



## Relation between passion and positive functioning in the covid-19 pandemic

### *Relação entre paixão e funcionamento positivo na pandemia covid-19*

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#### ABSTRACT

During the pandemic, abrupt disruptions in routines highlighted the importance of maintaining passionate activities to preserve mental health. The study aimed to investigate the relationship between passion and psychological well-being, as well as differences between groups based on gender, marital status, and exercise habits. The sample consisted of 147 participants, aged between 18 and 68 years ( $M = 35.6$ ,  $SD = 12.7$ ), of both genders (69.1% female). Results showed positive correlations between harmonious passion and psychological well-being. There was no difference between genders; however, married individuals exhibited higher levels of positive psychological functioning. Individuals who maintained activity during the pandemic also demonstrated higher levels of harmonious passion and positive psychological functioning. These findings underscore the importance of diverse activities in promoting well-being, especially during crises like the pandemic.

**Keywords:** Mental Health. Positive Psychology. Psychological Assessment. Psychological Resources.

#### RESUMO

Durante a pandemia, interrupções abruptas nas rotinas destacaram a importância da manutenção de atividades apaixonantes para preservar a saúde mental. O objetivo do estudo foi investigar a relação entre paixão e bem-estar psicológico, além de diferenças entre grupos de acordo com sexo, estado civil e prática de exercícios. A amostra foi composta por 147 participantes, com idades entre 18 e 68 anos ( $M = 35,6$ ,  $DP = 12,7$ ) de ambos os sexos (69,1% feminino). Os resultados demonstraram correlações positivas entre paixão harmoniosa e bem-estar psicológico. Não houve diferença entre sexos, porém os sujeitos casados exibiram maior funcionamento psicológico positivo. Indivíduos que mantiveram a prática de atividades durante a pandemia também apresentaram maior paixão harmoniosa e funcionamento psicológico positivo. Esses achados reforçam a importância de diversas atividades para promover o bem-estar, especialmente em tempos de crise como a pandemia.

**Palavras-chave:** Avaliação psicológica. Psicologia positiva. Recursos psicológicos. Saúde mental.

## INTRODUCTION

It is known that, during the pandemic, many behaviors that were previously part of people's daily lives were abruptly modified and restricted, which, to a certain extent, had a great impact on people's lives. However, studies show that some subjects suffered more than others from social isolation, the need for reclusion, among other security measures adopted to contain the spread of the coronavirus<sup>1,2</sup>. Even so, maintaining a positive attitude, using adaptive resources, is an important tool for coping with the pandemic scenario. In this sense, carrying out activities that one is passionate about can provide conditions for the personal and interpersonal development of an individual, thus improving their psychological functioning. Therefore, the present work aims to investigate the relation between passion and positive psychological functioning, as protective factors, in the context of the COVID-19 pandemic.

The conceptualization of passion as an inclination that individuals present towards a certain activity was proposed by Vallerand<sup>3</sup>. According to the authors, being passionate about the activity generates great engagement and a high investment of energy and time dedicated to this activity, which proves to be an important source of satisfaction. According to the Dualistic Model of Passion (DMP), there are two types of passion, harmonious (HP) and obsessive (OP). HP, on the one hand, is the result of a free and spontaneous internalization of the activity, so that there is compatibility and involvement of the individual with its practice. Furthermore, in this type of passion, the activity is in line with other tasks and needs that the subject may have, so that it does not cause any harm to them. OP, in turn, is the product of a controlled or controlling internalization, which causes the individual to end up feeling pressured to perform it to meet a demand external to themselves<sup>3,4</sup>.

Both forms of passion can provide gratification to subjects, however, it is observed that obsessive passion tends to be more frequently accompanied by negative outcomes,

such as distress, compared to harmonious passion<sup>3</sup>. This occurs because in this type of passion the individual feels obliged to perform a certain action, in an alienating way, leaving aside other aspects of their life that are equally important. Unable to reconcile what they need to do with their passion, the subject tends to experience a series of stressful contingencies and negative feelings towards themselves and the environment<sup>5</sup>.

Thus, the type of passion for activities, whether harmonious or obsessive, can impact the psychological functioning of individuals, since the way of relating to the activity can directly influence emotional and mental well-being<sup>3,4</sup>. Positive psychological functioning aims to understand the best resources for human development and the most effective ways to achieve a person's goals. The idea is linked to a series of factors, among which we can mention self-acceptance, autonomy, environmental mastery, positive relationships with others, purpose in life and personal growth<sup>6,7</sup>. With the introduction of the conceptualization of stress (not as previously known by the physiological sciences, but as a source of impetus for carrying out actions and coping), the description of the processes related to the healthy and adequate functioning of individuals is proposed<sup>8</sup>.

