables included in the study revealed a significant relationship with psychological distress and work engagement. Despite the adverse conditions experienced by health professionals during this pandemic, our results revealed a high level of work engagement highlighting the strong commitment of nurses to care.

Implications for Nursing Management

The significant relationship between the working conditions with psychological distress and work engagement suggests improvements in the workplace by nursing managers to promote favourable working conditions essential to take care of the mental health and well-being of healthcare professionals during the COVID-19 pandemic. Strategies to improve health professionals' work environment could include training courses in coping strategies, mindfulness meditation, or resilience skills.

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Table 1. Sociodemographic characteristics of the participants (n = 1459).

	N	%
Sex		
Male	278	19.1
Female	1181	80.9
Age [M (SD)]	41.03 (11.21)	
Marital status		
Single	376	25.8
Married or living with a partner	960	65.8
Separate/divorced/widowed	123	8.4
Latest completed studies		
Higher Sec. Educ., Vocational Training, or lower	94	6.5
University	903	61.9
Master or PhD	462	31.7
Professional category		
Nurses	998	68.6
Doctors	234	14.7
Other[†]	227	16.7
Work situation		
Part-time	179	12.3
Full-time	1280	87.7
Type of work centre		
Public	1098	75.3
Private/Associated	361	24.7
Years of caring experience		
0-5 years	281	19.3
5-10 years	232	15.9
More than 10 years	946	64.8
Working conditions		
I have limited contact with friends and/or relatives because I consider my workplace risky	1380	94.6
I believe my friends and/or relatives avoid me because I work in a place with high risk of infection.	432	29.6

	M‡	SD
I think my department, service, unit or company has provided me with the necessary means and material to effectively carry out my job	5.22	2.92
I think my department, service, unit or company has provided me with the necessary means and material to safely carry out my job	4.87	2.91
I consider the distance maintained with my work mates appropriate	5.68	2.84
I am in contact with patients that could be a source of risk	8.99	1.82
I have observed an increase in labour conflict in my job	5.39	3.12
I think my profession or workplace puts me at risk of getting infected	9.26	1.54
I accept the risk of getting infected as part of my job	7.30	2.95
I consider there has been an increase in the workload after the onset of the health crisis	8.27	2.47
I feel more stressed at work	8.57	2.07
Score of satisfaction during the present COVID-19 situation	6.51	2.50

M = mean, SD = standard deviation, †Other allied healthcare professions. ‡Likert-type response scale from 1 to 10.

Table 2. General Health Questionnaire (GHQ-12) according to professional category (n = 1459).

	M (SD)	Professional category			F/χ^2	*p*	η^2/V
		Nurses (N = 998)	Doctors (N = 234)	Other† (N = 227)			
GHQ-12 (over 12 points)							
	5.38 (2.99)	5.67 (2.98)	4.71 (3.11)	4.88 (2.67)	14.187	<.001	0.019
Presence of psychological distress (cut point ≥ 3)							
Yes	1176 (80.60)	83.2	70.9	79.3	18.417	<.001	0.112
No	283 (19.4)	16.8	29.1	20.7			

Likert-type response scale from 1 to 4. † Other allied healthcare professions. M = mean, SD = standard deviation, t = Student´s T-Test, p = level of significance, d = Cohen´s d, F = Snedecor´s F, η^2 = Partial eta squared, χ^2 = Chi-Squared Test, V = Cramer´s V.

Table 3. Utrecht Work Engagement Scale (UWES-9) according to professional category (n = 1459).

Dimensions	M (SD)	Professional category			*F*	*p*	η^2
		Nurses (N = 998)	Doctors (N = 234)	Other† (N = 227)			
Vigour	3.67 (1.32)	3.61 (1.31)	3.81 (1.31)	3.81 (1.36)	3.556	0.029	0.005
Dedication	4.31 (1.25)	4.31 (1.24)	4.22 (1.24)	4.41 (1.27)	1.257	0.285	0.002
Absorption	4.13 (1.18)	4.10 (1.19)	4.14 (1.08)	4.21 (1.28)	0.757	0.469	0.001
TOTAL	4.04 (1.14)	4.01 (1.13)	4.06 (1.11)	4.14 (1.21)	1.345	0.261	0.002

†Other allied healthcare professions, M = mean, SD = standard deviation, t = Student´s T-Test, p = level of significance, d = Cohen´s d, F = Snedecor´s F , η^2 = Partial eta squared

Table 4. Workplace-related variables in relation to distress and UWES (n = 1459).

