



Psicologia: Teoria e Prática

ISSN: 1516-3687

ISSN: 1980-6906

Universidade Presbiteriana Mackenzie

Uehbe, Carol; Juzwiak, Claudia Ridel; Padovani, Ricardo da Costa
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Psicologia: Teoria e Prática, vol. 25, no. 2, ePTPCP15398, 2023
Universidade Presbiteriana Mackenzie

DOI: <https://doi.org/10.5935/1980-6906/ePTPCP15398.en>

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Effects of the Covid-19 Pandemic on Physical and Mental Health among Women

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Received: May 5th, 2022.

Accepted: September 22nd, 2022.

Section editor: Carolina Andrea Ziebold Jorquera.

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Abstract

Aiming to investigate the effects of the restriction measures imposed during the Covid-19 pandemic on physical and mental health, nine adult women were interviewed according to an in-depth semi-structured script applied online. The content analysis of the interviews produced five thematic nuclei: 1) "Intensified feelings, emotions, and responses," portraying feelings and emotions resulting from the pandemic; 2) "Changing the work routine: work from home," addressing the transition from face-to-face work to working remotely from home; 3) "Intensified relationships," highlighting the effects on family relationships; 4) "Emotional eating, healthy eating," revealing a reorganization of foodways; and 5) "Coping with the pandemic," coping strategies were reported. The abrupt need to reorganize life, the fear of contamination and illness, and uncertainty about when the pandemic would end took a toll on the participants' psychological health. Exercising emerged as an essential strategy for maintaining mental health.

Keywords: Covid-19, social isolation, mental health, women's health, feeding behavior

EFEITOS DA PANDEMIA DE COVID-19 NA SAÚDE FÍSICA E MENTAL EM MULHERES

Resumo

Com o objetivo de investigar os efeitos das medidas de restrição da pandemia de Covid-19 na saúde física e mental, nove mulheres adultas participaram de entrevistas individuais, em profundidade, virtuais, a partir de roteiro semiestruturado. A análise de conteúdo das entrevistas gerou cinco núcleos temáticos: 1) "Sensações, emoções e reações intensificadas," retratando sentimentos e emoções decorrentes da pandemia; 2) "Mudança de rotina no trabalho: *home-office*," abordando a transição do trabalho presencial para o trabalho remoto em casa; 3) "Intensificando relações," evidenciando os efeitos nas relações familiares 4) "Comer emocional, comer saudável," apontando a reorganização nas formas de comer e 5) "Enfrentamento à pandemia," quando são indicadas as principais estratégias adotadas. A necessidade de reorganização abrupta da realidade, o medo de contaminação e adoecimento e a imprevisibilidade do fim da pandemia impactou a saúde psicológica das participantes. O exercício físico se revelou como importante estratégia de manutenção da saúde mental.

Palavras-chave: Covid-19, isolamento social, saúde mental, saúde da mulher, comportamento alimentar

EFFECTOS DE LA COVID-19 EN LA SALUD FÍSICA Y MENTAL EN MUJERES

Resumen

Con el objetivo de investigar los efectos de medidas de restricción de la pandemia de COVID-19 en la salud física y mental, nueve mujeres adultas participaron de entrevistas semiestructuradas, en profundidad. Del análisis de contenido, surgieron cinco núcleos temáticos: 1) "Sensaciones, emociones y reacciones intensificadas," retratando sentimientos y emociones productos de la pandemia; 2) "Cambio de rutina laboral: oficina en casa," abordando la transición del trabajo presencial para *home-office* ; 3) "Intensificando las relaciones," destacando el impacto en las relaciones familiares; 4) "Comer emocional, comer sano," señalando la reorganización en las maneras de comer y 5) "Hacer frente a la pandemia," cuando informan las estrategias adoptadas. La necesidad de una reorganización abrupta de la realidad, el miedo a la contaminación y la enfermedad, y la imprevisibilidad del fin de la pandemia impactaron la salud psicológica de las participantes. El ejercicio físico resultó ser una estrategia importante para mantener la salud mental.

Palabras clave: Covid-19, aislamiento social, salud mental, salud de la mujer, conducta alimentaria

Covid-19 is a disease caused by the SARS-CoV-2 coronavirus in which a patient's clinical condition may range from an asymptomatic infection to a severe respiratory illness. The symptoms may vary during the disease, including fever, cough, breathing difficulties, muscle pain, headaches, sore throat, and a loss of smell and taste (World Health Organization WHO, 2020; Umakanthan et al., 2020). Covid-19 presents a high mortality rate, while those who recover from the disease may experience diverse sequelae. Some studies report functional alterations post-infection in the short and long run, such as fatigue and constant headaches (Augustin et al., 2021; Goërtz et al., 2020). Its transmission occurs through an infected individual due to close contact, whether through touching, sneezing, saliva droplets, contaminated objects, or surfaces (WHO, 2020; Umakanthan et al., 2020).