Having good psychological functioning is synonymous with having a large number of psychic resources. These, in turn, generally appear in pairs, or even in groups, as demonstrated by Merino and Privado<sup>9</sup>. According to the authors, a person who has good self-esteem will feel confident, independent, and tends to be an optimistic person, for example. Therefore, it is observed that the presence of a resource facilitates the development of new resources, making the subject that presents it increasingly functional. Merino and Privado<sup>9</sup> propose a model of positive psychological functioning that has 11 different resources: Self-esteem, Resilience, Curiosity, Optimism, Autonomy, Vitality, Environmental mastery, Purpose in life, Humor, Enjoyment and Creativity, which are described in Table 1.

**Table 1.** Psychological resources related to positive psychological functioning according to Merino and Privado<sup>9</sup>

Psychological resource	Definition
Self-esteem	Degree to which a person's qualities are perceived as positive
Resilience	Result of successful adaptation to conflicting life events, learning
Curiosity	Need to investigate, learn new things, manipulate objects
Optimism	Hopeful attitude, belief in the best that can happen
Autonomy	Condition of independence, self-determination in relation to a group
Vitality	Vigor, physical or intellectual energy, disposition
Environmental mastery	Ability to effectively manage your life and the environment around you
Purpose in life	Goal, objective in life, motivating factor to continue living, guidance
Humor	Ability to perceive and express emotional states in a positive way, "see the good side of things"
Enjoyment	Perception associated with desirable or exciting events, ability to enjoy pleasant events
Creativity	Ability to develop, produce new work

Source: adapted from Merino and Privado<sup>9</sup>; Oliveira et al.<sup>10</sup>

As Brazil and the world face the coronavirus, it is observed that the strategies adopted by various countries to prevent the spread of the virus have mainly had negative effects on the psychological level of individuals. This new and unexpected organization of routines, for those who were able to adhere to social isolation, represented a new source of stressors beyond the fear of contamination and imminent death<sup>1,2</sup>.

In this sense, the investigation of the forms of passion for activities and positive psychological resources allows the understanding of the psychic dynamics of subjects in adverse times, such as those experienced during the pandemic, and their ways of coping with conflict, as can be seen in the study by Kubo et al.<sup>11</sup>. According to the authors' findings, the harmonious passion for respondents' preferred activities appears as a protective factor against aspects related to psychological suffering, such as fear of contamination by the virus. While obsessive passion is positively related to indicators of psychological distress, proving to be a risk factor for well-being and, consequently, mental health<sup>11</sup>.

Given this, the present study aims to evaluate how the DMP is associated with the dimensions that compose the Positive Psychological Functioning Scale (PPFS) indicators during the period of isolation adopted as a strategy to combat the pandemic in the Brazilian context. The study was based on the hypotheses that performing a beloved activity during the period of social isolation is positively and significantly associated with positive

psychological resources and, therefore, could act as a protective psychological phenomenon, while performing an activity based on OP does not present significant associations with positive psychological resources<sup>4</sup>.

## METHODOLOGY

### PARTICIPANTS

This is a quantitative study, with a cross-sectional design, and the data were collected at a single time (in the first half of 2021), allowing a statistical analysis of the variables in a representative sample of the target population. For this purpose, the sample, obtained by convenience, was composed of 149 subjects, aged between 18 and 68 years ( $M = 35.6$ ,  $SD = 12.7$ ) of both genders, 69.1% of whom were female, mostly from the Southeast region of Brazil (82.6%). Of these, 53% stated that they were single, 34.2% were married, 10% were separated/divorced and 2.7% were widowed. Regarding the level of education, 40.3% had completed Postgraduate studies, 21.5% had completed Higher Education, 19.5% had incomplete Higher Education, 9.4% had incomplete Postgraduate studies, 6.7% had completed High School, 1.3% had incomplete Primary School, and 0.7% had completed Primary School. 80.5% of participants reported being in compliance with social isolation and, in addition, 55% stated that they practiced some type of sport or physical exercise during the pandemic period.

## INSTRUMENTS

The sociodemographic questionnaire was structured specifically for this research, with the aim of gathering pertinent information regarding the participants, such as gender, age, level of education, type of physical activity practiced and weekly time dedicated to practice.

The Passion Scale (PS) evaluates two types of passion, harmonious and obsessive, based on the assumptions of the Dualistic Model of Passion<sup>12</sup>. The instrument consists of 12 items, which are answered using a seven-point Likert scale ranging from 1 (I do not agree) to 7 (I strongly agree). The researcher can use two different ways to access the activity of interest of the respondents. In the first, commonly used to evaluate heterogeneous samples, the respondents are asked to indicate an activity that they are passionate about; the second is used in conjunction with specific groups, in which the participants engage in a common activity, and in this case all the respondents have the same activity as a reference for answering the instrument. Regarding the psychometric properties of the scale, the Brazilian version presented an internal structure corresponding to the original version/theoretical model, with good accuracy rates for both factors, namely: Cronbach's Alpha: HP = 0.81 and OP = 0.75<sup>13</sup>.

The Positive Psychological Functioning Scale (PPFS) was developed by Merino and Privado<sup>9</sup>, originally in Spanish, and was adapted by Romano et al.<sup>14</sup> for the Brazilian reality. The scale assesses the following dimensions: self-esteem, resilience, curiosity, optimism, autonomy, humor, enjoyment, creativity, vitality, environmental mastery and purpose in life, with a five-point Likert response key, which varies between "1. I strongly disagree" and "5. I strongly agree". The Brazilian version replicated the hierarchical factor structure with 11 second-order factors, which presented good accuracy rates ( $\alpha = 0.7 \sim 0.93$ ).

## PROCEDURES

The work complied with the Resolutions of the *Conselho Nacional de Saúde* nº 510, of

April 7, 2016<sup>15</sup>, and the Research Ethics Committee by which it was approved (CAAE: 31959220.6.0000.5514). The instruments were allocated on the Google Forms platform, since the collection was carried out virtually, and the link was shared through the researchers' social networks. To access the form, the participant had to initially inform that they were eighteen years old or older and agree to the Free and Informed Consent Form (TCLE), declaring voluntary participation. The instruments were presented in the following order: sociodemographic questionnaire, Passion Scale (PS) and Positive Psychological Functioning Scale (PPFS). The average time to complete the questionnaire was approximately 15 minutes.

For data analysis, the data obtained were initially organized in an electronic spreadsheet to perform the analyses using the Jamovi software<sup>16</sup>. From this, descriptive analyses were carried out, based on the calculation of measures of central tendency and measures of variation to organize and verify the representation of the data. Furthermore, the accuracy of the instruments used was verified through Cronbach's alpha. To analyze the intensity and direction of the relation between the variables used in the present study, Pearson's correlation analysis was performed, and the interpretations of the results were based on the classification proposed by Cohen<sup>17</sup>: -0.09 to 0.09 described as null, 0.1 to 0.29 small, 0.30 to 0.49 medium and 0.5 to 1 large. Finally, to verify possible differences in mean between the groups, Student's t-test was performed, with Cohen's *d* as the effect size verification index ( $d \geq 0.3$ ) and considering the significance level  $p \leq 0.05$ .<sup>18</sup>

## RESULTS

Initially, the preferred activities mentioned by the participants were categorized. To this end, classifications made in the study conducted by Kubo et al.<sup>14</sup> were considered. The data are presented in Table 2, which indicates the classification of the chosen activity, descriptions of the type of activities and the percentage of participants who reported them.

**Table 2.** Classification of activities chosen by participants

Activities	Classification	%
1. Physical exercise	Walking, running, strength training, yoga, dancing, etc.	27.5
2. Passive leisure	Watching movies and/or series, cinema, watching sports, listening to music, etc.	12
3. Multimedia	Surfing the Internet, playing video games, etc.	9.3
4. Work / education	Studying, working, etc.	8.7
5. Reading	Reading novels, etc.	8
6. Team sports	Volleyball, soccer, etc.	8
7. Traveling	Going on trips, on walks with someone or alone, discovering new places	6.7
8. Artistic activities	Knitting, drawing, etc.	5.3
9. Relational activities	Going out with friends, having a drink, spending time with family, etc.	5.3
10. Cooking	Cooking, baking bread, making sweets, etc.	3.3
11. Active music	Singing, playing guitar, playing piano, etc.	2.6
12. Diverse	Shopping, eating, relaxing alone, etc.	2
13. Activities with animals	Spending time with pets, playing with dogs and cats, etc.	0.6

It is possible to observe that activities related to physical exercise are the most preferred, with 27.5% of participants choosing them. The second activity is classified as passive leisure, with 12% choosing them. Next, with 9.3%, are multimedia activities. Then, work and education activities with 8.7%. Activities such as reading, and team sports accounted for 8% each. Traveling accounted for 6.7%, and relational and artistic activities accounted for 5.3%, both with the same percentage. Cooking was chosen by 3.3%, and the activities that were least chosen as favorites were active music, with 2.6%, diverse activities with 2.6%, and activities with animals with 0.67%.

Subsequently, descriptive analyses were carried out on the scores presented by the

participants in the dimensions of the scales used in this research, and the results are shown in Table 3. Regarding the factors that compose the PPFS, Resilience presented the highest mean score ( $M = 12.1$ ,  $SD = 2.23$ ), while Environmental mastery obtained the lowest mean score ( $M = 9.52$ ,  $SD = 2.66$ ). Harmonious Passion, in turn, obtained a mean score of 32.4 ( $SD = 8.36$ ), and Obsessive Passion a mean score of 15.7 ( $SD = 8.41$ ). Finally, it was found that all subscales present good levels of precision in estimating the scores of the sample accessed, with Cronbach's alpha coefficients ranging from 0.85 to 0.9 for those that assess passion, and 0.91 to 0.93 for those that assess positive psychological resources.

**Table 3.** Descriptive analysis of variables

Factors	<i>M</i>	<i>SD</i>	Minimum	Maximum	$\alpha$
Self-esteem	11.4	2.54	3	15	0.91
Resilience	12.1	2.23	6	15	0.91
Curiosity	11.9	2.29	3	15	0.92
Optimism	11.5	2.51	4	15	0.91
Autonomy	11.3	2.32	6	15	0.92
Vitality	10.5	2.82	4	15	0.91
Environmental mastery	9.52	2.66	3	15	0.92
Purpose in life	11.9	2.29	4	15	0.92
Humor	11.8	2.35	5	15	0.93

Enjoyment	11.1	2.44	3	15	0.91
Creativity	11.4	2.12	5	15	0.92
Harmonious passion	32.4	8.36	6	42	0.9
Obsessive passion	15.7	8.41	6	36	0.85

Next, in Table 4, the correlations between the variables positive psychological functioning and passion are described. From the results, it is possible to observe that the factors that make up the PPFS correlated significantly with each other, with magnitudes that varied between small (Environmental mastery and Humor,  $r = 0.21$ ) and strong (Vitality and Enjoyment,  $r = 0.73$ ). Furthermore, in relation to the passion variable, Harmonious Passion

correlated significantly and positively with the factors Self-esteem ( $r = 0.23$ ), Curiosity ( $r = 0.4$ ), Autonomy ( $r = 0.3$ ), Vitality ( $r = 0.24$ ), Purpose in life ( $r = 0.34$ ), Humor ( $r = 0.24$ ), Enjoyment ( $r = 0.19$ ) and Creativity ( $r = 0.36$ ), with magnitudes that varied between small and moderate. Obsessive Passion, in turn, did not correlate significantly with the factors that compose the PPFS.

**Table 4.** Correlation matrix between the variables passion and positive psychological functioning

Factors	HP	OP	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11
HP	—												
OP	0.22*	—											
PF1	0.23*	0.02	—										
PF2	0.13	-0.02	0.6*	—									
PF3	0.40*	0.04	0.45*	0.47*	—								
PF4	0.1	-0.02	0.71*	0.67*	0.41*	—							
PF5	0.30*	0.02	0.6*	0.63*	0.42*	0.55*	—						
PF6	0.24*	-0.06	0.68*	0.59*	0.41*	0.71*	0.57*	—					
PF7	0.1	-0.07	0.47*	0.5*	0.23*	0.49*	0.57*	0.55*	—				
PF8	0.34*	-0.02	0.58*	0.7*	0.47*	0.57*	0.63*	0.57*	0.54*	—			
PF9	0.24**	0.08	0.5*	0.37*	0.32*	0.43*	0.3*	0.47*	0.21*	0.28*	—		
PF10	0.19*	-0.02	0.69*	0.66*	0.5*	0.73*	0.57*	0.73*	0.57*	0.58*	0.44*	—	
PF11	0.36***	-0.1	0.55*	0.54*	0.6*	0.51*	0.55*	0.54*	0.32*	0.53*	0.43*	0.52*	—

Note. HP = Harmonious Passion, OP = Obsessive Passion, PF1 = Self-esteem, PF2 = Resilience, PF3 = Curiosity, PF4 = Optimism, PF5 = Autonomy, PF6 = Vitality, PF7 = Environmental mastery, PF8 = Purpose in life, PF9 = Humor, PF10 = Enjoyment, PF11 = Creativity.

Finally, we sought to explore possible differences in means between groups based on the variables of gender, marital status and whether or not they practiced physical exercise. Regarding gender, the means obtained by female and male participants did not differ significantly ( $p > 0.05$ ,  $d < 0.3$ ). Next, the t-test performed to compare married and single subjects indicated a statistically significant difference between the mean scores of these groups. Participants who reported being married had a higher mean score when compared to single subjects in the following

variables: resilience (married:  $M = 12.5$ ,  $SD = 1.81$ , single:  $M = 11.66$ ,  $SD = 2.42$ ;  $p = 0.047$ ,  $d = 0.36$ ), optimism (married:  $M = 11.9$ ,  $SD = 2.14$ , single:  $M = 10.8$ ,  $SD = 2.62$ ;  $p = 0.01$ ,  $d = 0.46$ ), autonomy (married:  $M = 12.1$ ,  $SD = 2.23$ , single:  $M = 10.65$ ,  $SD = 2.22$ ;  $p < 0.001$ ,  $d = 0.64$ ), environmental mastery (married:  $M = 10.1$ ,  $SD = 2.33$ , single:  $M = 8.73$ ,  $SD = 2.67$ ;  $p = 0.003$ ,  $d = 0.55$ ) and enjoyment (married:  $M = 11.5$ ,  $SD = 1.9$ , single:  $M = 10.49$ ,  $SD = 2.65$ ;  $p = 0.019$ ,  $d = 0.42$ ).

As for the practice of physical activities, the results obtained indicated a significant difference between those who practiced and those who did not. Those who reported practicing some physical activity during social isolation had a higher mean when compared to non-practitioners in relation to the variables harmonious passion and the factors that compose positive psychological functioning, namely: harmonious passion (yes:  $M = 34.55$ ,  $SD = 7.2$ , no:  $M = 29.7$ ,  $SD = 8.94$ ;  $p < 0.001$ ,  $d = 0.6$ ), self-esteem (yes:  $M = 11.96$ ,  $SD = 2.1$ , no:  $M = 10.81$ ,  $SD = 2.87$ ;  $p = 0.05$ ,  $d = 0.46$ ), resilience (yes:  $M = 12.41$ ,  $SD = 1.94$ , no:  $M = 11.7$ ,  $SD = 2.5$ ;  $p = 0.05$ ,  $d = 0.32$ ), optimism (yes:  $M = 11.89$ ,  $SD = 2.17$ , no:  $M = 10.94$ ,  $SD = 2.81$ ;  $p = 0.02$ ,  $d = 0.38$ ), autonomy (yes:  $M = 11.66$ ,  $SD = 2.14$ , no:  $M = 10.82$ ,  $SD = 2.47$ ;  $p = 0.02$ ,  $d = 0.36$ ), vitality (yes:  $M = 11.35$ ,  $SD = 2.32$ , no:  $M = 9.48$ ,  $SD = 3.04$ ;  $p < 0.001$ ,  $d = 0.7$ ), environmental mastery (yes:  $M = 9.96$ ,  $SD = 2.54$ , no:  $M = 8.97$ ,  $SD = 2.72$ ;  $p = 0.02$ ,  $d = 0.37$ ), purpose in life (yes:  $M = 12.49$ ,  $SD = 1.94$ , no:  $M = 11.27$ ,  $SD = 2.52$ ;  $p = 0.001$ ,  $d = 0.54$ ), humor (yes:  $M = 12.16$ ,  $SD = 2.16$ , no:  $M = 11.33$ ,  $SD = 2.5$ ;  $p = 0.03$ ,  $d = 0.35$ ), enjoyment (yes:  $M = 11.43$ ,  $SD = 2.29$ , no:  $M = 10.61$ ,  $SD = 2.55$ ;  $p = 0.04$ ,  $d = 0.33$ ) and creativity (yes:  $M = 11.78$ ,  $SD = 1.85$ , no:  $M = 11.04$ ,  $SD = 2.37$ ;  $p = 0.035$ ,  $d = 0.35$ ).

The analyses and interpretations duly supported by the data, concepts and information presented in the development should be inserted here. This is the topic in which the results achieved in the research should be explained. The verification and comparison with the state of the art of the theoretical basis can be carried out.

## CONCLUSION

The main objective of this research was to evaluate the association between DMP and positive psychological functioning during the period of restrictions due to the COVID-19 pandemic. In this sense, the hypothesis presented was that the potential of HP through activities is associated with indicators of positive psychological functioning. Mostly, the results corroborate theoretical expectations, demonstrating the potential of HP to be

associated with psychological functioning and positive emotions, even in times of personal and social challenges such as the pandemic<sup>14</sup>.

In the data collected in this study, a variety of activities were observed. Among them, individual activities, passive leisure and the use of multimedia were among the most chosen by respondents, while traveling, relational activities and team activities were less sought after during this period. This may reflect the severity of the context experienced, which requires reclusion and distancing from crowded situations, as protective measures against the disease<sup>19</sup>.

Regarding the relationships established between the DMP and indicators of positive functioning, it was observed that the protective role of passion for activities depends on the quality of the passion, given that OP was not associated with the variables investigated and, on the other hand, HP presented significant relations, with the exception of resilience, optimism and environmental mastery. Passion plays an important role in how people feel, influencing the regulation of their mood and well-being. This is because engaging in a pleasant activity can provide positive and meaningful moments<sup>3</sup>.

As seen, HP is characterized as an adaptive and healthy way of relating to the valued activity and, in this way, it integrates harmoniously with the subject and does not overlap their identity. Therefore, individuals experience more positive results not only during, but after carrying out the activity, providing greater life satisfaction and, consequently, indicators of positive psychological functioning, regardless of the result obtained<sup>20</sup>. However, the presence of OP is related to self-neglect, since the subject is susceptible to internal and external pressures, so the maintenance and development of positive characteristics is not expected, but it can reinforce negative effects on mental health, such as rumination<sup>3,21</sup>.

This corroborates the findings of Peixoto et al.<sup>22</sup> about the effects of passion on indicators of procrastination, life satisfaction and psychological distress in university students during the pandemic. The results demonstrate that harmonious passion was negatively associated with procrastination and psychological distress and positively associated with life

satisfaction. While obsessive passion for studies was positively associated with procrastination and psychological distress, and negatively associated with life satisfaction.

Studies carried out outside the context of the pandemic also stand out, which had already demonstrated the positive effects of harmonious passion on positive psychological phenomena. In this direction, Curran et al.<sup>23</sup> conducted a meta-analysis to evaluate the association of passion with four external criteria: cognition, behavior, performance and well-being. The authors observed that in the cognitive outcome criterion, HP was positively related to variables such as flourishing, concentration and better self-esteem, and negatively related to anxiety. In contrast, OP was positively related to rumination, anxiety and conflict with activity or life dissatisfaction. In the behavior and performance criteria, HP stood out in terms of subjective performance with a higher degree, while OP stood out in relation to the high number of working hours per week and dependence on the activity. As for well-being, HP was positively related to positive affects, life satisfaction, vitality and emotional-cognitive engagement, and negatively related to burnout, while OP was more positively related to negative affects and burnout.

Concerning the descriptive analyses carried out in this research, a difference was found between the means obtained in relation to the marital status of the subjects. With regard to indicators of positive psychological functioning, those who identified themselves as married had higher means than those who stated they were single. Marital status is an important predictor of mental health<sup>24</sup>. Isolation and social distancing have been efficient measures to contain the spread of the virus, however, psychological effects tend to arise as a consequence<sup>24</sup>. Social interactions can be considered a protective factor; therefore, marriage can reduce the negative effects arising from such measures<sup>25</sup>. Furthermore, the literature indicates that married people experience higher levels of life satisfaction, while unmarried people are more likely to experience depressive symptoms<sup>24</sup>.

Regarding the practice of physical exercise during the pandemic period, it was observed that those who maintained such activities, even if in an adapted way, presented

higher means in the variables harmonious passion and indicators of positive psychological functioning (except curiosity, which did not differ significantly) to the detriment of those who interrupted the practice. These results corroborate the literature, since the practice of physical activities is a fundamental aspect for promoting well-being and quality of life for individuals, especially in a restricted scenario such as the current one<sup>26</sup>. According to Matsudo et al.<sup>27</sup>, the harm caused by a sedentary lifestyle is not restricted to the physical level, but also directly affects psychological aspects, promoting higher levels of stress and symptoms of anxiety and depression. An international study carried out with participants from 18 countries observed an increase in adherence to the practice of physical exercise during the period of social isolation, based, in many cases, on the justification of the monotony caused by the reduction in daily and social activities<sup>28</sup>.

However, it was also observed that behavioral changes in adherence to physical exercise did not always immediately result in improvements in subjective well-being, suggesting that these benefits should be experienced through long-term practice. These results corroborate the understanding that, although promoting the practice of physical exercise is related to maintaining physical and mental health, the meaning that the individual attributes to this practice can differentiate the feelings experienced during its performance, as well as their perception of subjective well-being. In this sense, people who are harmoniously passionate about practicing physical exercise and, therefore, who already present the integration of these into their personalities, are those who experience higher levels of positive affects while carrying out the activity, as well as better levels of psychological well-being, even during the pandemic<sup>22</sup>.

