

ORIGINAL ARTICLE

Relationship between pandemic fatigue and work motivation in graduate students from a state university in Peru

ABSTRACT

The aim of this study was to determine the relationship between pandemic fatigue and workplace motivation in graduate students from a state university in Peru in 2022. A correlational, non-experimental, simple and descriptive quantitative study was performed, based on a structured questionnaire administered to the demographic group from the study, with a sample of 30 students. Regarding reliability, Cronbach's alpha was 70.4% for the validity of the 21-item questionnaire used in the pilot prototype. The findings showed that 60.0% of survey respondents reported that they sometimes felt work-related stress in the workplace. 66.7% of survey respondents reported that they sometimes felt anxiety during working hours, while 66.7% reported that they sometimes felt some physical and emotional tension during working hours. Meanwhile, 46.7% reported that they had a harmonious relationship with their superior. In addition, 66.3% reported that they have good social relationships with their peers; lastly, 53.3% reported that they felt satisfaction in their current position. Regarding the correlation analysis for variable association, a value of $-.586$ was obtained, with $p < .001$, therefore confirming the general hypothesis. It is concluded that pandemic fatigue has a moderate correlation with employee motivation, considering the coefficient value of 0.586 . However, there are strategies that can be implemented to mitigate its effects.

Keywords: Fatigue; stress; human resources, graduate school; university.

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Submitted: 06/09/2023 - Accepted: 10/10/2023 - Published: 31/12/2023

INTRODUCTION

Globally, the impact of the COVID-19 pandemic on society has resulted in deep sequelae among individuals, comprising physical, psychological and emotional aspects. This has had a significant effect on people's quality of life. In the organizational field, these effects have become evident through substantial changes in the dynamics of companies. To face this situation, many organizations have had to implement new approaches when managing their personnel. Two of the most widely strategies adopted were remote work and the hybrid mode. Although some organizations are gradually returning to face-to-face operations, there is an ongoing adaptation to this new reality. At the same time, the context of university education has undergone similar transformations (Yamamoto *et al.*, 2023, Huarcaya-Victoria *et al.*, 2022).

This research is consequently important because it addresses dimensions of interest such stress, anxiety and irritability among individuals studying for a master's degree, in relation to the experience they lived as a result of the COVID-19 pandemic. In addition, there is a lack of relevant academic literature in Peru on the subject, because there are not any studies that address the relationship between work motivation and pandemic fatigue among students from management-related courses. The majority of studies focus on samples of physicians or nurses who directly experienced COVID-19. For this reason, addressing this knowledge gap contributes to the business focus and Human Resources departments, focusing on the relationship between pandemic fatigue and work motivation.

Given this situation, it is the Human Resources department which undertakes the responsibility to carry out strategic actions to prevent or support employees in terms of emotional self-reliance. The objective is to determine the relationship between pandemic fatigue and work motivation in graduate students from a state university, given the external circumstances of the pandemic threat which also affected Peru. Considering this context, the underlying aim of this research paper is to determine the nature of the relationship between the above-mentioned variables, using the graduate

student sample as a starting point while focusing on those specializing in Human Talent Management at the Management Sciences School from Universidad Nacional Mayor de San Marcos. However, the main limitation of this study was data collection, since the participants did not complete the form quickly enough, and the pilot test was only completed at the last possible moment. Participants had to be constantly reminded to complete the questionnaires so that the data collection would be ensured for subsequent analysis.

Pandemic fatigue

The concept of pandemic fatigue emerged as a result of the response to the prolonged measures and challenges that appeared due to the COVID-19 pandemic. This natural and predictable reaction emerged as a consequence of tension sustained over time, leading to a reduced disposition to continue health protective behaviors (World Health Organization. Regional Office for Europe, 2020). In addition, according to Broquet (2020), it is important to highlight that social isolation can play a role in the generation of pandemic fatigue. It is therefore imperative that students become involved in meaningful interactions with faculty. In such regard, it is crucial to understand that culture and the arts during a pandemic work as a stronghold for everyone, providing key support (pp. 189-193). On the other hand, there are dimensions that act as stressors and may somehow increase fatigue in individuals; these are emotions such as stress, anxiety or irritability. These bloom as pandemic fatigue increases during working or studying hours.