	Psychological distress					UWES-9 M(SD)			
	Yes N = 1176	No N = 283	□²/*t*	*p*	*V*/*d*		*t*/*F*	*p*	*d*/ŋ²
Have you limited contact with friends and/or relatives for considering your workplace risky?									
Yes	95.0	92.9	1.872	0.171	0.036	4.04 (1.13)	0.354	0.723	0.044
No	5.0	7.1				3.99 (1.18)			
Do you believe your friends and/or relatives avoid you for working in a place with high risk of infection?									
Yes	32.7	17.0	33.601	<0.001	0.152	3.90 (1.19)	6.334	0.002	0.009
No	46.3	64.0				4.14 (1.10)			
I don't know	21.0	19.1				3.98 (1.13)			
	M (SD)	**M (SD)**				*Spearman´s rho p*			
Do you think your department, service, unit or company has provided you with the necessary means and material to effectively carry out your job?	5.05 (2.87)	5.91 (3.04)	4.464	<0.001	0.296	0.145	<0.001		
Do you think your department, service, unit or company has provided you with the necessary means and material to safely carry out your job?	4.70 (2.83)	5.59 (3.13)	4.336	<0.001	0.308	0.151	<0.001		
Do you consider the distance maintained with your work mates appropriate?	5.50 (2.81)	6.43 (2.82)	4.969	<0.001	0.331	0.179	<0.001		
Are you in contact with patients that could be a source of risk?	9.06 (1.76)	8.66 (2.03)	-3.033	0.003	0.220	-0.013	0.613		
Have you observed any increase in labour conflict in your job?	5.65 (3.09)	4.30 (3.04)	-6.622	<0.001	0.438	-0.149	<0.001		
Do you think your profession or workplace puts you at risk of getting infected?	9.36 (1.42)	8.84 (1.89)	-4.328	<0.001	0.342	-0.015	0.560		
Do you accept the risk of getting infected as part of your job?	7.21 (2.97)	7.68 (2.87)	2.431	0.015	0.159	0.248	<.001		
Do you consider there has been an increase in the workload after the onset of the health crisis?	8.46 (2.36)	7.54 (2.75)	-5.177	<0.001	0.377	-0.018	0.493		
Do you feel more stressed at work?	9.00 (1.62)	6.78 (2.69)	-13.299	<0.001	1.184	-0.167	<0.001		
How would you score your job satisfaction during the present COVID-19 situation?	6.32 (2.52)	7.27 (2.28)	6.138	<0.001	0.384	0.440	<0.001		

Likert-type response scale from 1 to 10. M = mean, SD = standard deviation, t = Student´s T-Test, p = level of significance, d = Cohen´s d, □² = Chi-Square Test, F = Snedecor´s F, V = Cramer´s V, ŋ² = Partial eta squared.

Table 5. UWES-9 and GHQ-12 according to professional category (n = 1459).

UWES-9	Nurses (N = 998)					Doctors (N = 234)					Other† (N = 227)				
	Psychological distress					Psychological distress					Psychological distress				
	Yes N = 830	No N = 168	*t*	*p*	*d*	Yes N = 166	No N = 68	*t*	*p*	*d*	Yes N = 180	No N = 47	*t*	*p*	*d*
Dimensions															
Vigour	3.43 (1.30)	4.51 (0.95)	12.445	<.001	0.865	3.58 (1.35)	4.35 (1.02)	4.729	<.001	0.609	3.63 (1.39)	4.50 (0.92)	5.074	<.001	0.665
Dedication	4.20 (1.27)	4.85 (0.96)	7.478	<.001	0.531	4.05 (1.27)	4.66 (1.03)	3.814	.001	0.506	4.31 (1.32)	4.78 (0.99)	2.696	.008	0.373
Absorption	4.02 (1.18)	4.51 (1.13)	4.928	<.001	0.418	4.04 (1.08)	4.41 (1.03)	2.496	.014	0.347	4.12 (1.31)	4.55 (1.07)	2.061	.040	0.340

†Other allied healthcare professions. t = Student´s T-Test, p = level of significance, d = Cohen´s d