In general, the study contributes to the understanding of the mechanisms that promote well-being in adverse situations, and also reinforces the importance of promoting mental health and developing strategies that strengthen positive engagement in activities as a resource, since positive practices can benefit individuals in adverse contexts<sup>29,30</sup>. In this sense, understanding how passion for activities is related to positive



psychological functioning can guide effective mental health interventions<sup>23</sup>. Promoting activities that encourage intrinsic engagement and enjoyment can be a powerful strategy for improving people's emotional and psychological well-being, especially during times of adversity, such as a pandemic. Therefore, encouraging a harmonious relationship through activities, that is, engagement in activities in an intrinsically motivated way, can positively impact the health of individuals<sup>2,3</sup>. And, it is worth noting that in addition to the psychological benefits, harmonious passion for activities can also have positive impacts on physical health, such as reducing stress<sup>29,30</sup>.

The findings in this research offer insights into the mechanisms that promote well-being even in challenging contexts. The findings highlight the importance of developing and implementing intervention strategies that promote positive engagement in meaningful activities. This may include programs that encourage hobbies, personal interests, and community activities that provide a sense of fulfillment and satisfaction. Such interventions not only strengthen emotional and psychological well-being but can also improve individual coping with future challenges.

The present study brought new contributions by investigating the relation between positive psychological functioning and passion for certain activities during the pandemic period caused by COVID-19. From the results, positive relations were observed between positive functioning, specifically: self-esteem, curiosity, autonomy, vitality, purpose in life, humor, enjoyment and creativity, and harmonious passion for certain activities. In this sense, it is possible to infer that passion for an activity can have a protective function, therefore helping to maintain the positive psychological functioning of individuals, even in times of pandemic.

Furthermore, the limitations of this research include the small sample size, the origin of the participants (mostly from the Southeast region) and the majority presence of females. These factors are complicating when the aim is to generalize the results obtained regarding the demographic variables investigated to other contingencies related to those investigated in the study. Therefore, it is suggested that future

investigations seek to expand the sample used, in addition to dedicating efforts to obtaining a more balanced sample, enabling the control of these variables over the results obtained, and increasing its applicability to several other contingencies.

## REFERENCES

1. Lopez-Leon S, Wegman-Ostrosky T, Perelman C, Sepulveda R, Rebolledo PA, Cuapio A, et al. More than 50 long-term effects of COVID-19: a systematic review and meta-analysis. *Scientific Reports*. 2021; 11:16144. <https://doi.org/10.1038/s41598-021-95565-8>.
2. Saladino V, Algeri D, Auriemma V. The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being. *Front Psychol*. 2020. <https://doi.org/10.3389/fpsyg.2020.577684>.
3. Vallerand RJ. The role of passion in sustainable psychological well-being. *Psychology of Well-Being: Theory, Research and Practice*. 2012; 2(1):1. <https://doi.org/10.1186/2211-1522-2-1>.
4. Vallerand RJ, Verner-Filion J. Making People's Life Most Worth Living: On the Importance of Passion for Positive Psychology. *Terapia Psicológica*. 2013; 31(1):35-48. <https://doi.org/10.4067/s0718-48082013000100004>.
5. Houliort N, Philippe FL, Bourdeau S, Leduc C. A comprehensive understanding of the relationships between passion for work and work-family conflict and the consequences for psychological distress. *Int J Stress Manag*. 2018; 25(4):313. <https://doi.org/10.1037/str0000068>.
6. Levesque RJR. Optimal Functioning. *Encyclopedia of Adolescence*. 2011:1955–1955. [https://doi.org/10.1007/978-1-4419-1695-2\\_64](https://doi.org/10.1007/978-1-4419-1695-2_64).
7. Ryff CD, Singer B. Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychother*

- Psychosom. 1996; 65:14-23.  
<https://doi.org/10.1159/000289026>
8. Joseph S, Wood A. Assessment of positive functioning in clinical psychology: Theoretical and practical issues. *Clin Psychol Rev.* 2010;30(7):830-838.  
<https://doi.org/10.1016/j.cpr.2010.01.002>
9. Merino MD, Privado J. Positive Psychological Functioning. Evidence for a new construct and its measurement. *Anales de Psicología.* 2015;31(1):45-54.  
<https://doi.org/10.6018/analesps.31.1.171081>.
10. Oliveira EP, Merino MD, Privado J, Almeida LS. Escala de Funcionamento Psicológico Positivo: Adaptação e estudos iniciais de validação em universitários portugueses. *Rev Iberoam Diagn Eval.* 2018; 3(48):151-162.  
<https://doi.org/10.21865/RIDEP48.3.13>
11. Kubo T, Sugawara D, Masuyama A. The effect of passion for activities on fear of COVID-19 and mental health among the Japanese population. *Pers Individ Dif.* 2022; 186:111358.  
<https://doi.org/10.1016/j.paid.2021.111358>
12. Vallerand RJ, Blanchard C, Mageau GA, Koestner R, Ratelle C, Léonard M, et al. Les passions de l'ame: on obsessive and harmonious passion. *J Pers Soc Psychol.* 2003; 85(4):756.  
<https://doi.org/10.1037/0022-3514.85.4.756>
13. Peixoto EM, Nakano TDC, Castillo RA, Oliveira LP, Balbinotti MAA. Passion scale: Psychometric properties and factorial invariance via exploratory structural equation modeling (ESEM). *Paideia.* 2019;29:1-10.  
<https://doi.org/10.1590/1982-4327e2911>.
14. Romano AR, da Silva MPP, Vieira TCH, Peixoto EM. Evidências de Validade da Escala de Funcionamento Psicológico Positivo (EFPP) no Brasil. *Rev Iberoam Diagn Eval Psicol.* 2022;4(65):61-68.  
<https://doi.org/10.21865/RIDEP65.4.05>
15. Conselho Nacional de Saúde. Resolução nº 510/2016 – Dispõe sobre a pesquisa em Ciências Humanas e Sociais. Brasil: Ministério da Saúde; 2016.
16. The jamovi project. jamovi (Version 2.2) [Computer Software]. 2022. Recuperado de: <https://www.jamovi.org>
17. Cohen J. Statistical power analysis for the behavioral sciences. Lawrence Erlbaum Associates; 1988.
18. Tabachnick GB, Fidell LS. Principal Components and Factor Analysis. In: Tabachnick GB, Fidell LS, eds. *Using Multivariate Statistics.* Pearson; 2019. pp. 476-527.
19. Prati G, Mancini AD. The psychological impact of COVID-19 pandemic lockdowns: a review and meta-analysis of longitudinal studies and natural experiments. *Psychol Med.* 2021;51(2):201-211.  
<https://doi.org/10.1017/S0033291721000015>.
20. Lafrenière MAK, Vallerand RJ, Sedikides C. On the Relation between Self-enhancement and Life Satisfaction: The Moderating Role of Passion. *Self Identity.* 2013; 12(6):597-609.  
<https://doi.org/10.1080/15298868.2012.713558>.
21. St-Louis AC, Carbonneau N, Vallerand RJ. Passion for a Cause: How It Affects Health and Subjective Well-Being. *J Pers.* 2015;84(3):263-276.  
<https://doi.org/10.1111/jopy.12157>.
22. Peixoto EM, Campos CR, Oliveira KS, Palma BP, Bonfá-Araujo BB, Anacleto MC. O impacto da paixão pelo exercício na percepção de bem-estar durante períodos de isolamento social. Manuscrito submetido.
23. Curran T, Hill AP, Appleton PR, Vallerand RJ, Standage M. The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes. *Motiv Emot.* 2015;39(5):631-655.  
<https://doi.org/10.1007/s11031-015-9503-0>.

24. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, Rubin GJ. The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet*. 2020; 395:912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8).
25. Jace CE, Makridis CA. Does marriage protect mental health? Evidence from the COVID-19 pandemic. *Soc Sci Q*. 2021; 102(6):2499-2515. <https://doi.org/10.1111/ssqu.13063>
26. Silva CEMD, Cruz Neto CCD, Bezerra ACV, Santos RT, Silva JAMD. Influência das condições de bem-estar domiciliar na prática do isolamento social durante a Pandemia da Covid-19. *J Health Biol Sci*. 2020;8(1):1-7. <https://doi.org/10.12662/2317-3206jhbs.v8i1.3410.p1-7.2020>.
27. Matsudo VKR, Santos MD, Oliveira LCD. Quarentena sim! Sedentarismo não! Atividade física em tempos de coronavírus. *Diagn Tratamento*. 2020;116-120. Recuperado de: <https://periodicosapm.emnuvens.com.br/rdt/article/view/243>
28. Brand R, Timme S, Nosrat S. When pandemic hits: Exercise frequency and subjective well-being during COVID-19 pandemic. *Front Psychol*. 2020; 11:2391. <https://doi.org/10.3389/fpsyg.2020.570567>.
29. Rocha RMA, Romano AR, Peixoto EM. Paixão pelo Exercício: Estrutura fatorial e relações com afetos em praticantes brasileiros. *Psychologica*. 2023;66. [https://doi.org/10.14195/1647-8606\\_66\\_2](https://doi.org/10.14195/1647-8606_66_2).
30. Romano AR, da Silva MPP, Peixoto EM, Valentini F. Bem-estar Subjetivo em praticantes de exercício físico: estrutura e invariância fatorial. *Motricidade*. 2023;19(4). <https://doi.org/10.6063/motricidade.28981>.

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