The World Health Organization provides several hygiene guidelines to control the disease, including frequent hand washing, covering the nose and mouth, and bending the elbow when coughing, keeping surfaces clean, and wearing face masks. Additionally, because of the rapid transmission and contagion, social isolation was the most recommended measure to control the disease (WHO, 2020; Jiménez-Pavón et al., 2020). Most epidemiologists agree that China successfully contained the coronavirus due to the speed at which its authorities imposed a quarantine on the population (Jiménez-Pavón et al., 2020). Therefore, most countries, including Brazil, adopted social distancing measures.

Even though the quarantine is a vital strategy to stop the rapid spread of COVID-19, it potentially leads to side effects of different dimensions among those isolated (Jiménez-Pavón et al., 2020). The beginning of quarantine implies radical changes in the population's lifestyle, affecting various aspects of life and causing stress (Qiu et al., 2020).

In general, in addition to the effects of the infection, the Covid-19 pandemic threatens people's mental and physical health. It triggers several psychological problems, such as panic disorder, anxiety, and depression (Qiu et al., 2020). According to Ornell et al. (2020), the number of individuals whose mental health is affected during an epidemic tends to be greater than the number of people infected. In addition, past tragedies show that the implications for the population's mental health may be long-lived and be more prevalent than the epidemic itself (Ornell et al., 2020; Shigemura et al., 2020).

Vindegaard and Benros (2020) conducted a systematic review to analyze the psychiatric complications resulting from the Covid-19 infection and how it affected the mental health of psychiatric patients and the community in general. The 13 studies included in the analysis revealed that Post-Traumatic Stress Disorder predominated, and high levels of depressive symptoms were experienced by the individuals infected, in addition to psychiatric symptoms among those with preexisting disorders. A worsening in psychological well-being and high levels of anxiety and depression was found in the general public compared to the period before Covid-19. Several factors were associated with an increased risk of psychiatric symptoms and altered well-being, including being a woman, presenting health conditions, and having relatives infected with Covid-19. A study conducted in Brazil by Vindegaard and Benros (2020) showed

that women were more likely to develop depression. Additionally, being young, married or having a partner, consuming alcohol, having prior psychiatric disorders, and having a negative perception of Covid-19 were risk factors for anxiety and depression. Guiland et al. (2022) addressed workers from different fields and noted women's vulnerability to psychological distress during the Covid-19 pandemic.

Similar results were found in another systematic review by Wu et al. (2021), in which the authors synthesized the literature on the psychological aspects of Covid-19 among the general population and associated risk factors. The results showed relatively high rates of anxiety and depression symptoms, post-traumatic stress disorder, psychological distress, and stress in the general population during the Covid-19 pandemic. Regarding risk factors associated with psychological distress, the authors highlighted: being a woman, young (≤ 40 years old), having chronic/psychiatric illnesses, being unemployed, and being frequently exposed to social media/news regarding Covid-19. Added to these factors, women with a paid job also have to deal with a double burden, which may lead to work overload due to organizational demands and having to take care of children and perform house chores, intensifying the conflict between work and family (Lemos et al., 2020).

In addition to the impact on mental health, the new coronavirus pandemic also impacted individuals' physical health. People spent more time at home during this period and adopted sedentary habits. Lack of exercise favors weight gain and the emergence of comorbidities (Pitanga et al., 2020). The importance of exercising and the risks of a sedentary lifestyle are well documented in the literature (Guthold et al., 2018). Studies show that sedentariness is a risk factor for developing cardiovascular diseases, type 2 diabetes, dementia, and some types of cancer (Guthold et al., 2018). Therefore, having a physically active life is paramount during quarantine and social distancing measures intended to fight Covid-19 (Pitanga et al., 2020; Stanton et al., 2020).

Kaur et al. (2020) sought to understand the experiences of people who exercised during the pandemic. The study adopted a qualitative approach, collecting data through semi-structured interviews held via telephone with adults who exercised regularly in gyms and had to stay home during the social distancing measures imposed in Brazil. The participants reported tiredness, fatigue, and a lack of motivation to perform their daily routines and exercise at home. However, throughout the pandemic, they realized that alternative exercises and physical activities performed at home helped them cope with psychological problems during the pandemic.

Hence, considering the impact of the Covid-19 pandemic on the population's physical and mental health and women's vulnerability to psychological distress (Shechter et al., 2020; Antunes et al., 2020; Stanton et al., 2020; Vindegaard & Benros, 2020; Guiland et al., 2022; Wu et al., 2021) associated with the double burden of work, the following question was proposed: What are the effects of the Covid-19 pandemic on the physical and mental health of adult working women? Hence, the objective was to qualitatively understand the impact of social distancing measures imposed during the Covid-19 pandemic on adult working women's physical and mental health.

Method

Study design

This qualitative, descriptive study was conducted between September and December 2020, corresponding to the transition period from the first to the second wave of the Covid-19 pandemic in Brazil (Moraes, 2021). The narratives of women with bachelor's degrees working during the pandemic were analyzed. Qualitative studies in health enable a deeper understanding of such little-known topics. From this perspective, we sought to identify the beliefs, perceptions, and interpretations of how these women live and develop themselves in a given social context (Minayo, 2014).

