Relationship between subjective well-being and self-care among caregivers in pandemic times

Dante Ogassavara¹ D Juliana Ferreira de Souza¹ D Daiane Fuga da Silva¹ D Daniel Bartholomeu² D José Maria Montiel¹

¹ Universidade São Judas Tadeu. São Paulo/SP, Brasil. ² Centro Universitário Padre Anchieta - UniAnchieta. Jundiaí/SP, Brasil.

REVISTA MUNDO DA

Abstract

Self-care refers to disease prevention and health maintenance practices. Self-care capacity can be an important factor in different conditions and contexts and when associated with aspects of an individual's health it can provide direct benefits to this person. During the Pandemic (COVID-19) this ability may be diminished or impaired, and even hindered with affective aspects, influencing their subjective well-being, that is, affecting their assessment of their own well-being. Thus, this study aimed to evaluate the relationship between self-care capacity and the affective attribution (positive or negative) of male and female adults who act as caregivers. The instruments used were a sociodemographic questionnaire, the Positive and Negative Affect Schedule and the Scale to Assess Self-Care Capabilities. After analyzing the frequency of the variables, Pearson's correlation analysis was performed and through it, moderate associations (medium high) were revealed between the measure of positive affect and self-care (r=0.62; p=0.000) and negative affect and self-care, in this case, with a negative coefficient (r=-0.42; p=0.000); thus, this indicates that people tend to have more self-care, have better positive affects and less negative affects, respectively. It was possible to infer the idea that well-being and quality of life are intertwined with the affective attribution of the individual.

Keywords: Evaluation. Affective charge. Basic care. Self-care.

INTRODUCTION

Conceptualizing precisely what self-care is, is difficult because there are several possible definitions. However, all of them are related to practices of disease prevention and health maintenance at an individual or group level. Individual self-care practices may be categorized into: healthy eating, awareness of one's physical and mental condition, physical activity, good hygiene, risk mitigation, and preventing and avoiding harmful behaviors; as well as the responsible use of products, information, services, medicines, and functional health literacy (ability to acquire and understand basic health information for conscious decision-making)¹.

The capacity for self-care is an impactful factor for different aspects of health that, when in good condition, brings benefits to the individual². It was observed in the study by Dias *et al.*² that a correlation was established between self-care and cognition of individuals aged at least 50 years old. An experimental study was carried out with a

DOI: 10.15343/0104-7809.202246321330I



E-mail: ogassavara.d@gmail.com

control group and an intervention group, which aimed to evaluate the effects of a health education program on the participants' cognition, mood, and functional capacity. Before and after the program, data were collected through the application of a battery of cognitive tests, an anxiety scale, a depression scale, and a functional dependence assessment instrument, which resulted in the identification of a positive correlation between health education and memory.

MUNDO DA

A study by Bettoni *et al.*³ was carried out in a hospital context with individuals aged 18 years or over and suffering from chronic kidney disease, with the objective of evaluating their capacity for self-care and the degree of depression and anxiety symptoms present. The results indicated the existence of a negative correlation between self-care capacity and levels of anxiety and depression. It was possible to observe the benefits generated if the self-care capacity was in good condition, promoting the performance of cognitive functions and emotional aspects. However, when the self-care skill is not well developed, there was a deficit.

In the study by Coutinho and Tomasi⁴, some correlations between the elderly population and the self-care deficit were demonstrated. They used a variety of scales to assess self-care capacity, functional capacity, and behavioral issues, aiming to characterize the elderly with self-care deficits and their sociodemographic associations. They showed that lesser education, family income, a diet rich in fat and low in vegetables, a lack of physical activity, and functional dependence are related to self-care deficits.

As previously presented, the self-care deficit appears to relate to the condition of vulnerability, not having physical, psychological, economic, or social support. Such findings showed that the influence of self-care capacity on an individual's physical and mental state can generate gains, in addition to maintaining health. However, it is still a possible risk to be aware of, considering that self-care has not proven to be an element that generates greater risk or protection.

According to Orem⁵ in his theory of the self-care deficit, when the informal caregiver is no longer able to act, the professional care provided by nurses becomes opportune. Also, providing care to other individuals can bring risks to the caregiver by affecting their mental health, which can cause conditions such as compassion fatigue, burnout⁶, depression⁷, frailty, and overload⁸.