To define pandemic fatigue, the World Health Organization, Regional Office for Europe (2020) stated the following:

La fatiga entorno a la pandemia es una valoración establecida se refiere a la respuesta a las medidas prolongadas y a los obstáculos engendrados por la pandemia de Covid-19; así mismo, esta reacción es inherente cuando se encuentra bajo el

contexto del estrés constante con una desmotivación para continuar con la conducta de protección sanitaria. [Pandemic fatigue refers to the response to the prolonged measures and obstacles created by the COVID-19 pandemic. This is a natural reaction when it appears within the context of constant stress, by means of demotivation to continue with health protective behavior]. (p. 4)

The Clínica Las Condes blog (2021) states that the effects of limitations and precautions for the protection of people's health are important, because prolonged tiredness becomes acute and manifests itself as fatigue, overwhelming feelings, hopelessness and worry in some cases.

The Federación de Enseñanza Extremadura (FEUSO, 2021) states that pandemic fatigue is a way in which emotional exhaustion becomes apparent due to the feeling of restlessness experienced by people due to the COVID-19 pandemic and their everyday lives. Over time, this becomes a type of overall exhaustion that affects emotions, experiences and personal beliefs. It also manifests itself or is perceived through symptoms such as anxiety, apathy, depression, stress, irritability or demotivation, among others.

Stress

It can emerge due to the presence of stress factors in the work environment, such as wage gaps and task overload, which increase the likelihood of exhaustion. These factors turn workers more sensitive to experiencing both physical and emotional symptoms, one such being the possibility of deficient performance at work (Muñoz-Fernández *et al.*, 2020).

Anxiety

According to the Royal Spanish Academy (RAE, 2014), the term *ansiedad* (anxiety) is defined as "Es un estado de agitación, inquietud o zozobra de ánimo, se considera como parte de la existencia del ser humano" [It is a state of agitation, restlessness or low spirits; it is considered to be part of human existence] (par. 1).

Irritability at work

Based on the above-mentioned information, these intense emotions may lead to situations in which an individual may feel unable to rationally manage their emotions and reactions. In such situations, individuals may experience anxiety, tension and even become unable to remain calm due to irritability (Neumann *et al.*, 2021).

Work motivation during pandemic times

As stated by Robbins and Judge (2009), behavior is described as a series of sequences in which an individual acts with passion, a sense of direction, and persistence. This is manifested as the effort that the individual channels toward achieving their goals; in this case, the goals are of an organizational nature, linked to the work context. This approach provides individuals with a sense of concentration, satisfaction and achievement in the workplace.

Intrinsic motivation

As established in the definition by Robbins and Judge (2009), intrinsic motivation—according to Maslow's theory—originates from within the individual. In this context, motivation is internally driven, proposed, and executed; there is no reliance on the people surrounding or spending time with the individual. The measurement of intrinsic motivation is directly related to the concept of self-realization, where the individual experiences a sense of fulfilment due to their feeling motivated from within.

To be able to experience this motivation or intrinsic drive, it is crucial for an employee to be in a state of emotional self-awareness. The ability to manage one's emotions effectively plays a key role. This ability will not only allow the individual to firmly channel their internal motivation, but it will also promote their personal development.

Extrinsic motivation

Conversely, extrinsic motivation emerges when the employer provides employees with several incentives such as bonuses and monetary rewards, among others. These rewards have a

significant impact on the workforce, generating a tangible reaction (Robbins and Judge, 2009).

METHOD

This research was performed using a quantitative, correlational approach. A total of 30 students from the master's degree program in Management, Human Resource Management specialization, during the 2022-1 and 2022-2 academic terms. The sample was non-probabilistic and purposive. The quantitative data collection was performed through an online survey administered by Google Forms. Throughout the process, confidentiality, anonymity and voluntary participation were ensured.