Participants

Nine adult women participated in this study. An invitation was made available through the first author's social media to recruit a convenience sample. The participants were the author's acquaintances and already had a rapport, facilitating the interview process and connection. The aim was to compose a heterogeneous group regarding occupation and marital status. Note that the saturation criterion was not used to determine the number of participants.

Inclusion criteria were: being a woman, having a bachelor's degree, having a paid job, having access to the internet, and availability to participate in the interview via Google Meet. A small number of participants resulted from the fact that the invitation was divulged to the first author's social media only and that the inclusion criteria were specifically determined to ensure that the recommendations and measures adopted to control the Covid-19 pandemic were similar among participants. Moreover, the objective was to survey in the shortest period possible to apprehend the participants' psychological and emotional organization at that point of the pandemic. The letter "P" (participant), followed by the numbers from 1 to 9 (P1, P2, P3 and so forth), was used to identify the women and ensure their identities remained confidential.

Instruments

The semi-structured interviews were based on a script with open-ended questions to facilitate exploring the participants' perceptions of the world as they lived and experienced it. Semi-structured interviews enabled apprehending experiences, especially of groups likely to experience similar situations in similar contexts (Manzini, 2020). The interviews were held online via video call (Google Meet). The authors developed the interview script specifically for this study. This script was based on the literature addressing the impacts of social isolation on the individuals' emotional responses and affection, the effect of abrupt changes in routine, eating and sleep aspects, and main coping strategies, primarily focusing on physical exercise as a coping strategy (Kaur et al., 2020; Lemos et al., 2020; Vindegaard & Benros, 2020; Guillard et al., 2022; Wu et al., 2021). The guiding questions addressed feelings ("How did you feel when the quarantine started?"), routine ("What is your routine like? What has been the main change in your opinion?"), eating and sleep aspects ("Did you perceive any changes in your mood, motivation, sleep, diet/

appetite?”), coping strategies (“What are your main difficulties in dealing with this period? What strategies have you adopted to cope with this pandemic? What has been your main challenge during this period?”), and exercises during the pandemic (“Did you exercise before the pandemic? If yes, what did you practice? Do you, or did you, exercise during the quarantine? If yes, what do/ did you practice? What is your main challenge in keeping active during the quarantine? What do you do to keep yourself physically healthy?”).

The invitation to participate in the interview was divulged to the authors' contact network only. Each volunteer was contacted to schedule the day and time for the interview according to availability.

Procedures

The Research Ethics Committee approved this study at the Universidade Federal de São Paulo (Unifesp), #CAAE¹: 36342720.7.0000.5505. The volunteers formalized their participation by reading and signing a free informed consent form online, accessed through a link via Google Forms before the interview. Therefore, the interview was initiated only after the participants signed it.

After receiving proper training and following a semi-structured script, the first author conducted all the interviews. She adopted an attentive posture and carefully listened to the participants to grasp the scope of the concepts investigated and to address the topics of interest, asking additional questions when needed to clarify matters or restore the interview context. The interviewer adopted an active and receptive attitude, facilitating a pleasant and relaxed environment, enabling open and close contact with the interviewees, establishing rapport, and encouraging spontaneous answers and affective exchange. The interviews lasted 25 minutes on average.

The interviews were video, and audio recorded and transcribed verbatim to be later analyzed. The recorded material was under the first author's responsibility and was deleted immediately after its transcription.

According to Minayo (2014), content analysis from the thematic perspective was adopted to interpret the interviews. According to Braun and Clarke (2006), thematic analysis is a practical method describing the participants' experiences, meanings, and realities based on societal discourses. Additionally, given its theoretical freedom, the thematic analysis provides a flexible and helpful research tool, generating a rich and detailed, even if complex, set of data (Braun & Clarke, 2006). Hence, the analysis was divided into three stages: pre-analysis, exploration of material, treatment of data, and interpretation (Minayo, 2014; Bardin, 2016).

The first stage after transcribing the interviews was pre-analysis of the material collected through floating reading. In this stage, the entire material was read several times to familiarize

1 Certificate of Presentation of Ethical Appreciation

the researcher with the data and grasp the main ideas and general meanings without committing to systematization.

The second stage consisted of exploring the material; the interviews were analyzed to find repeated patterns of meanings. Next, units of analysis were selected, and a search began for themes guided by the topics that originated the questions, research objectives, and the participants' values, beliefs, and representations regarding the phenomenon under study (Minayo, 2014; Bardin, 2016; Braun & Clarke, 2006).

The third stage included the treatment of results and interpretation. Hence, theoretical aspects relevant to the study and which were previously studied were reevaluated (Vindegaard & Benros, 2020; Guillard et al., 2022; Wu et al., 2020; Kaur et al., 2020; Jiménez-Pavón et al., 2020) and then related to each thematic nucleus.

Results

Table 1 presents the participants' profiles.

Table 1
Participants' characteristics

Interviewee	Age	Career area	Live with	Income was affected (pandemic)
P1	32	Legal	Boyfriend	No
P2	44	Communication	Two children	No
P3	29	Education	Alone	Yes
P4	31	Health	Father and mother	Yes
P5	32	Legal	Father, mother, and sister	No
P6	30	Education	Mother	Yes
P7	28	Health	Husband	Yes
P8	42	Legal	Husband	No
P9	30	Communication	Father and mother	Yes

The participants' mean age was 33.1 years old (a minimum of 28 and a maximum of 44 years old). All the participants had a bachelor's degree and a paid job during the interview. Participant 4 was the only one who remained working in person during this period, while P2 had already worked remotely even before the pandemic and remained working from home. All the remaining participants worked in person before the pandemic and started working remotely in the same position after the pandemic. Only participant 9 became unemployed at the beginning of the pandemic for a few weeks, and soon after, she started a new job in her field and worked from home. Even though we did not apply a socio-economic questionnaire, given the life conditions reported during the interviews, we can infer that the participants belonged to the middle class.

All the participants lived in apartments. Three were married (P2, P7, and P8); P7 and P8 lived with their husbands, while P2 was separated and lived with two children. The other six participants were single: P1 lived with her boyfriend, P3 lived alone, and the other four (P4, P5, P6, and P9) lived with their parents. Five of the nine participants reported that their income was affected after the pandemic, while four said their income remained unchanged.

The thematic nuclei are presented below: 1. Intensified feelings, emotions, and responses; 2. Changing the work routine: work from home; 3. Intensified relationships; 4. Emotional eating, healthy eating, and 5. Coping with the pandemic.

Intensified feelings, emotions, and responses

The first nucleus from the participants' reports concerned different feelings, emotions, and ways they responded to the pandemic. As soon as the pandemic began, the participants experienced different reactions over time, some of these reactions subsided, but others remained. Table 2 summarizes the central psychological tensions related to the pandemic.

Table 2

Synthesis of the central psychological tensions experienced during the pandemic

Psychological tensions	Reports
Surprise/Fear	<i>"Well, I guess that it was scary for everyone, right? This situation of staying home is sort of awkward" (P3)</i> <i>"It was a shock, like, I got a little lost, not knowing what to do. I thought it would all get back to normal soon" (P7)</i> <i>My first feeling was fear. I felt really insecure. I still do, by the way. I'm still afraid" (P8)</i>
Lack of Motivation	<i>I felt really unmotivated and had no energy for anything. It was difficult to resume my routine" (P4)</i> <i>"Up to July, I was really unmotivated to carry on with my affairs" (P9)</i> <i>I got really discouraged, felt like throwing the towel, you know, stop trying" (P3)</i>
Worries	<i>"My family has a business, so it was a concern for me, and still is, you know?" (P7)</i> <i>"I got really anxious, especially because of my income. It was my greatest concern" (P6)</i>
Uncertainties	<i>"Now, at the end, I got so stressed out, and I got very anxious. I wanted it to end soon so that things would go back to normal"(P2).</i> <i>"I didn't know when I'd go back to my routine. So, this insecurity, uncertainty of not knowing when I'd be able to make plans, do things, it's really awful" (P3).</i>

Note that psychological tensions were gradually intensified, such as anxiety, fear, and restlessness for not knowing how to act or when the pandemic would end. There were also depressive symptoms, especially hopelessness, and concern about financial problems resulting from the pandemic. At the same time, two participants reported feeling calmer for being able to stay at home. P5 said, *"Staying home is not a bad thing for me [...] I guess I am very, very homely, so it's ok for me to stay home."* Participant 4 reported the same situation: *"I thought I'd be desperate to stay home every day, without anything to do, but I didn't [...] I actually felt more patient."*

Changing the work routine: work from home

This second nucleus emerged from reports concerning the impact of the COVID-19 pandemic on the participants' work routines. The main change was transitioning from working in person to working from home. Seven participants experienced this change while P2 worked from home even before the pandemic. On the contrary, P4, who is from the health area, never stopped working in person. Table 3 presents the main impressions concerning remote work.

Table 3
Impressions concerning remote work

Impressions	Reports
Sleepiness/tiredness	<i>[...] I guess that I got really sleepy in the beginning, felt really tired because staying home means relaxing, so it was hard for me to adapt to working from home [...]" (P1)</i>
Staying home	<i>The main change was working from home and not leaving the apartment. The reason is that in my profession, I didn't know anything else than providing service in person, you know?" (P7)</i>
Contentment	<i>"Honestly, I have nothing to complain about remote work! [laughs]" (P5)</i>
Continuity	<i>"Nothing changed in my life because I've already worked from home. It is a routine I was already used to." (P2)</i>

This thematic nucleus shows that different sensations accompanied the adaptation to working from home: feeling sleepy/tired because staying home was associated with relaxing and being away from the working routine (P1); learning to adapt to the remote work (P7); being positively surprised with the new work routine (P5) and experiencing a continuity of the remote work (P2).