Caring for individuals is an exhausting activity, especially when there is no social support. And if this activity is undertaken by only one family member, it can affect the caregiver's quality of life in an even more negative way⁷. The impacts on the caregivers' lives can take a variety of forms, as demonstrated by the study by Freitag, Milbrath and Motta⁹ in which the routine of a family caregiver is totally guided by the needs of the person being cared for, to the point of not being having any time separated to take care of themselves.

When investigating the health of caregivers, it was observed that there are a large number of caregivers whose well-being is compromised⁷. Well-being is a concept popularly used as a condition of happiness, but its possible definitions can be separated into three categories: (1) external criteria, being judged by elements external to the individual, such as virtue; (2) satisfaction with life itself, being subjective to the respondents; and (3) predisposition to emotional experience, which refer to the feelings that an individual experiences more frequently¹⁰.

It is said that subjective well-being is a concept that refers to the subjective asses-



sment of individuals concerning their well--being, consisting mainly of an individual's satisfaction with their own life and their affects (positive and negative), but not limited to only these aspects¹⁰. Positive affect is the dimension related to how excited, active and alert an individual feels; negative affect, on the other hand, refers to how much the person experiences anguish and other unpleasant feelings¹¹. Affects are associated with the perception one has about one's own mental health and experiencing fewer negative and more positive affective states improves this perspective¹². However, even though the two types of affect seem to be two opposing mood factors, they can interact in different ways, establishing non-monotonous and independent relationships depending on the observed affect¹¹.

Regarding positive affects, when these are more frequent there is a tendency to have a higher quality of health, with a lower presence of risk behaviors such as smoking, better physical condition, fewer symptoms of anxiety¹³ and greater satisfaction with one's own life¹². Contrary to the possible constructive impact of positive affect, when negative affects are at a higher frequency, there is a greater chance of observing a lower degree of adaptive functioning¹⁴ and cognitive deficits¹⁵.

When turning attention to the affective experience of the population in general, it is valid to reflect on this issue due to the recent reality observed during the COVID-19 pandemic, which generated intense impacts, to the point that during the month of October/2021 the Ministry of Health¹⁶ reported that the number of accumulate-d deaths in Brazil already exceeded the 600 thousand deaths mark. It must be considered that with such a risk of infection, resilience is a personal aspect that helps a lot in coping with the problem that is the pandemic scenario¹⁷. However, those who have mental disorders related to anxiety suffer more from isolation required by preventative measures¹⁸.

Given the situation and the complexity of the situation observed in Brazilian territory, it is necessary to observe possible implications for people in the pandemic (COVID-19) condition and identify the risks derived from this situation in order to be able to suggest possible interventions that mitigate their suffering. There are still personal aspects that make the process of identifying possible risks difficult, such as the psychological aspects of the population¹⁷.

A range of different studies show the negative impact that the act of caring can have on quality of life and well-being^{6,7,8}, with the possibility of establishing a situation of overload¹⁹, there was the expectation that caregivers studied would present positive affective states with a higher frequency and negative ones with a lower frequency.

As previously mentioned^{2,3} the integration between the physical and mental dimensions of a subject is opportune in different contexts, especially when linked to affective aspects^{12,13}. Such prerogatives encourage the existence of correlations between the self-care capacity and the individual's affections; thus, the research question posed here is: Do the affects commonly experienced by an individual influence their self-care capacity and care for others, or vice versa?

By assuming such expectations, that is, the existence of evidence that reinforces the idea that individuals with a greater capacity for self-care have a higher quality of health as they have a better emotional and cognitive state^{2,3}, it was expected that the studied group would report more positive af-





fect and less negative affect than those who showed a lower capacity for self-care. Thus, this study aimed to evaluate the relationship between self-care capacity and the affective attribution (positive or negative) of male and female adults who act as caregivers.

METHODOLOGY

The research dealt with in this work consists of a cross-sectional and descriptive study that provided quantitative data for analysis, which were given by the participants online. This has a correlational character, whose research method aims to find and evaluate the intensity of the relationships between variables, without presuming causality²⁰.

