

# INVESTIGATION OF FACULTY EMOTIONS DURING THE COVID-19 PANDEMIC AND THE STRATEGIES TO ASSURE THEIR EMOTIONAL WELL-BEING

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**Abstract:** This paper analyses faculty's emotions during the Covid-19 pandemic and identifies their characteristics and possible emotional vulnerability in order to provide decision makers with the information necessary to better serve this community. This action is important since teaching is catalogued as the fourth most stressful profession in the world, and due to adverse conditions, this could increase, as reported by the literature. This research, carried out in Mexico during April 2020, answers the questions: What are the main concerns of instructors at the beginning of the COVID-19 lockdown in a private Mexican university? What are their perceptions about their health and the demographic characteristics of these instructors during the COVID-19 lockdown? We conducted a survey for 104 professors of the South-Centre Region of the Tecnológico de Monterrey and the results were analysed using a mixed methodology which included text analysis and descriptive and inference statistics. Results indicated that the mayor concerns were health, getting sick, contagion and uncertainty. Other concerns included socio-economic consequences of lockdown and their teaching performance under the online modality. Regarding health, the faculty reported feeling more frequently concerned, followed by feeling calm, excellent, at risk and vulnerable and 36% revealed having negative feelings regarding their health. Based on their generation, negative feelings increased the older the faculty member was, from 28% of Millennials to 55% of Boomers. Main concerns of professoriate are dependent of gender and generation; however, these are independent of the academic degree, the professional experience and the relationship status. Furthermore, we mention the strategies implemented by the Tecnológico de Monterrey to assure the emotional wellbeing of its faculty.

**Keywords:** Professors' well-being, faculty concerns, support during pandemic, higher education, educational innovation

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## Introduction

The closing of every educational institution's facilities, as a consequence of the COVID-19 emergency, did not offer options to teachers, lecturers and professors to work in a different modality other than online, bringing additional stress into their daily lives. Under these circumstances, the professoriate will experience negative feelings and emotions. Higher education institutions and governments must analyse the feelings and emotions of teachers and professors to supply them with services to assure their mental health and well-being.

This research analysed information from professoriate in a private Mexican university two weeks after the beginning of the lockdown, in April 2020. It represents one of the first attempts to report instructors' main concerns and feelings about health issues in their own words. It also reports several strategies to assure the mental health and well-being of the academic community.

### **Research objectives**

The objective of this research is to answer the following questions:

RQ1. What are the main concerns of instructors at the beginning of the COVID-19 lockdown in a private Mexican university?

RQ2. What are the demographic characteristics of these instructors and their perceptions about their health during the COVID-19 lockdown?

This work also reports the strategies implemented by Tecnológico de Monterrey to assure the mental health and well-being of its academic community. Its objective is to inspire higher education institutions and policy makers to enable educators to maintain their role as a driving force within society.

### **Background**

While this document is being written, instructors face problems not only in their professional lives, but also emotionally, financially and mentally (Cam-Tu *et al.* 2020). The COVID-19 pandemic has caused social, economic and emotional impacts without precedents: different professions have been affected, professoriate among them (Allen *et al.* 2020).

In contrast to other professional activities, the teaching activity was forced to the online modality. Taking into consideration that under non-pandemic situation, teaching is recognized as the fourth most stressful activity (only after physicians, nurses and social workers) (Gormandy, 2020) and that mandatory lockdown forces them to work from home, professoriate will suffer additional stress.

Working from home and under mandatory lockdown, professoriate will experience negative feelings and emotions (B.H *et al.* 2020). Pfefferbaum *et al.* (2020) reported that lockdown and sanitary regulations, health risk and uncertainty favour emotional distress. Some of the feelings expressed by people under quarantine are stress, depression, irritability, insomnia, fear, confusion, anger, frustration and boredom, among others (B.H, *et al.* 2020). The COVID-19 quarantine might promote these feelings in teachers.

Higher education institutions and governments must analyse the feelings and emotions of teachers and professors to supply them with services to ensure their mental health and well-being. In addition to the negative feelings, Sherril *et al.* (2020) found that teachers are experiencing low energy levels and serious difficulties to educate their own children at home while working. Instructors inspire and guide the personal and professional development of undergraduates; therefore, their mental health and well-being is essential for their optimal performance.