Intensified relationships

Spending more time at home intensified family relationships, while relationships outside the house were also affected. The greatest challenge for Participant 2 was spending time with her children throughout the day: *"The biggest change was spending 24 hours with my children at home and not having a domestic helper"* (P2). The participants who lived with their parents also reported some conflicts: *"[...] I'd leave work and got straight home, and my parents would be already home. So, there were times we'd struggle with spending too much time together"* (P4).

P5 reports her impressions from a daughter's perspective:

This intense coexistence with my family also causes some "friction," you know? [...] Sometimes I'm watching my gymnastic class, and my father is teaching a video class to the university in the room beside mine, and the noise gets in the way, and it's a little conflicting. (P5)

P8 reports a similar situation with her husband:

Spending so much time with my husband got intense. We didn't use to see each other so much because I've always worked [in another town]. For as long as we are together, we've always seen each other at night and on the weekends, [...] so, it was a bit overwhelming for me. (P8)

At the same time, when coexistence at home was intensified, missing spending time with other people was also reported. Some participants said that their most significant challenge was not being able to socialize. They use expressions like “*not hanging out with anyone*” (P6) and “*staying away from family*” (P7).

Emotional eating, healthy eating

The participants' reports regarding their eating practices are divided into two points: at the beginning, the pandemic impacted and interfered with their eating practices, disrupting them, and later, changes were implemented to reorganize them.

All the participants noted that the pandemic caused disorganization in their eating practices, which is expressed by a lack of an eating schedule and an above-usual intake of foods, as reported by participants 2 and 5:

“[...] because you end up eating all day long when you stay at home (P2).

Everything was very confusing. Sometimes, I was working and had to stop to prepare lunch. Then, lunch was supposed to last 1 hour, but I'd spend like 3 hours, you know? So, it was everything very confusing, and I felt lost (P5).

Anxiety, lack of motivation, and instability caused by the pandemic were the elements reported by the participants to explain their eating experiences.

I was like, drinking 3, 4 times a week by myself at home, I was ok... I don't know, just surviving... living like, I don't know: Today I woke up with a certain mood, and I will (...) But then, even though I was working, I was like, working and watching sitcoms, that was my life. And eating a lot of sweets, something I wasn't used to. I was eating sweets every day; it was really chaotic (P9)

“...feeling hungry and sleepy all the time, all these with anxiety and stress. So, I got really unmotivated; I felt like throwing the towel, you know? So, I felt like stopping, leaving everything behind. Felt like staying in bed, sleeping, and eating (P3).

Four participants (P1, P5, P6, and P9) highlighted that eating sweets was a strategy for feeling better during the pandemic. This pleasure was also associated with the opportunity to prepare their food.

So, it was not because I was hungrier, but it was like: — ‘Ah, I’m home, let’s cook, let’s cook better, eat tasty foods’ – so, during the quarantine, I took the opportunity to prepare... bread, dishes, and I’d eat all the time” (P5).

“I got interested in learning how to cook, so I got good at it, you know? So, there was something new to try, and I had this expectation, it was something cool to do, you know? (P6).

I don’t know what got into me; sweets, give that thing... ah, a feeling of pleasure! I got addicted to sweets and prepared very nice cakes(P9).

Except for participant 2, all the interviewees reported that as the pandemic progressed, their initial behavior was reevaluated due to weight gain (P5) or a perception that it would not be feasible to keep an unstructured diet as the pandemic extended:

“[...] I tried not to get caught in this vicious cycle. Because I work in the health area, so I said to myself: – No, I need to be an example, so I’ll get the chance to take care of myself. So, I tried to be even more careful with my diet. I tried, but I didn’t succeed every time (P3).

I guess it started a situation in which my relationship with food became very intense. I had nothing else to do, so cooking and eating was everything; it was the only pleasure we had. . . I guess that now life is resuming to what it used to be, let’s say, back to ‘normal,’ so it’s time to get more concerned with your food and everything else (P1).

The strategies adopted to restructure eating habits were very heterogeneous, including an increased (e.g., fruits and greens) or decreased intake of foods (e.g., meats and milk), eating and preparing healthier meals at home, drinking more water, having professional support, eating in regular hours, restricted diets, and taking supplements or herbal medicines. Three participants reported decreased consumption of alcohol, while four reported exercising to reorganize eating practices. Participant 3 said that she found a balance between the pleasure of eating and healthy eating:

So, I try to control my food. Obviously, I respect social times, the times when I have some needs... sometimes, it’s emotional, and I know I need some food, an emotional need of food. But it’s part of the process, so I acknowledge it and don’t deprive myself of anything. I don’t do anything restrictive. However, I try to eat healthy, correctly (P3).