Due to the COVID-19 pandemic and the classroom capacity restrictions, particularly at Universidad Nacional Mayor de San Marcos (UNMSM), lessons have been delivered online. For this reason, students were provided with a link to the Google Form so that they could complete it anonymously.

As shown in Table 1, 80% of the survey respondents are female, 30% are aged 26-30 years, over a third have a degree in Management, 30% work as analysts, 40% work more than 40 hours a week, 43.3% work under a fixed-term employment contract, and 43.3% earn a salary ranging from PEN 3,001 and PEN 5,000.

Table 1
Respondents' characteristics

Characteristics	n	%
Sex		
Male	6	20
Female	24	80
Age		
Between 21 and 25 years	3	10.0
Between 26 and 30 years	9	30.0
Between 31 and 35 years	6	20.0
Between 36 and 40 years	6	20.0
Over 40 years	6	20.0
Professional degree		
Law	2	6.7
Management	11	36.7
Accounting	2	6.7
Industrial Engineering	3	10.0
Psychologist	4	13.3

Characteristics	n	%
Other	8	26.7
Occupation		
Assistant	5	16.7
Analyst	9	30.0
Coordinator	3	10.0
General Manager	2	6.7
Psychologist	2	6.7
Other	9	30.0
Working hours		
Between 30 and 40	9	30.0
Between 41 and 48	9	30.0
Over 48	12	40.0
Type of contract		
Fixed-term contract	13	43.3
Indefinite term contract	10	33.3
Administrative Service Contract (CAS)	6	20.0
Service Agreement	1	3.3
Salary		
Between PEN 2,000 and PEN 3,000	9	30.0
Between PEN 3,001 and PEN 5,000	13	43.3
Between PEN 5,001 and PEN 7,000	5	16.7
More than PEN 7,000	3	10.0

Note. Prepared by the author, 2023.

RESULTS

As a result of the statistical analysis performed through SPSS, a correlation has been found between the dimensions of the study variables: pandemic fatigue and work motivation.

As shown in Table 2, the pandemic fatigue dimensions show a negative and statistically significant correlation with the work motivation dimensions.

It was also evidenced that pandemic fatigue has a negative and statistically significant correlation with work motivation ($r_s = -.586, p < .001$).

DISCUSSION

The findings and scientific evidence produced in this study involving graduate students are part of an unexplored field: the academic context of Management. For this reason, the main contribution of this paper is the identification of the relationship between post-COVID-19 pandemic fatigue and the work motivation of students in a state university from Peru.

Table 2*Correlations of the pandemic fatigue and work motivation dimensions*

Dimensions	1	2	3	4	5
Work-related stress	--				
Anxiety	.650**	--			
Irritability	.681**	.733**	--		
Intrinsic motivation	-.601**	-.532**	-.472**	--	
Extrinsic motivation	-.577**	-.515**	-.634**	.707**	--

p < .01 **

Note. Prepared by the author, 2023.

This study evidences the possibility of extrapolating the measurements of pandemic fatigue and work motivation to other contexts, which is an important factor for extending research to future studies. However, a limitation was found: the sample size was very small. For this reason, it is advisable to conduct research with larger sample sizes, as this topic is interesting and new in scientific literature.

The findings of this study show that there is an inverse correlation between the two study variables. This means that, the higher the level of stress, negative thoughts and anxiety, the lower work motivation. This has an impact on the tasks performed in each of the positions. This evidence was shown in a study by Santamaría (2021), conducted in Chiclayo hospitals on the health workforce of said hospital: exhaustion and chronic stress show a regulated relationship; in other words, as fatigue increases, so does burnout. It was also found that the female employees' (198) work-related fatigue was physical (55.56%) and general (5.50%) in nature, while the male employees' (37) was cognitive in nature (51.35%) and showed a higher level than general fatigue (16.22%). This study also evidenced, in terms of the construct dimensions, that work-related stress negatively affects extrinsic and intrinsic motivation. It also found that pandemic fatigue and work motivation have an indirect relationship.

The main finding of Gómez's study (2020), also conducted in a hospital environment, was that there is a solid positive link between work circumstances and fatigue in the workplace (Rho 0.506 and p-value 0.000). Consequently, work circumstances have an important impact on work-related fatigue.