Mockaitis and Butler (2020) stated that confinement will significantly increase stress and complications to deal with family, social life and professional work. Therefore, working from home will increase the stress experienced by teachers and professors. Burnout is also possible under current teaching conditions, so working from home is not a permanent solution. This research will provide information to decision makers about how to support professoriate in their leading role in society.

## **Methodology**

### ***Data collection***

In order to answer the research questions, we analysed the perceptions of 104 lecturers from Tecnológico de Monterrey, a private university in Mexico. From the population size, this sample ensures a 90.4 reliability.

One month after lockdown and the beginning of the online teaching activity, evidence was collected through an online survey. The invitation to participate in this research was disseminated through the institutional email in April and May 2020. We informed every participant about the purpose of the study, their optional participation and the confidentiality of their answers. Participants included faculty from engineering, business, architecture, humanities and social sciences. We did not aim for gender equity in this work; therefore, the number of female and male participants are different.

### ***Survey***

The survey consisted of 23 questions and was applied in Spanish via Google Forms. By answering open and closed questions, participants provided information about their demographic characteristics and their main concerns amid the COVID-19 pandemic. The questions that we analysed in this work were:

1. In one word, what is your main concern during the COVID-19 lockdown?
2. In one word, how do you feel about your health during the COVID-19 lockdown?

### ***Analysis***

The data gather was analysed through a mixed methodology, qualitatively (text analysis) and quantitatively (descriptive and inferential statistics). Prior to text analysis, data was prepared. We removed duplicated and incomplete records. Concerning words, we corrected misspelling and concatenated words that appeared in singular and plural forms. For the purpose of analysis, we classified perceptions of lecturers about their health as positive (excellent, calm, satisfied, healthy, etc.) and negative (worried, at risk, scared, threatened, etc.). We also classified concerns into health related and non-health related.

We applied descriptive statistics on data and analysed the relationship between categorized variables by using Chi-square test ( $H_0$ : the variables are independent.  $H_1$ : the variables are not independent, with a level of confidence of 95%). Demographic characteristics of the sample were categorized according to generation, degree, teaching experience, program, gender and marital status. Participants were classified according to their characteristics:



Table 1 reports the main concerns and perceptions of lecturers about their own health amid the COVID-19 lockdown, according to their demographic characteristics. 36.5% of the participants manifested having negative perceptions about their health, while 63.5% manifested positive perceptions. According to generation, negative perceptions increase as age increases: from 25% of Millennials to 55% of Boomers. Concerning gender, the percentage of women that reported negative perceptions about their feelings is larger than the corresponding percentage of men. Concerning degree, program and marital status, there is no defined trend in perceptions.

Table 1: Comparison of the characteristics of the participants according to the variables: greatest concern and feelings regarding their health given in percentages (ALL = -36.54% + 63.46%) Greatest concern 50-50.

	Greatest concern		Feelings about their health	
	No health	Health	Negative	Positive
Generation				
Millennials	64	36	28	72
X	37	63	41	59
Boomers	45	55	55	45
Teaching experience				
Initiation	50	50	35	65
Stabilization	63	37	24	76
Diversification	33	67	48	52
Aging	46	54	46	54
Distancing	50	50	50	50
Academic degree				
PhD	47	53	35	65
Master	55	45	38	62
School				
Engineering and Science	53	47	39	61
Business and Humanities	37	63	26	74
Gender				
Male	59	41	28	72
Female	37	63	49	51
Relationship status				
With formal relationship	55	45	36	64
No formal relationship	42	58	37	63

Table 2 reports the main concern of the instructors categorized into five relevant topics. For all the participants, independently of the category, the main concern is health. Teaching performance is also reported as the main concerns but not for the majority of the participants. Also, it is noteworthy to mention that for Boomers the second main concern is “uncertainty”. For those instructors in the distancing stage, the second main concern is their teaching performance. This might be related to their commitment with their teaching career throughout their lives. In addition, for the faculty from the School of Business and Humanities, the second main concern is different from the five main topics mentioned in this analysis. Concerning gender, for males, 19% considered “uncertainty”, 15% considered “socio-economic consequences” and only a 41% considered “health” as their main concern. This might be a consequence of the patriarchal society currently predominant in the Mexican society.

Table 2: Answers to the question: "What is your main concern during the COVID-19 lockdown?" according to the characteristics of the instructors and categorized into five relevant topics, given as a percentage.

Category	Socio-economic consequences	Teaching performance	Family	Uncertainty	Health	Others
<b>Generation</b>						
Millennials	19	13	6	17	36	9
X	8	7	7	8	63	7
Boomers	0	18	0	27	55	0
<b>Teaching experience</b>						
Initiation	10	5	10	20	50	5
Stabilization	18	11	5	21	37	8
Diversification	7	11	4	4	67	7
Aging	8	8	8	15	53	8
Distancing	17	33	0	0	50	0
<b>Academic degree</b>						
PhD	11	6	5	18	53	7
Master	14	17	7	10	45	7
<b>School</b>						
Engineering and Science	13	12	7	16	47	5
Business and Humanities	11	5	0	5	63	16
<b>Gender</b>						
Male	15	11	7	19	41	7
Female	9	9	5	7	63	7
<b>Relationship status</b>						
With formal relationship	13	11	8	14	45	9
No formal relationship	13	10	2	15	58	2

Table 3 shows the Chi-square test for the answers to the question: "What is your main concern during the COVID-19 lockdown?" related to the characteristics of the instructors. It reveals, as expected that the concerns of the participants are related to their Generation. This can be understood since the health issues appear with age. Also noteworthy is the fact that health concerns are different in males and females; female instructors seem to have higher concerns as shown in Table 2. Instructors' characteristics like teaching stage, academic degree, school and relationship status are independent of their health worries.

Table 3: Chi-square test for the answers to the question: "What is your main concern during the COVID-19 lockdown?" according to the characteristics of the instructors and categorized into five relevant topics.

Variable	$\chi^2$	p	H0	Conclusion
Generation	6.817	0.033	Rejected	Dependent
Teaching stage	5.709	0.22	Not rejected	Independent
Academic degree	0.609	0.424	Not rejected	Independent
School	1.61	0.205	Not rejected	Independent
Gender	4.798	0.029	Rejected	Dependent
Relationship status	1.462	0.227	Not rejected	Independent

Table 4 reports the Chi-square test for the answers to the question: "How do you feel about your health during COVID-19 lockdown?" related to the characteristics of the participants. It can be noticed that the only dependent variable is Gender; in general, male instructors perceived their health status in a more positive way than female instructors. This finding suggest that this sort of support and attention is more relevant if the education institution wants to promote equity of gender.

Table 4: Chi-square test for the answers to the question: "How do you feel about your health during COVID-19 lockdown?" according to the characteristics of the instructors.

Variable	$\chi^2$	p	H0	Conclusion
Generation	3.587	0.166	Not rejected	Independent
Teaching stage	5.285	0.256	Not rejected	Independent
Academic degree	0.074	0.786	Not rejected	Independent
School	1.048	0.306	Not rejected	Independent
Gender	4.782	0.029	Rejected	Dependent
Relationship status	0.026	0.872	Not rejected	Independent

## Discussion

This study is one of the first attempts to register lecturers' concerns amid a pandemic. In the context of Covid-19, psychosocial assessment and monitoring should include health stressors (e.g., exposures to infection, infected family members, loss of loved ones and physical distancing), secondary adversities (e.g., economic loss), psychosocial effects (e.g., depression, anxiety, worries, insomnia, substance abuse and domestic violence) and indicators of vulnerability (e.g., pre-existing physical or psychological conditions) (Besser, 2020).

Professoriate is one of the most affected sectors of society due to the closure of all higher education facilities and mandatory online teaching. Under a non-pandemic situation, teaching has been described as the fourth most stressful working activity. Due to the lockdown, teachers and lecturers were forced to work from home and adjust their teaching methods to the online modality. As reported by Mockaitis and Butler (2020) by 2020 a very low percentage of instructors in the European Union were well trained in the competencies required to teach in this modality. So additional stressors appeared in the everyday lives of instructors.

Tecnologico de Monterrey promotes self-care and well-being among faculty to help them cope with the stressors amid the COVID-19 pandemic. Research shows that higher levels of resilience are directly related to better health and well-being outcomes when living through a crisis (Amaya, 2020).

Therefore, resilient institutions invest in all levels of their organization and promote empathy and self-care to all stakeholders to enable them to prosper during times of crisis.

### ***Support to professoriate during COVID-19 pandemic***

Tecnologico de Monterrey was the first Mexican university to suspend face-to-face classes on March 17th, 2020 and initiated virtual online academic continuity programs a week later. Through a strategy called the Flexible Digital Model (FDM), Tecnologico de Monterrey ensured academic continuity. In a period of two-weeks, it provided 290 workshops to all of its academic community. Since the institution already had previous experiences with these technologies, the program also included a self-diagnostic tool to detect instructors' requirements. FDM included pedagogical guidance and supportive educational technology to cover those requirements, as well as peer assistance provided by those instructors who had experience in the digital format. Instructors were trained in technologies such as Zoom, CANVAS, E-Lumen as well as other apps to transform their courses for the digital context and to design and integrate active learning activities. A relevant strategy was called the "Buddy Académico" (Academic Buddy); a group of people with experience in these technologies that accompanied the instructors and provided technical support during synchronic sessions. Concerning hardware and devices, FDM also provided tablets, laptops and graphical tablets to those instructors who needed them.

"Cuida Tu Mente" (Taking Care of your Mind) program is an online platform run by Tecnologico de Monterrey to offer relevant information and support to its community by providing activities related to maintaining the mental health of lectures, students, etc. Launched in March 2020, "Cuida Tu Mente" promotes having and sharing positive thoughts and good practices to work from home despite the abrupt change in the daily routines and the social distance.

"TQueremos", an initiative established in 2019 for students, extended its services to professoriate and collaborators of Tecnologico de Monterrey amid the COVID-19 pandemic. It offers coaching and emotional support for personal development in harmony. The program includes the organization of forums and activities for physical and emotional well-being; as well as a telephone hotline and online contact 24 hours a day, 7 days a week. This hotline is used mainly with the following topics: questions and health issues, emotional problems, the need to talk to someone, personal loss or the loss of loved ones.

"AcompañandoTec" is a companionship program for faculty and collaborators of Tecnologico de Monterrey in case of COVID-19 contagion. It is a telephone hotline providing 24 hours a day, 7 days a week service that gives medical advice and health services formalities support.

Tecnologico de Monterrey established the mentioned strategies with the purpose of diminishing the impact on mental health due to the COVID-19 lockdown and in a show of commitment with the professoriate. However, further research is needed to demonstrate its effectiveness.

### ***Limitations***

The current research is limited to faculty from Tecnologico de Monterrey, South-central region (Region Centro Sur) and professoriate perspective corresponds to their living experiences after the



second week under COVID-19 lockdown. Feelings and concerns are related to the present situation, therefore further study is needed to analyse their evolution during the time under lockdown. Workload of professors and other pandemic conditions limited the number of participants answering our optional survey. Since we were limited by the number of volunteer answers, the number of participants was not the same for males and females.

## **Conclusions**

Professoriate is one of the most affected sectors of society due to the impacts that the COVID-19 pandemic has had on their work conditions. Even under a non-pandemic situation, teaching has been identified as one of the most stressful working activities. Due to the lockdown, teachers and lecturers were forced to work from home and adjust their teaching to the online modality, increasing their stress levels.

This research allowed the instructors to freely express their main concerns and their perceptions about their health, two weeks after the mandatory COVID-19 lockdown in a private Mexican university. 104 lecturers and professors from the School of Engineering and Sciences and the School of Business and Humanities answered an optional survey. We analysed the results through descriptive statistics, Chi-square tests and text analysis, giving answers to our research questions as follow:

RQ1. The main concerns of instructors at the beginning of the COVID-19 lockdown in a private Mexican university vary from socio-economic consequences, teaching performance under online modality, family issues, job uncertainty and health; however, health was the concern with highest frequency of mentions in all the different categories of participants.

RQ2. The instructors participating in this study vary across three different generations, Millennials, X Generation and Boomers; five teaching stage experiences, initiation, stabilization, diversification, aging and distancing; two academic degrees, PhD and Masters; two schools, Engineering and Science and Business and Humanities; both genders, males and females; and two relationship status, with and without formal relationship. Health concerns of the participants were only related to their Generation and their Gender. The first one can be understood since health issues appear with age. With respect to Gender, male instructors perceived their health status in a more positive way than female instructors.

Just at the beginning of the quarantine in Mexico, Tecnológico de Monterrey promptly implemented several strategies to support professoriate in their teaching performance as well as to improve their well-being and mental health. This work has briefly described them to inspire higher education institutions and policy makers to enable educators to maintain their role as a driving force within society.

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