Coping with the pandemic

The beginning of the pandemic implied changes in all the participants’ lifestyles. Therefore, various strategies were adopted to help them cope with this period, such as meditation (P2, P6), reading (P3, P6, P7), psychological support (P4), and hiring a personal trainer (P5, P9). Exercising was also a coping strategy, so we explored it in this category. Table 4 presents a synthesis of the main coping strategies the participants adopted.

Table 4*Coping strategies during the pandemic*

Coping strategies	Reports
Meditation	<i>Meditation, I also started to do it [...] Meditation, like, especially at night, was essential. I had never adopted this habit before (P6).</i>
Reading	<i>I was reading a lot; I was reading a lot, literature, as a way to relax (P3). I think that the most important thing for me was reconnecting with reading books, literature. [...] I stopped watching sitcoms, and I guess that books are what have kept me sane, you know?! It is what keeps me more stable (P6).</i>
Painting	<i>I guess painting is something I've found out. At the end, I'm like... I have some very pretty paints (P2).</i>
Psychological support	<i>Ah, my psychologist helped me. I'd tell her: 'I can't stand it anymore. I need to get out of the apartment.' There were times I realized that I really needed to leave the apartment (P4)</i>
Personal trainer	<i>It's been three months since I hired a personal trainer and started training online at home (P5). I got a personal trainer to exercise at home [...] (P9).</i>

Regarding exercises, nine participants practiced physical activity before the pandemic. Four reported they maintained their exercising when the pandemic began (P1, P3, P7, and P8), while five did not. Three participants resumed exercising approximately three months after the pandemic's beginning (P2, P5, and P9). Those who continued exercising emphasized its importance for coping with the pandemic, as P8's report shows:

"[...] obviously, exercising helps me a lot. I guess it's been fundamental for me. [...] I work from 8 am to 6 pm and don't get out on the weekends. I live only here. It's... taking gym classes; it's my only escape valve. Otherwise, I don't do anything else. (P8)

The two participants who did not exercise during the pandemic reported a lack of motivation to exercise at home.

I guess that it's a lack of motivation, really. You have to adapt to the new reality and have the motivation, incentive... you know? Motivation to exercise at home was sort of complicated at the beginning because you're at home, right? (laughs). Like, I'll get dressed, put on my gym clothes to exercise at home [...] (P4).

I guess it was lack of motivation. I'm not a person who enjoys exercising, you know? I've always practiced collective sports, I like it much more, I like the social aspect of sports (P6).

Discussion

The COVID-19 pandemic affected the lives of millions of people around the world. Several effects and impacts of a psychological, physical, or nutritional nature have been reported (Cecchetto et al., 2021; Guillard et al., 2022; Kaur et al., 2020), while relational and social effects stood out in the pandemic. This study addressed adult women aged between 28 and 44, middle class, who had a bachelor's degree and remained working during this period. The objective was to investigate the effects of the COVID-19 pandemic on their physical and mental health. Note

that the data collection period comprised September to December 2020, when the social distancing and isolation measures were intense.

The results present the significant impacts of the pandemic on the participants' physical health, especially on eating practices, exercise routines, and mental health, in addition to the main coping strategies they adopted. The fear of being infected, of leaving their homes, and anxiety attacks caused by feeling insecure and lacking protection, increased family stress, sorrow, and helplessness reported by the participants corroborate the literature on psychological disorders and interpersonal and social problems arising from the COVID-19 pandemic among populations worldwide (Kaur et al., 2020; Stanton et al., 2020; Cecchetto et al., 2021; Qiu et al., 2020; Wu et al., 2021; Guillard et al., 2022). According to Vindegaard and Benros (2020) and Wu et al. (2021), being young (<40 years old), which is the predominant age range of the studied group, was a risk factor for the development of anxious and depressive symptoms during the pandemic.

This study's results show that first, the participants experienced fear and insecurity; these were the feelings most frequently expressed when the pandemic began. One of the participants said, "it was a shock," to illustrate how she felt when the pandemic started. After the first "shock," other feelings and emotions emerged due to the social distancing measures. Discouragement, fatigue, lack of motivation for performing everyday tasks, and anxiety were the feelings most frequently reported, corroborating the literature from different countries (Videgaard & Benros, 2020; Qiu et al., 2020; Wu et al., 2021; Stanton et al., 2020; Smith et al., 2020). The changes imposed on the individuals' routines due to the pandemic and the feeling of being "trapped" at home without having a straightforward routine, associated with uncertainties regarding their futures or that of their families, resulted, from the participants' perspective, in laziness, fatigue, lack of motivation, apparently inexplicable sensations (Lemos et al., 2020). A perception of lack of control and helplessness in the face of the pandemic, something never experienced before, explains the difficulty in psychologically dealing with an event of global proportions, corroborating the findings of different studies that also report significant psychological disorders and mental health problems even among individuals who were not infected with the disease and that mental problems tend to more extensive than the epidemic itself (Ornell et al., 2020; Shigemura et al., 2020).

Even though the participants reported their concerns, the previously reported feelings influenced the disruption of the eating practices of all the interviewees, especially at the beginning of the pandemic, when social distancing measures were implemented. They initially sought emotional comfort, expressed by a lack of regular meal schedules, increased food intake, and an attempt to find pleasure in food. Other studies also reported responses related to negative emotions, mainly anxiety and depression (Gaspar et al., 2020; Cecchetto et al., 2021; De Aro et al., 2021).

Lack of motivation was also one of the most significant challenges in keeping physically active during the quarantine. Even though most participants remained active, they reported that

keeping an exercise routine was challenging. Lack of motivation, especially to exercise, was also found by Kaur et al. (2020). In that study, the participants reported tiredness and a lack of motivation to exercise at home during the pandemic.

Increased anxiety during the pandemic reported by our study's participants was also identified by other studies (Lei et al., 2020; Stanton et al., 2020). Lei et al. (2020) noted that the prevalence of anxiety and depression almost doubled among those who complied with the quarantine compared to those who did not. Stanton et al. (2020) verified that the mental health symptoms more frequently reported were anxiety, depression, and sleep disorders. Other studies showed that women tend to be more vulnerable and report higher stress levels (Shechter et al., 2020; Antunes et al., 2020; Stanton et al., 2020). Being a woman was also a risk factor for depression (Guilland et al., 2022; Vindegaard & Benros, 2020; Wu et al., 2021). These findings suggest that gender plays a vital role in expressing psychological distress during the pandemic. The complexity of such an expression may be explained by several social, cultural, and occupational factors linked to gender (Guilland et al., 2022).

Therefore, quarantine was a significant risk factor for worsened mental health, as other studies also show (Smith et al., 2020; Qiu et al., 2020). On the other hand, despite a negative perception of the pandemic, the participants positively assessed some aspects, such as the good side of spending more time at home and having more time for self-care. Similar results were found by Kaur et al. (2020), in which adaptation and resilience were reported even in extreme situations, such as the COVID-19 pandemic.

On the other hand, spending more time at home resulted in conflicts in other spheres, such as with work and family members. Interestingly, even though the guiding questions did not address the topic of "work," it appeared as an essential issue for all the participants. Possibly, because all the participants had a paid job, related stressors increased significantly. It happened due to the impact of the pandemic on work matters, from changing environments (remote work) to the need to keep working in person and having direct contact with other people (Lemos et al., 2020), which explains why this topic was included in all the participants' reports. Additionally, working at home may result in longer hours and more intense work, interfering with work and family and leading workers to experience even more stress (Lemos et al., 2020).

Lemos et al. (2020) found similar results when interviewing Brazilian women working remotely during the COVID-19 pandemic. Some women experienced intense work-family conflicts when they started working from home. This intensification occurred due to work overload and difficulties establishing a schedule for working, house chores, and leisure with the family (Lemos et al., 2020).

The participants also reported that the relationships at home became conflicting at times. They experienced stress in their marriage and relationships with their parents or children. The social distancing measures imposed many challenges on couples, such as difficulties in communication, lack of cohesion, and commitment to the relationship, exposing them to greater vulnerability (Lemos et al., 2020; Lebow, 2020). Such problems became apparent in Participant

8's report. She noted that she would only see her husband at night before the pandemic. However, with the pandemic, she started spending more time with him and said, "*in a relationship that I considered ideal and perfect, I started seeing weaknesses, and it moved me a lot*" (P8). According to Stanley and Markman (2020), essential activities that enrich a couple's lives were lost with the pandemic, at the risk of hurting their intimacy and feeling of connection.

With more time spent together, family relationships tend to intensify, favoring increased conflicts (Smith et al., 2020; Silva et al., 2020). People started bringing their external lives to their homes, which caused discomfort. An example is Participant 5's report: she started exercising at home, and the noise bothered her father, who was administering online classes in the next room. Issues and situations that did not exist before the pandemic or were not considered a problem became ones. Family members needed to share the spaces because of the need to spend extended periods at home while performing different activities (Silva et al., 2020). These aspects may have exacerbated preexisting conflicts within family relationships or even generated new ones (Lebow, 2020).

As the need to spend more time at home intensified, social relationships outside the home decreased drastically. Keeping family, social, and affective relationships and interpersonal exchanges are essential for an individual's well-being and quality of life (Silva et al., 2020; Lebow, 2020; Smith et al., 2020). Additionally, growing evidence shows that impoverished social relationships adversely affect mental health (Silva et al., 2020). Therefore, the social distancing imposed by the pandemic created the conditions for a new perspective on the affective relationships established within the home and the possibility of observing strengths and weaknesses. It also favored a search for a new perception of relationships. For example, Participant 4 reported that the intense coexistence experienced during the pandemic showed her that it was time for her to leave her parents' home.

The different changes imposed on the participants' lives due to COVID-19, such as changes in their work, routines, and social interactions, were uncommon and challenging, demanding abrupt and radical transformations, which may have consequences for mental health, such as increased stress, anxiety, or depression (Vindegaard & Benros, 2020; Wu et al., 2021; Barkur et al., 2020). However, the participants adapted and ensured their physical and mental well-being. Being able to keep their jobs, even with a lower income, should be considered an essential variable for their mental health.