The research sample consisted of 52 volunteers aged between 19 and 55 years, with 51% of people up to 29 years of age and 76% female. Most people have a higher education (59%), family income greater than R\$4,000.00/month (53%) and are divided between being single (50%) and married (46%). It should be noted that from the total sample of 106 volunteer participants, participants were chosen for this study who, in addition to being over 18 years of age or older, provide health care to people, regardless of professional affiliation.

Regarding sources of support that are part of the participants' daily lives, most lived with other individuals (94%), with a variation of 2 to 5 individuals per residence (86%), including children (55%), and a small portion of the studied group resides with individuals aged 60 years or older (17%). 83% of respondents are informal caregivers, providing care to their children (42%) or parents (16%), and despite being caregivers, some respondents felt they needed to receive care (26%), but few participants received this help (13%).

The instruments used for data collection were: a sociodemographic questionnaire, addressing age, gender, education level, family life, and issues related to the provision of care by participants in the context of a pandemic; the Positive and Negative Affects Schedule²¹ to measure the frequency that each type of affective state is experienced; and the Scale to Assess Self-Care Capacity²². The study was approved by the ethics committee (CAAE: 44251721.2.0000.00089; opinion number: 4.583.833).

In order to obtain the sample in the context of the COVID-19 pandemic, the study was disseminated in the form of posts on the researchers' own social networks, such as Facebook and Instagram, containing an invitation to participate. Those who accepted the invitation were able to access a link to participate in the research as volunteers. The form was filled out individually in the form of an electronic questionnaire, Google Forms, which contained all the aforementioned instruments, taking 5 to 10 minutes to be fully answered.

Before filling out the form, the participant had access to the online version of the Informed Consent Form, which they could download and print. After acceptance, the instrument was presented.

All data collected is being kept in a safe place for a period of five years. After this period, the files will be incinerated, in accordance with current legislation.

As procedures for data analysis, a quantitative analysis of the data was performed using SPSS - Statistical Package for Social Science, version 21.0, having a correlational and inferential character of the results obtained during data collection, performing analysis of variance (ANOVA) when dealing with nonparametric variables, as well as Pearson's correlation tests.





RESULTS

Based on the established objective, which was to evaluate the relationship between self-care capacity and the affective attribution (positive or negative) of male and female adults who act as caregivers, this section presents the results obtained through statistical analyses and discussions of the findings in this study. Thus, with the instruments, it can be observed that most of the subjects in the sample were afraid of contracting COVID-19 (59%) as well as feeling anxious about the number of people with COVID-19 in the world (71%). Furthermore, most people were concerned about maintaining good hygiene (88%) but did not practice physical activity (53%). The other descriptive statistics of the measures taken on affection and self-care are shown in Table 1.

The analysis of normality indicated that the measurements showed a normal trend, enabling the performance of parametric analyses. It was observed that the proportions of both types of affective state were similar, with similar means and standard deviations, as well as similar classifications, with a predominance of a moderate incidence of these emotions. However, the positive affect had more people with a high incidence (17.3%) compared to the negative affect (9.6%). Self-care also showed good distribution, and most were classified as having a good level of self-care. Despite this, 13.5% of people showed a high level of self-care.

After analyzing the frequency of the variables, Pearson's correlation analysis was performed to establish associations between self-care and the categories of affection, initially. This analysis revealed moderate associations (medium high) between self-care and the positive affect score (r=0.62; p=0.000) and with negative affect and self-care, in this case, with a negative coefficient (r=-0.42; p =0.000). These data indicate that people who tend to have more self-care tend to have a better positive affect and a less negative affect; however, it is not possible to attribute causality to these relationships based on these results.

The comparison analysis was performed of the average scores of the affection and self-care categories of the sample in relation to the fear of contracting COVID-19, anxiety about the number of people with COVID-19 in the world, physical activity, and maintaining a healthy diet (test Anova and Student Newman Keuman, respectively). They revealed that the fear of contracting COVID-19 differentiated from the frequency that positive affective states were experienced as well as the quality of self--care of those of the sample in question. Those who were at the extremes, having high or low intensity of fear of COVID -19, had experienced more affective states of a positive nature, proving to be more emotional than people with moderate fear of contracting the disease. This was observed with regards to self-care and these data are shown in Table 2.

Anxiety about contracting the disease did not differentiate the frequency that affections were experienced nor the quality of self-care. The practice of physical activity differentiated people in the variables in question, with people who practiced more physical activity reporting better self-care, with a more positive affect and a less negative affect. These data are in Table 3.

Therefore, both the fear of contracting COVID-19 and the anxiety generated by the number of cases of contamination of the virus around the world have not influenced the experience of affective states of negative content in general, even if both are negative affects. This indicates that neither of the two conditions (fear and anxiety) must have been relevant enough in the composition of the level of negative affect; however, it is still necessary to evaluate this possibility.





In the present study, although it was not possible to establish causality between the issues addressed, it was observed that people who maintained a healthy diet also had more positive emotions and greater self-care, as shown in Table 4.

Table 1 - Descriptive statistics of measures of affection and self-care, São Paulo, Brazil, 2021.

	N	Minimum	Maximum	Mean±(dp)	Median	Mode
Positive affect	52	12.0	45.0	33.2±7.7	34.5	37.0
Negative affect	52	17.0	44.0	28.9±7.6	28.5	25.0
Self-care ability	52	49.0	120.0	88.9±15.1	89.5	96.0

Table 2 - Analysis of variance (ANOVA) of self-care ability, positive affect and negative affect for fear of contracting COVID-19, São Paulo, Brazil, 2021.

	Intensity variables	Mean	Standard Deviation	F	р
	Little	36.8	4.3		
Positive affect	Moderate	25.4	8.5	13.298	0.000*
	Much	35.5	5.6		
Negative affect	Little	26.0	5.1		
	Moderate	29.6	9.1	0.719	0.493
	Much	29.4	7.5		
Self-care ability	Little	95.1	15.1		
	Moderate	80.3	17.7	3.250	0.047*
	Much	90.7	12.5		

Note: * There was a difference in the group with moderate fear.

Table 3 - Analysis of variance (ANOVA) of self-care ability, positive affect and negative affect for physical activity, São Paulo, Brazil, 2021.

	Intensity variables	Mean	Standard Deviation	F	р
	Little	30.4	8.6		
Positive affect	Moderate	36.1	5.1	5.051	0.010*
	Much	40.0	1.0		
Negative affect	Little	31.3	7.4		
	Moderate	27.1	6.9	4.768	0.013*
	Much	20.0	3.6		
Self-care ability	Little	80.7	13.2		
	Moderate	80.7	11.3	13.417	0.000*
	Much	88.8	13.1		

Note: * There was a significant difference in the group that practiced a lot of physical activity.



	Intensity variables	Mean	Standard Deviation	F	р
	Little	27.5	8.4		
Positive affect	Moderate	34.3	6.1	4.579	.015*
	Much	35.7	8.1		
Negative affect	Little	32.0	7.7		
	Moderate	29.5	6.9	2.461	.096
	Much	25.5	8.1		
Self-care Ability	Little	75.1	14.6		
	Moderate	89.1	10.5	10.602	.000*
	Much	98.8	15.7		

Table 4 - Analysis of variance (ANOVA) of self-care ability, positive affect and negative affect for healthyeating, São Paulo, Brazil, 2021.

Note: * There was a significant difference in the group that had little quality of food.

DISCUSSION

In the current research, individuals with higher positive affect scores were more present than those who reported a higher degree of negative affect, and this is related to some findings by Greetham, Hurling, Osborn and Linley²³. This British study aimed to investigate the dynamics between positive and negative affects in short periods, over 14 consecutive days. Such variables were measured using the original version of the Positive and Negative Affect Schedule²¹ and among the data obtained, it was observed that the level of positive affect tends not to increase or decrease even more over the days after being changed and that the level of negative affect showed an opposite tendency, tending to go to extremes when it changes. Such evidence indicates that the levels of positive affect in the group of caregivers in the present study are constantly higher, while the level of negative affect is subject to greater changes.

The correlation between the quality of self-care and positive affect was also observed in the study by Davidson, Mostofsky, and Whang¹³. The authors sought to verify the relationship between the experience of positive affective states and strokes. From the data collected, negative correlations were found between positive affect and the habit of smoking, cholesterol levels, levels of hostility, and anxiety symptoms, as well as relating positive affect to higher quality of health in general, with fewer risky behaviors.

Still referring to the correlations of self-care capacity, it is worth mentioning two studies. First, the work by Bettoni et al.³, as he verified the relationship between self-care capacity and depression and anxiety symptoms in hospital patients undergoing hemodialysis. As a result, it was possible to observe negative correlations of moderate intensity between self-care capacity with depressive symptoms and anxious symptoms. These findings are relevant to the current discussion when accompanied by the second study to be mentioned, since the people in our research who presented low self-care, also demonstrated significant negative feelings. The other study²⁴ sought to investigate the relationships between self-compassion,



depression symptoms, and both types of affects. After analyzing the collected data, it was found that positive and negative affects are negatively correlated and that depression symptoms are correlated with these two variables, positively with the negative affect and negatively with the positive affect. Therefore, it indirectly relates to the outcome of the previously cited research. When considering the results of these two studies^{3,24}, one can consider the possibility that there is a negative correlation between the capacity for self-care and negative affect, and, conveniently, the present study provided evidence that confirms this hypothesis, presenting a correlation of moderate intensity between the variables.

MUNDO DA

The interaction evidenced in the present work between the frequency that fear is experienced, being a negative affect, and the level of positive affect corroborates the findings of the study by Scorsolini-Comin and Santos²⁵, which investigated some factors related to subjective well-being and how it was possible to verify that the frequency that positive affective states are experienced decreases throughout aging and that these affects are negatively correlated with a moderate intensity with negative affect. Studies have shown negative correlations between the two types of affects^{24,25} and considering that people with a moderate fear of contracting COVID-19 experience fewer positive affective states, it is reasonable to infer that this specific fear has a non-monotonous relationship with levels of positive affect; that is, having a lot or a little fear of being infected with the virus tends to be more pleasant than remaining in a moderate state.

As the practice of physical activity is one of the elements that make up the self-care capacity score, having differentiated this score indicates that it was relevant to the composition of the variable. This interpretation corroborates the aforementioned study by Coutinho and Tomasi⁴ as it showed that the lack of physical exercise is correlated with the presence of self-care deficits, thus implying that the lower the frequency of physical activity, the lower the capacity for self-care is. This issue configures a greater degree of complexity when reaffirming that the study was carried out in the midst of the COVID-19 pandemic and, thus, social distancing was still a reality that limited the use of physical spaces for the practice of physical exercise, although it is also possible to perform exercises from the domestic context.

Thus, as is the practice of physical exercise, healthy eating is also a practice of self-care. Given such a situation, it can be assumed that the correlations with self-care already presented^{3,4,13}, including the findings of the current study, are also applicable to both of these self-care practices; except for the correlation with negative affect, as it was observed that food does not differentiate the frequency with which an individual experiences anguish, but influences how alert, active, and enthusiastic he/she feels.

CONCLUSION

Concerning final considerations, it should be noted that the objective of this study was to assess the relationship between self-care capacity and affective attribution (positive or negative). In this sense, we can infer that the idea of well-being and quality-of-life may be intertwined with the affective attribution of the individual. Within this premise, the results were aligned in several aspects with the previously existing literature on self-care, as a set of practices related to health maintenance and disease prevention. When looking at the



self-care capacity of the investigated sample the sociodemographic profile was in line with what would be presumed from the findings regarding the beneficial effect of having a higher financial condition, a higher level of education, and being part of a younger age group. The most relevant aspect that was contrary to what was expected was that even though they were caregivers, affections were recorded at a moderate intensity instead of a profile with a worse well-being. This fact encourages further studies to measure whether there really is a bad perception of well-being concerning caregivers, bearing in mind how exhausting this occupation can be.

MUNDO E

Another point to be considered is the influence of certain negative affects experienced during the pandemic (COVID-19) on the daily experience of caregivers, such as the fear of contracting the virus. Thus, we suggest a further investigation, as it would be valuable to elucidate the dynamics between such factors. In addition, these temporary affects did not appear to be relevant to the general score; however, it is necessary to verify this possibility more deeply. Moreover, the demand for future investigations to address other sociodemographic characteristics that were not explored in the present study, such as ethnicity and individual history, is also highlighted.

The current study had limitations resulting from the methodology used, both for the instruments used and for the data collection procedure. The instruments used, despite being adapted and validated for the Brazilian context, were not designed in a way that was sensitive to the specificities created by the establishment of the CO-VID-19 pandemic, such as limitations resulting from the social distance necessary to maintain health.

We believe that psychoeducational programs can favor both a better understanding of self-care and in moments and/or contexts in which it is a protective factor for caregivers in general. Based on the above, we conclude that our research may contribute to the individual consideration of aspects related to self-care in other studies. Since each person has their coping strategies and their attributions, both positive and negative, during daily events. When considering this premise, the satisfaction with the well-being condition itself can be relative, which is valid as an incentive for further investigations.

Faced with this moment of health crisis, it is worth reaffirming the importance of self-care to preserve the well-being of the population as a set of practices that favor the maintenance of health and to point out that the act of helping others in their self-care has the same function. Given this emphasis, care providers should be made aware of their great social impact, as professionals who meet the unmet needs of dependents and have the possibility to educate others about healthy practices. It is advised that they assign a higher priority to preserving their physical and mental health as much as possible, as the role of caregiver can cause risks. For, in addition to having responsibilities for other lives, they also are responsible for their own life.

CRediT author statement

All authors have read and agreed to the published version of the manuscript.



Conceptualization: Ogassavara, D; Souza, JF; Montiel, JM. Methodology: Ogassavara, D; Souza, JF; Montiel, JM. Validation: Silva, DF; Bartholomeu, D; Montiel, JM. Statistical analysis: Não aplicável. Formal analysis: Ogassavara, D; Souza, JF; Silva, DF; Bartholomeu, D; Montiel, JM. Investigation: Ogassavara, D; Souza, JF; Montiel, JM. Resources: Ogassavara, D; Souza, JF. Writing-original draft preparation: Ogassavara, D; Souza, JF. Writing-review and editing: Ogassavara, D; Souza, JF; Silva, DF; Bartholomeu, D; Montiel, JM. Visualization: Ogassavara, D; Souza, JF; Silva, DF; Bartholomeu, D; Montiel, JM. Visualization: Ogassavara, D; Souza, JF; Silva, DF; Bartholomeu, D; Montiel, JM. Project administration: Montiel, JM.

REFERENCES

MUNDO I

1. Webber D, Guo Z, Mann S. Self-care in health: we can define it, but should we also measure it? Selfcare Journal [Internet]. 2013. [acess 02 September of 2021]; 4(5):101-6. Available from: https://selfcarejournal.com/article/self-care-in-health-we-can-define-it-but-should-we-also-measure-it/.

2. Dias JC, Rodrigues IA, Casemiro, FG, Monteiro DQ, Luchesi BM, Chagas MHN, Castro PC, Pavarini SCI, Gratão ACM. Effects of a health education program on cognition, mood and functional capacity. Rev Bras Enferm. 2017; 70(4): 814-21. https://doi.org/10.1590/0034-7167-2016-0638

3. Bettoni LC, Ottaviani AC, Orlandi FS. Relação entre autocuidado e sintomas depressivos e ansiosos de indivíduos em tratamento hemodialítico. Rev Rene. 2017; 18(2): 181-6. https://doi.org/10.15253/2175-6783.2017000200006

4. Coutinho LSB, Tomasi E. Déficit de autocuidado em idosos: características, fatores associados e recomendações às equipes de estratégia saúde da família. Interface (Botucatu) [Internet]. 2020. [acess 03 september of 2021]; 24(supl 1): e190578. https://doi.org/10.1590/Interface.190578 5. Orem, DE. Nursing: concepts of practice. 6ª ed. Saint. Louis: Mosby; 2001. ISBN 0-323-00864-X

6. Sanchez-Reilly S, Morrison LJ, Carey E, Bernacki R, O'Neill L, Kapo J, Periyakoil VS, Thomas JL. Caring for oneself to care for others: physicians and their self-care. J Support Oncol. 2013; 11(2): 75-81. https://dx.doi.org/ 10.12788/j.suponc.0003

7. Dias P, Hirata M, Machado FP, