

## ARTICLE

**BURNOUT SYNDROME, LIFE SATISFACTION, SELF-ESTEEM AND OPTIMISM OF UNIVERSITY PROFESSORS DURING REMOTE TEACHING****LETÍCIA CAMPOS DE TOLEDO<sup>1</sup>**ORCID: <<https://orcid.org/0000-0001-5609-8770>><[d201811093@uftm.edu.br](mailto:d201811093@uftm.edu.br)>**CAROLINA ROSA CAMPOS<sup>1</sup>**<[carolina.campos@uftm.edu.br](mailto:carolina.campos@uftm.edu.br)>ORCID: <<https://orcid.org/0000-0002-1713-3307>>

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**ABSTRACT:** This research intended to investigate characteristics of Burnout Syndrome, life satisfaction, self-esteem and optimism of university professors during remote teaching, brought about the pandemic caused by COVID-19. 98 teachers took part in the research, with ages between 31 and 64 years old (M=43.35; SD=7.98; 60.20% women) who answered the sociodemographic and technology use questionnaire, Burnout Characterization Scale, Life Satisfaction Scale and Rosenberg Self-Esteem Scale. The results indicated the incidence of professors in courses related to the health field, and who carried out extra curricular activities, using different digital platforms. An increase in topics taught between school periods, followed by the perception of weekly hours of work, was observed. Regarding the instruments, self-esteem rates below average, optimism within the average rate, and life satisfaction above average were observed. As for Burnout, low levels were observed, with emphasis on the lack of personal gratification at work and emotional exhaustion. As for the correlation analyses, women had higher averages related to mental health and men had a higher average for Burnout, with a significant relationship between age and optimism, although no significant differences were found in mental health rates along the period of remote teaching. Limitations regarding the number of participants and the Burnout instrument used suggest that further studies must be carried out in order to provide a more accurate understanding of the mental health of university professors.

**Key words:** university professors, mental illness, coronavirus, mental health, positive psychology.

## SÍNDROME DE *BURNOUT*, SATISFAÇÃO DE VIDA, AUTOESTIMA E OTIMISMO EM DOCENTES UNIVERSITÁRIOS DURANTE O ENSINO REMOTO<sup>1</sup>

**RESUMO:** Esta pesquisa buscou investigar características da Síndrome de *Burnout*, satisfação de vida, autoestima e otimismo em docentes universitários durante o ensino remoto estabelecido por contingência da pandemia provocada pela COVID-19. Participaram 98 professores com idades entre 31 e 64 anos (M=43,35; DP=7,98; 60,20% mulheres), que responderam ao questionário sociodemográfico e uso de tecnologias, Escala de Caracterização de *Burnout*, Escala de Satisfação de Vida e Escala de Autoestima de Rosenberg. Os resultados indicaram a prevalência de docentes em cursos ligados à área da saúde e que exerceram atividades além das aulas, utilizando-se de diferentes plataformas digitais. Foi observado um aumento de disciplinas ministradas entre os períodos letivos, acompanhado pela percepção de horas semanais de trabalho. Em relação aos instrumentos, observaram-se índices de autoestima abaixo da média, de otimismo dentro do valor médio, e de satisfação de vida acima da média. Quanto ao *Burnout*, observaram-se baixos níveis, com destaque para a falta de realização pessoal no trabalho e exaustão emocional. Quanto às análises de correlação, mulheres apresentaram médias superiores relacionadas à saúde mental, e os homens obtiveram média superior de *Burnout*, havendo ainda uma relação significativa entre idade e otimismo, embora não tenham sido encontradas diferenças significativas nos índices de saúde mental conforme o avanço do período remoto. Limitações quanto ao número de participantes e ao instrumento de *Burnout* utilizado sugerem que novos estudos sejam conduzidos a fim de se obter uma compreensão mais assertiva sobre saúde mental de docentes universitários.

**Palavras-chave:** professores universitários, adoecimento mental, coronavírus, saúde mental, psicologia positiva.

## SÍNDROME DE *BURNOUT*, SATISFACCIÓN DE VIDA, AUTOESTIMA Y OPTIMISMO EN DOCENTES UNIVERSITARIOS DURANTE LA EDUCACIÓN A DISTANCIA

**RESUMEN:** Esta investigación buscó investigar características del Síndrome de Burnout, satisfacción de vida, autoestima y optimismo en docentes universitarios durante la educación a distancia instaurada por la contingencia de la pandemia del COVID-19. Participaron 98 docentes con edades entre 31 y 64 años (M=43,35; DT=7,98; 60,20% mujeres) que contestaron la encuesta sociodemográfica y uso de tecnologías, Escala de Caracterización de Burnout, Escala de Satisfacción de Vida y Escala de Autoestima de Rosenberg. Los resultados indicaron la prevalencia de profesores en el área de la salud, y que realizaban actividades más allá de las clases, utilizando diferentes plataformas digitales. Se observó un aumento de asignaturas ministradas entre los periodos escolares, acompañado de la percepción de la jornada laboral semanal. Acerca de los instrumentos, se observó los índices de autoestima abajo del promedio, de optimismo dentro del valor promedio y la satisfacción de vida por encima del promedio. Acerca del Burnout, se observaron niveles bajos, con énfasis en la falta de realización personal en el trabajo y el agotamiento emocional. Acerca de los análisis de correlación, las mujeres presentaron medias mayores relacionadas con la salud mental y los hombres medias mayor de Burnout, existiendo relación significativa entre edad y optimismo, aunque no se

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encontraron diferencias significativas en los índices de salud mental a medida que avanzaba el periodo. Las limitaciones en acerca de los participantes y el instrumento de Burnout sugieren que se realicen estudios para mejor comprensión de la salud mental de los profesores.

**Palabras clave:** profesores universitarios, enfermedad mental, coronavirus, salud mental, psicología positiva.

## INTRODUCTION

The role of the educator has been changing in line with the economic, social, and political context, so that the teaching profession is assuming functions beyond those traditionally assigned to their work, facing the demand for long working hours and the constant devaluation of their social function (Tostes et al., 2018). It is also noted that teachers face challenges related to meeting productivity targets, the need for constant professional updating, as well as dealing with large classes with different characteristics and demands, being also the target of severe social criticism (Diehl & Marin, 2016). These factors corroborate the fact that this profession is one of the most subject to occupational diseases, as well as being one of the most stressful according to the International Labor Organization (ILO, 1984; Oliveira et al., 2017).

Burnout Syndrome is one of the main psychopathologies evidenced in the literature within the teaching profession (Diehl & Marin, 2016), characterized as the final phase of a process of exhaustion of the emotional resources used in coping with adverse demands. In the teaching category, this is manifested by emotional exhaustion after intensive interaction with students, depersonalization in cold attitudes toward students, and finally, lack of personal fulfillment at work, devaluing their professional role (Moreno-Jimenez et al., 2002).

According to the study of Massa et al. (2016), a quarter of the sample of university professors studied presented this symptomatology, with the factor of dehumanization of the work activity having the highest percentage of high level which highlighted the need to understand the organizational and psychosocial factors associated with illness in order to manage interventions aimed at the well-being and quality of life of teachers. Gomes and Quintão (2011) also consider this psychopathology as one of the most representative under the psychosocial aspect, since it directly impacts on individual, social and organizational variables, besides representing, in the teacher's experience, a threat to life satisfaction and self-esteem. This fact can then cause the development of negative feelings, such as demotivation and dissatisfaction with life in general, in addition to damaging optimism in relation to future prospects, both personally and professionally (Garcia & Benevides-Pereira, 2003; Montalvão et al., 2018).

In view of such considerations, important emphasis should be given to teachers' well-being, self-esteem, and optimism. According to Hutz, Zanon, and Bardagi (2014), satisfaction with life can be explained by genetics and personality traits, in terms of the perception of the level of contentment that someone has about their own life when reflecting on the most important aspects that make up their history, according to their perception of what is satisfying or unpleasant. In this aspect, self-evaluation tends to vary not only between subjects, but also depending on life events, moods, thoughts, and feelings, although there is a tendency to a stability in the events that each individual considers important in his/her trajectory. Studies with university teachers also point out that the higher the life satisfaction, the higher the personal fulfillment and extroversion, and the lower the Burnout (David, 2011; Moreira et al., 2009).