Mansueto *et al.* (2022) found that health-care workers experienced a notable increase in the feelings of negative mood, worry, restlessness, loneliness, and a reduction in the feeling of happiness. In contrast, in the general population group, a significant increase was noted in the negative mood, worry, difficulty to sustain attention and concentration, and a decrease in the feeling of happiness and pleasure derived from everyday activities. This research also helped identify fatigue and loneliness as adjustable psychosomatic factors requiring supervision and potentially intervention in order to improve the health condition of healthcare staff. In such regard, the graduate students who participated in this study reported having experienced stress, anxiety, irritability and negative thoughts that affected their performance during working hours. They also reported an overload of physical and emotional tension, and they were occasionally affected by factors related to the COVID-19 pandemic situation.

Along those lines, Valladares-Garrido *et al.* (2023) conducted a cross-sectional study on the presence of depression and anxiety in Peruvian members of the Armed Forces in the context of the pandemic. The sample consisted of 615 members of the Armed Forces, 93.7% of whom were male. The results indicated a 29.9% prevalence of depression symptoms, and a 22.0% prevalence of anxiety symptoms. These findings were linked to associated factors such as the long working periods, which went for over 18 months since the beginning of the COVID-19 pandemic. In addition, the results revealed that 60.0% of the participants reported that they occasionally experienced work-related stress in their workplace. Also, 66.7% of the

survey respondents reported feeling anxiety on several occasions while at work, while a similar percentage (66.7%) reported experiencing both physical and emotional tension during their working hours on several occasions.

Meanwhile, Kupcewicz *et al.* (2022) found that anxiety control had a balancing effect on emotions during the COVID-19 pandemic ($r = 0.236$; $p < 0.01$). The result analysis also revealed positive and significant links between controlled emotions and their components, and the tiredness/fatigue experienced by nursing students. This research found that the anxiety dimension (from the pandemic fatigue variable) negatively affects intrinsic motivation, $rS = -.532^{**}$ ($p < .01$). and extrinsic motivation, $rS = -.515^{**}$ ($p < .01$).

The impact of the results or findings will be greatly useful for Human Talent management in companies and organizations because, at the study unit level, there is a need to carry out *mindfulness*, resilience and emotional management campaigns for employees, while it is important to create plans, programs and methodological improvements for teaching and learning in the case of graduate students from state universities.

It is expected that the findings will help companies to better manage their employees' emotional health, and will encourage academics to continue investigating this issue with more representative samples.

CONCLUSIONS

- It was evidenced that pandemic fatigue has a negative and statistically significant correlation with work motivation ($rS = -.586$, $p < .001$) in the Master's Degree in Management program students from a Peruvian state university.
- It was evidenced that the work-related stress dimension negatively affects intrinsic motivation, $rS = -.601^{**}$ ($p < .01$) in the Master's Degree in Management program students from a Peruvian state university.
- It was found that the work-related stress dimension inversely affects extrinsic motivation, $rS = -.577^{**}$ ($p < .01$)

in the Master's Degree in Management program students from a Peruvian state university.

- It was found that the anxiety dimension (from the pandemic fatigue variable) negatively affects intrinsic motivation, $rS = -.532^{**}$ ($p < .01$) and extrinsic motivation, $rS = -.515^{**}$ ($p < .01$) in the Master's Degree in Management program students from a Peruvian state university.
- Finally, it was evidenced that the irritability dimension (from the pandemic fatigue variable) negatively affects the work motivation variable dimensions: intrinsic motivation, $rS = -.472^{**}$ ($p < .01$) and extrinsic motivation, $rS = -.634^{**}$ ($p < .01$) in the Master's Degree in Management program students from a Peruvian state university.

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Conflicts of interest

The author has no conflicts of interest to declare.

Author contributions

Elizabeth Juana Ruth Aldave Campos (lead author): conceptualization, data curation, formal analysis, research, methodology, project management, software, validation, data visualization, writing (original draft, reviewing and editing).