Additionally, the participants adopted strategies to help them cope with changes and ensure their physical and mental well-being. Art, culture, and leisure were some of these strategies. With the pandemic, the consumption of cultural products, books, music, movies, and others, increased and appeared as an efficient strategy to avoid affective-emotional discomforts (Castro & Carvalho, 2021). In addition to helping them to avoid discomfort, these strategies enabled contact with pleasurable and creative solutions to deal with stressors.

Meditation, a strategy the participants reported to cope with the new situation, became more notorious during the pandemic since it promotes relaxation and well-being (Zanon et al.,

2020). In addition, studies show that anxiety, depression, and irritability decrease with regular meditation while physical and mental strength increase (Zanon et al., 2020).

In the meantime, exercising also appeared as a coping strategy, and Participant 8 even defined it as an “escape valve”: “[...] *exercising, it's my only escape valve.*” This perspective was also reported by Kaur et al. (2020). Most participants remained exercising even though they lacked the motivation to exercise at home during the pandemic. In this study, all the women practiced physical activities before the pandemic, which explains why most remained exercising. An exercise plan improves an individual's cardiorespiratory capacity, muscle strength, mental health, and well-being (Pitanga et al., 2020; Kaur et al., 2020), possibly minimizing the negative impact of social isolation measures on the participants' health.

Even though unhealthy food choices were initially adopted as a coping strategy, the fact that some participants started cooking seems to have contributed to a re-signification of their relationship with food, as Gaspar et al. (2020) noted. Furthermore, the participants' reports indicated that at a certain point during the pandemic, they reassessed their eating habits and reorganized them as a self-care strategy, as Participant 3 noted: *“I have to take care of my diet because it is directly related to physical issues, from immunity to hormones, cholesterol levels, and everything else.”* Chechetto et al. (2021) also found a change in the relationship with food when assessing individuals at two different points in time during the pandemic in Italy. Such changes may have resulted from the more efficient government strategies to cope with the pandemic and the relaxation of social distancing measures.

Thus, this study aimed to qualitatively investigate the effects of restrictive measures during the COVID-19 pandemic among adult working women. This study's main limitations include a convenience sample and the fact that, due to the methodological choice, the participants exclusively belonged to the middle class and that we did not use data saturation as a criterion to cease the recruitment of participants. On the one hand, the participants had a personal bond with the first author who held the interviews, which was positive. It ensured a better rapport with the participants and made them feel at ease when describing their experiences. However, on the other hand, it also represents a limitation when determining the group's characteristics. Even though it was a method that speeded up data collection, and a satisfactory amount of data were obtained to meet the study's objective, it does not represent the general population. Because the group was composed of working women who belonged to the middle class, it presents some specificities that may not represent the context of other groups of women in less favored socioeconomic conditions, who were unemployed during the pandemic, or possibly faced conditions other than those found in the group addressed here. Future studies should consider the saturation criterion to determine the number of participants and broaden the understanding of the effects of the pandemic on the population's physical and mental health at the present time. Finally, even though the bond established between the interviewer and interviewees facilitated the interviews, the sample may be biased.

Despite this study's limitations, we believe it enabled a broadened understanding of the pandemic's effect on adult, middle-class women. Additionally, we could verify the weaknesses experienced by this group, intensified emotional conflicts and relationships within families, and their difficulties in maintaining healthy eating habits and exercising. This study also enabled observing how the participants sought healthier strategies to alleviate emotional tension and manage stress, such as meditation, painting, reading, and psychological support. Additionally, the fact that the interviews were accomplished in a short period (3 months), despite the small number of participants, enabled the investigation of the phenomenon and grasping the participants' psychological organization at the same point during the pandemic.

The participants' reports showed that the pandemic demanded them to reorganize different areas of life, which involved the abrupt need to adapt to a new reality permeated by insecurity, fear of contamination, and illness, besides uncertainties about when the pandemic would end.

The participants' reports revealed this new context's psychological and relational effects. For example, the intensification of interpersonal relationships at home showed a need to develop new social skills, such as sharing physical spaces that had not been planned for the new functions.

The social isolation measures resulted in psychological distress and showed the importance of emotion regulation and problem-solving skills. All these situations were challenging and required the participants to adapt at various levels. On the other hand, the participants chose coping strategies, emphasizing physical exercise.

Thus, the interviews broadened our understanding of the new reality imposed by the pandemic on adult working women who belonged to the middle class, highlighting its emotional and relational effects. Anxiety seems to have taken the spotlight in this process, considering that the participants' perceptions amplified the threat. In addition to the adverse effects that resulted from intensified interpersonal relationships at home, losing contact with the external world (physical and social), and changing eating habits, the participants sought new meanings. They resumed or started new activities, such as reading, meditation, painting, and exercise classes available online. From this perspective, future studies might seek to understand behavioral patterns and lifestyles that emerged in this period and remained even after the pandemic.

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