In turn, self-esteem can also be related to the symptomatology of Burnout and the satisfaction that teachers have with their lives, since it brings together the general and common feelings that the subject has about himself, whether they have a positive connotation, associated with mental health, social skills and well-being, or negative, involving the perception of disability, depression and social anxiety (Hutz, Zanon & Vazquez, 2014). These authors also emphasize that a positive view of oneself is important and necessary to the extent that subjects with these characteristics believe they live in a world where they are respected and

valued, a perception that arises from the positive recognition by peers and other subjects considered significant. In this regard, we also highlight studies that point to the fact that educators from public universities tend to present high self-esteem when compared to private higher education workers (Terra et al., 2013), although other more recent studies point to a higher level of Burnout and consequent psychological distress in teachers from public institutions (Baptista et al., 2019).

With regard to optimism, it can be said that this concept emerged within the studies about positive subjective experiences and human potentialities in the field of positive psychology. Optimism is related to generalized positive expectations about future events, so that such perception of the subjects is intrinsically related to their physical and mental well-being, as well as to their expectations about the future, the effort required to achieve goals, and their academic and professional performance, with studies pointing to a positive correlation between self-esteem and optimism (Bastianello & Pacico, 2014; Bastianello et al., 2014).

In this aspect, in view of the current pandemic moment caused by COVID-19 and the consequent measures of social isolation regulated by the Ministry of Health, the Ministry of Education adhered, on an exceptional basis, to the remote modality, with the need for the use of information and communication technologies (ICTs) to supply the school needs and the school year. In view of this, it was necessary for teachers to carry out new pedagogical planning, as well as to understand the operation and usefulness of different digital platforms to continue stimulating students to build and seek knowledge, a process that involved the challenge of reconciling personal and professional activities in the home environment and transferring face-to-face pedagogical methods and practices to the so-called remote teaching in a short period of time (Gusso et al., 2020; Silva et al., 2020).

Considering that the integration of ICTs into everyday school practices has been little explored by the educational system itself over the years, making them the only pedagogical option has consisted, even if on an exceptional basis, in changes in the flow and amount of work. These changes, consequently, may influence or trigger the consolidation of some occupational disorders in teachers (Oliveira et al., 2020), as well as favor mental illness by the impacts of this new work configuration (Araujo et al., 2020; Bittencourt, 2021; Morosini, 2020; Pereira et al., 2020; Santos et al., 2021).

Given that the teacher's health is a topic that acquires relevance and has been the target of concern by institutional managers, union and government entities, and researchers in the area (Diehl & Marin, 2016), as well as that the constant innovations of digital technologies provide significant changes in teaching practice in the current pandemic situation caused by COVID-19 (Moreira et al., 2020), the present research aimed to investigate the level of Burnout, optimism, self-esteem, and life satisfaction in the pandemic context in university professors in the face of the need to fulfill academic activities in a remote format.

## **METHODS**

This is a descriptive, cross-sectional, and quantitative research.

### **Participants**

Ninety-eight professors who belonged to the staff of a public university in the interior of Minas Gerais collaborated with this research. In the second phase, 59 university professors answered the instruments, 52 of whom had already participated in the first collection. Table 1 presents the descriptive characteristics of the sample.

**Table 1** - Sample description

<i>Sample Description</i>				
	<b>Study 2</b>		<b>Study 2</b>	
	<b>Teachers</b>	<b>%</b>	<b>Teachers</b>	<b>%</b>
<b>Age*</b>				
25 to 39 years old	<b>32</b>	35,16	19	32,20
40 to 59 years old	<b>56</b>	61,54	35	59,32
60 years or more	<b>3</b>	3,30	5	8,48
Total	<b>91</b>	100,00	59	100,00
<b>Sex</b>				
Female	<b>54</b>	59,30	40	67,80
Male	<b>36</b>	39,60	19	32,20
Non-binary	<b>1</b>	1,10	0	0,00
Total	<b>91</b>	100,00	59	100,00
<b>Education</b>				
Specialization	<b>1</b>	1,10	0	0,00
Master's Degree	<b>2</b>	2,20	1	1,70
Doctorate	<b>57</b>	62,60	39	66,10
Post-Doctorate	<b>31</b>	34,10	19	32,20
Total	<b>91</b>	100,00	59	100,00

**Source:** Elaborated by the authors based on survey data.

Caption: \*Age groups, according to IBGE: <https://sidra.ibge.gov.br/tabela/5918>

## Instruments

Sociodemographic and technology use questionnaire, containing questions about the participant's sociodemographic information and items about the time of ICT use, purpose, programs used, ease of use, among others.

Life Satisfaction Scale (LSS), which evaluates the perception of how satisfied people are with their lives. It was developed by Diener et al. (1985), adapted and validated for Brazilian adults and adolescents by Hutz et al. (2014). It is composed of five self-report items and a seven-point response key, which follows adherence from "Strongly disagree" to "Strongly agree" (Zanon & Hutz, 2013). The final version of the Brazilian adaptation showed a good internal consistency index ( $\alpha=0.91$ ).

Rosenberg Self-Esteem Scale, which assesses the level of perceived self-esteem. It was developed by sociologist Morris Rosenberg and adapted and validated for students and adults by Hutz and Zanon (2011). The final version of the scale is composed of ten items with Likert scale responses, consisting of four

points ranging from "Strongly disagree" to "Strongly agree". It is also worth noting that the scale has a good internal consistency index ( $\alpha=0.90$ ).

Revised Life Orientation Test (LOT-R), which assesses optimism by relating positive and negative expectations more strongly. It was developed by Scheier, Carver, and Bridges (1994), adapted and validated for Brazil for adolescents, university students, and adults in Brazil by means of two studies. The final version of the scale consists of ten items, with three sentences on optimism, three on pessimism, and four filter items, whose scores are not computed, with a five-point Likert-type response scale ranging from "I strongly disagree" to "I strongly agree" (Bastianello & Pacico, 2014). The study conducted with college students and adults showed an internal consistency index of 0.80, and the study with adolescents, 0.76.

Burnout Characterization Scale (ECB), which evaluates the Burnout Syndrome from the tri-factor structure of emotional exhaustion, cynicism and disappointment at work. It was developed by Tamayo and Tróccoli (2009) and validated in Brazil for adults by means of two studies with nursing workers and members of the civil police. The final version of the scale consists of 35 items divided among the factors Emotional Exhaustion ( $\alpha=0.93$ ), Dehumanization ( $\alpha=0.84$ ), and Work Disappointment ( $\alpha=0.90$ ), with the factor Personal Achievement incorporated into the latter. The response key is a five-point Likert scale ranging from "Never" to "Always," with intermediate values representing different levels of frequency in relation to the behaviors exposed in the sentences.

### **Data Collection Procedures**

The subjects who met the inclusion criteria were invited to participate in the research on a voluntary and unpaid basis, so that the study, in all stages, met the requirements proposed by Resolution 510/16 of the National Health Council (CNS), which provides on the standards applicable to research in Human and Social Sciences, so that the research project was approved by the Ethics and Research Committee (CEP) of the university. Data collection was carried out using the Google Forms platform, whose access link was made available on the social media of the researchers themselves, by sending e-mails to the teachers and disclosing it in groups in which they participated. Moreover, the respondents were asked to share the survey, thus forming a communication network among them.

It is also noteworthy that the collections followed the dates of the respective academic calendars of the main campus and the university campus 2, being Study 1: End of the "Resumption of the 2020.1 Calendar" and Study 2: End of the "Resumption of the 2020.2 Calendar", which was fulfilled between the months of March and August 2021.

### **Data analysis procedures**

Data analysis was performed using descriptive statistics and mean comparison and correlation analyses between the data obtained from the questionnaire and the other instruments mentioned.

In order to verify if the mean differences found were significant, the analyses consisted of Student's t-test, which is used to analyze the differences in the means of qualitative variables of two categories; Anova, for the comparison of means between three or more groups; and, finally, the nonparametric Mann-Whitney and Kruskal-Wallis tests. The choice of non-parametric tests is justified by the fact that the data are asymmetric and by the low sample size.

## **RESULTS**

Regarding the data collected during study 1, Table 2 shows that the answers to the questionnaire demonstrate that, in relation to the area of professional activity, 42.70% of the teachers work in Health Sciences courses; 32.45% in Engineering; and 16.21% in Human and Social Sciences, so that the other areas of activity account for only 8.64% of the respondents. It is noteworthy that the sum of the answers is higher

than the number of teachers, since the same teacher may work in courses from different areas at the university. In relation to study 2, 39.50% of the respondents work in Health Science courses; 36.84% in Engineering; and 11.40% in Human and Social Sciences, with the other areas adding up to only 12.26% of the answers.

As for the number of subjects taught during remote teaching, only 6.60% teach a single subject, and the other percentages are balanced, as 23.10% teach two subjects; 28.60% teach three subjects; 24.20% are responsible for four subjects; and 17.50% for five or more subjects. As for study 2, 30.50% of the teachers teach three subjects; 23.72% of the sample teach up to two subjects; and 45.78% teach four or more subjects, which shows an increase in the number of subjects among the teachers in both studies.

Regarding the types of professional activities performed, it was found that besides giving classes (28.75% for study 1; and 29.06% for study 2), the teachers give videoconferences (study 1 with 24.50%; study 2 with 23.64%), supervise research/internship (study 1 with 22.90%; study 2 with 22.66%), coordinate leagues (study 1 with 4.90%; study 2 with 3.44%), among other functions (study 1 with 18.95%; study 2 with 21.20%), percentages that again do not refer to the number of teachers, because each of them performs one or more activities. In turn, the most used platforms are the videoconferencing ones (study 1 with 26.25%; study 2 with 24.90%), while the research ones represent the lowest percentage (study 1 with 17.99%; study 2 with 19.65%), among the types designated by the questionnaire.

Still about the first phase of the 91 participants, 69.20% had taken an improvement course on the use of ICTs, and 30.80% had not. In relation to the number of hours worked, 41.80% said they worked eight to ten hours a day, and 32.90% worked more than ten hours a day. 59.30% of the teachers said they were satisfied with their professional performance in remote teaching, and only 4.40% were very dissatisfied with their performance in this teaching model. Regarding the second phase of the 59 teachers, 49.15% took the improvement course, and 50.85% did not. In this stage, 44.07% of the teachers perceive they work eight to ten hours a day, and 35.59% perceive they work more than ten hours a day. As for the level of satisfaction with their professional performance, 47.45% reported being satisfied and 30.51% are somewhat to very dissatisfied, although only 5.10% reported being very dissatisfied.

**Table 2** - Description of the performance in remote teaching

	Study 1		Study 2	
	Teachers (n=91)	%	Teachers (n=59)	%
<b>Area of Expertise</b>				
Biological Sciences	4	2,16	6	5,26
Exact Sciences	5	2,70	4	3,50
Health Sciences	79	42,70	45	39,50
Agrarian Sciences	3	1,62	4	3,50
Engineering	60	32,45	42	36,84
Human and Social Sciences	30	16,21	13	11,40
Others	4	2,16	0	0,00
Total	185	100,00	114	100
<b>Types of platforms used</b>				
Videoconferencing platforms	89	26,25	57	24,90

Messaging platforms	85	25,10	53	23,14
Writing platforms	74	21,82	53	23,14
Research platforms	61	17,99	45	19,65
Other	30	8,84	21	9,17
Total	339	100,00	229	100
<b>Perception of average daily hours of remote work</b>				
Less than 3 hours	5	5,50	0	0,00
From 4 to 7 hours	18	19,80	12	20,34
From 8 to 10 hours	38	41,80	26	44,07
From 10 to 12	23	25,30	12	20,34
More than 12	7	7,60	9	15,25
Total	91	100,00	59	100
<b>Perceived satisfaction with remote job performance</b>				
Very dissatisfied	4	4,40	3	5,10
Dissatisfied	8	8,80	4	6,77
Not very unsatisfied	7	7,70	11	18,64
Satisfied	54	59,30	28	47,45
Not very satisfied	10	11,00	3	5,10
Very Satisfied	8	8,80	10	16,94
Total	91	100,00	59	100

**Source:** Adapted by the authors from Areas of knowledge, according to the CAPES platform: [http://fisio.icb.usp.br:4882/posgraduacao/bolsas/capesproex\\_bolsas/tabela\\_areas.html](http://fisio.icb.usp.br:4882/posgraduacao/bolsas/capesproex_bolsas/tabela_areas.html)

In relation to the results of the scales, Table 3 shows that the highest percentage refers to the self-esteem index below the average, representing 35.16% of the respondents in study 1 and 37.30% in study 2. In turn, 38.49% of the teachers in study 1 and 37.30% in study 2 indicated optimism within the average value for the sample, although 31.86% of the teachers in study 1 and 30.50% in study 2 showed levels below the average. With regard to life satisfaction, 39.56% of study 1 and 42.37% of study 2 obtained scores above the average, although it should be noted that 26.38% of study 1 and 37.28% of study 2 teachers showed scores slightly below the average or actually below the average, according to the percentile division of the correction manuals of the scales established by the authors.

Considering the levels of Burnout symptomatology, the divisions were made based on the raw score obtained by the participants, with the result that most of the teachers (study 1 with 84.62%; study 2 with 74.57%) are slightly below the average; only 1.1% of the sample of the first study and 3.38% of the second study indicate a high index of the pathology, although 13.18% of the teachers in study 1 and 22.05% in study 2 are slightly above the average. It is also noted that among the common manifestations of Burnout,

the teachers in study 1 had higher rates of lack of personal accomplishment at work, while study 2 had a higher rate of emotional exhaustion.

**Table 3** - Description of the Scales' Results

	Study 1			Study 2	
	Percentile Value Interval *	Teachers (n=91)	%	Teachers (n=59)	%
<b>Level of Self-Esteem</b>					
Below Average	5-25	32	35,16	22	37,30
Slightly below average	30-45	17	18,70	9	15,26
Slightly above average	50-65	22	24,17	14	23,72
Above average	70-95	20	21,97	14	23,72
Total	5-95	91	100,00	59	100,00
<b>Level of Optimism</b>					
Below average	5-20	29	31,86	18	30,50
Around average	25-55	35	38,47	22	37,30
Above average	65-95	27	29,67	19	32,20
Total	5-95	91	100,00	59	100,00
<b>Level of Satisfaction with Life</b>					
Below Average	1-20	14	15,40	9	15,25
Slightly below average	25-45	10	10,98	13	22,03
Slightly above average	50-70	31	34,06	12	20,35
Above average	75-95	36	39,56	25	42,37
Total	1-95	91	100,00	59	100,00
<b>Burnout Level</b>					
Below Average	0-50	1	1,10	0	0,00
Slightly below average	51-100	77	84,62	44	74,57
Slightly above average	101-130	12	13,18	13	22,05
Above Average	131-175	1	1,10	2	3,38
Total	0-175	91	100,00	59	100

**Source:** Elaborated by the authors based on survey data.

Caption: \*Values considered by the authors of the respective instruments.

With regard to the results of the t-test, Table 4 shows that the differences between genders in relation to the constructs researched are statistically significant ( $p \leq 0.05$ ). It is worth mentioning that

significant differences were also found in relation to gender, with women presenting higher means for the variables related to better mental health indices, such as life satisfaction, optimism, and self-esteem, while men presented a higher mean for Burnout syndrome, which denotes a greater susceptibility of this gender to becoming ill at work.

**Table 4** - Correlation Analyses

	Sex	Mean	Standard Deviation	Test t	Significance
Life satisfaction	F	24,90	6,568	33,762	0,001
	M	23,67	6,984	44,625	0,001
Self-esteem	F	32,35	5,616	66,746	0,001
	M	30,80	6,148		
Optimism	F	23,04	4,761	52,248	0,001
	M	20,95	5,756		
Burnout Syndrome	F	85,68	17,996	56,412	0,001
	M	86,04	20,003		

**Source:** Elaborated by the authors based on survey data.

As for the differences in the means of the constructs compared to the established age groups, the Anova showed that there was a statistically significant difference only between age and optimism ( $p = 0.025$ ). Finally, mean, and standard deviation analyses were performed with the results of the teachers who answered both phases, and no significant differences were found in the mental health indices as the remote period progressed.

## DISCUSSION

According to Tostes et al. (2018), the teaching profession is marked by extensive working hours, as observed in both phases of the study, in which most teachers perceived working more than eight hours per day, i.e., more than the 40 hours per week for which they were hired. Such a picture seems to have further intensified in the context of remote work, in which the challenges of reconciling personal and professional activities, as well as making the use of ICTs the only pedagogical option, have brought about changes in the flow and amount of work of these professionals, leading to problems of overload and greater susceptibility to mental illness (Araujo et al., 2020; Bittencourt, 2021; Gusso et al., 2020; Morosini, 2020; Pereira et al., 2020; Santos et al., 2021). In this sense, the high workload denotes the difficulty for teachers to perform all the activities assigned to them, which go far beyond teaching classes within the regular working time. Add to this the fact that a considerable percentage of these professionals have not taken the ICT enhancement course offered by the university, which tends to increase the difficulties in telecommuting.

Just as the teaching workload is extrapolated beyond the classroom, Dallacosta and Castro (2021) also point out that university students also have extracurricular tasks that go beyond the hours that teaching activities normally demand. In the context of the pandemic, there is also a percentage of students who, due to economic and family issues, had to enter the world of work and deal with an intense weekly routine of studies and work activity. In this sense, aiming to cover the difficulties faced by the entire academic community, Manica (2022) points out that college students, as well as teachers, went through a period of adaptation to remote classes, facing issues such as social isolation, increased screen time and frustration in the face of the academic reality at a distance, in addition to economic and social deprivation that directly impacted worrying aspects of the mental health of these individuals.

However, the literature notes that protective factors such as self-esteem, optimism, and life satisfaction alter the reaction of subjects when faced with risky situations. Thus, it is observed that a well-developed repertoire of social skills, as well as the way the subject perceives himself and understands the events in his life, were instruments of relevance to academic performance and psychological well-being during the period of remote classes. However, it is worth noting that, although intertwined with teaching practice, the purpose of this study was to observe the profile of the university professor, with a future goal of studying the constructs for students.

With regard to the constructs related to mental health indices, the present study observed similar indices of self-esteem, optimism, and life satisfaction in both phases, with only self-esteem showing considerable percentages below and slightly below the average. Such a finding can be explained by the fact that, according to Hutz et al. (2014), the perception of self-esteem is associated with the recognition that the individual receives from his or her social environment, which needs to give respect and appreciation, elements that are little observed in educational institutions. In these spaces, the devaluation, according to the teachers' reports, comes both from the students and from the university itself, creating a favorable environment for teachers to perceive themselves as incapable. Adding to this, Baptista et al. (2019) highlight that professors from public institutions are more subject to psychological attrition than those belonging to private universities, which opens space for new studies that evaluate this issue, observing, mainly, the interlocation of self-esteem problems with structural and administrative issues of the university.

Regarding the indices of satisfaction with life, the data collected was mostly positive, which points to the stability of the subjects' self-evaluation about their life events. This fact is explained to the extent that, according to Hutz et al. (2014), life satisfaction involves not only life events, but also how genetics and personality traits influence the individual to select the most important events that make up his or her history. Thus, it is hypothesized that the teachers' answers mostly considered the achievements of their professional career to become professors at a public university, considering that the vast majority of respondents hold a doctoral degree, and a significant percentage of them even went on to post-doctoral studies. However, it is important to consider that there was a significant growth in the percentage of teachers who showed satisfaction with life slightly below average from the first to the second phase of the study, as well as the increase of respondents who perceive themselves as slightly to very dissatisfied with the remote professional performance, which points to possible influences that telecommuting has exerted on the satisfaction levels of teachers about their professional practice.

As far as future perspectives are concerned, both phases of the study pointed to similar and balanced levels of optimism, which can be seen as positive when observing that, even though the second phase of the study accumulated the stresses of two semesters in remote classes, the generalized expectation about future events remained similar in both moments. However, the significant indexes of optimism at the mean and below the mean become worrisome, considering that such a result, according to Bastianello and Pacico (2014), also concerns the effort required to achieve goals and the teachers' professional performance, factors that may have been impaired by the future uncertainties intrinsic to the pandemic context, which is complemented by the teachers' mean satisfaction index with their remote performance.

As for the specifics of the occupational illness represented by Burnout, the fact that most of the teachers presented slightly below-average indices is complemented by the significantly positive indices of the constructs representing mental health, since the literature notes that this psychopathology constitutes a threat

to life satisfaction and self-esteem, in addition to damaging optimism regarding future prospects in the personal and professional fields (Garcia & Benevides-Pereira, 2003; Gomes & Quintão, 2011; Montalvão et al., 2018). Taking into account the dimensions of Burnout established by the literature (Moreno-Jimenez et al., 2002), it was observed that, although the symptomatology does not appear abruptly in this professional category, the highest rates of Burnout point to a negative valuation of the teacher about his role, and may reveal feelings of ineffectiveness in the development of his work, as well as denote emotional exhaustion, which converges to the lack of teaching dedication because he is not able to engage better in the issue of affectivity. The dehumanization of the work activity, in turn, was not the predominant factor in any of the phases of the study, contrary to the research of Massa et al. (2016).

However, for comparison purposes, when looking at the literature produced about the mental health of students and teachers during the pandemic period, Dallacosta and Castro (2021) point out that the dehumanization of work activities was not a preponderant factor for both, but rather the emotional exhaustion and the feeling of disbelief of their potential, although there is an interrelationship between all these factors. Adding to the comparative aspects, Becker et al. (2021) conducted a literature review in which, through the analysis of 14 studies, an association was found between remote teaching and a higher prevalence of anxiety, stress, and Burnout in college students compared to face-to-face classes. However, as found by the present research from the faculty's perspective, although the students have satisfactory coping and adaptation skills, the emotional and physical exhaustion was not mostly due to the relationship with professors, but with other colleagues.

With regard to the variables collected by the sociodemographic questionnaire, it is observed that the highest rate of respondents in both phases of the study belongs to the female gender (study 1 with 59.30%; study 2 with 67.80%), which is consistent with the general panorama of other studies in the area of university teaching, signaling that this profession is mostly exercised by women (Massa et al., 2016; Silva et al., 2020). The study in question observed higher rates of mental health represented by the constructs of positive psychology in females, while males obtained higher rates of Burnout symptomatology, although the literature presents women as more vulnerable to mental illness due to factors such as domestic work overload, the cultural rules imposed on them, and hormonal differences to which they are subjected (Tostes et al., 2018).

Thus, in the study by Tostes et al. (2018), a higher prevalence of the symptoms of minor mental disorders, depression, and anxiety was observed in female public-school teachers, as well as Baasch et al. (2017) found significant differences in the prevalence of Mental and Behavioral Disorders in women working as public servants. Adding to these studies, Neme and Limongi (2019) surveyed 351 faculty members at a university in Minas Gerais, with respondents holding varying degrees of master's, doctoral, and postdoctoral, and performing research, teaching, extension, and management activities. In this research, although the sample was predominantly male, a higher prevalence of Common Mental Disorders was found in female professors. As for the positive constructs, Gomes et al. (2017) compared quality of life and quality of work life indices between genders and concluded that men obtained higher values in all comparisons with statistical significance.

In turn, the significant relationship between age and optimism can be explained by the literature brought by Silva et al. (2020), in which mental illness due to work is associated with predominantly young professionals through the unpreparedness of university education for the adversities of the work environment. Moreover, the authors highlight the relationship between age and well-being in people at older ages, who often have greater ability to deal with affective and professional problems. However, Luis (2018) points out that, in general, there is no consensus in the literature on the relationship between age and well-being, highlighting that optimism is associated not only with well-being, but also with the fact that individuals are able to have a better quality of life in situations in which they are experiencing health problems, since psychological resources are interconnected; thus, the presence of one increases the probability of others emerging, there being an intrinsic relationship between positive affections and health.

Finally, the fact that no significant differences in mental health scores were found in the course of remote teaching may indicate that, although the adaptation of face-to-face teaching practices to designated

remote teaching as well as the need to understand the operation of different digital platforms in a short period of time have become a challenge for teachers (Gusso et al., 2020; Silva et al., 2020), they have adapted to the complexity of the process. Thus, there was not a gradual increase in the impact on the mental health of teachers over the semesters surveyed, as expected by the literature notes (Araujo et al., 2020; Bittencourt, 2021; Morosini, 2020; Pereira et al., 2020; Santos et al., 2021).

## FINAL CONSIDERATIONS

From the results and discussions presented, it can be inferred that the research fulfilled its purpose of evaluating the mental health of university professors regarding the performance of academic activities in a remote format in both semesters studied. However, a limitation of the study is the low number of participants in relation to the number of university professors, which hinders the generalization of the data obtained. Furthermore, it is important to note that the Burnout Characterization Scale, used in this study to measure the syndrome, focuses on aspects related to the nuances between the professors and their students, not including bureaucratic and administrative demands of the university, which also involve stressful and sickening issues of the teaching work.

This conclusion could be obtained from the teachers' reports in an open field of research added in the second phase, in which the teachers' reported difficulties beyond the lack of interaction with students, such as failures in communication with the institution, too many extracurricular meetings, the university's lack of concern with the reception of workers, and the precariousness of the academic systems used. Thus, it is suggested that new studies be carried out with larger samples and with instruments that explore administrative work issues and that involve the resumption of face-to-face classes, in addition to investigations that explore, in a more in-depth manner, aspects referring to the students' mental health, in order to obtain more assertive and comprehensive descriptive and comparative data about the understanding of the mental health panorama of the professors and students who make up the academic community.

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## STATEMENT OF CONTRIBUTION OF THE AUTHORS

**Author 1** - Designing the project, collecting data, analyzing data, and writing the text.

**Author 2** - Project guidance, active participation in data analysis, and review of final writing.

## DECLARATION OF CONFLICT OF INTEREST

The authors declare that there is no conflict of interest with this article.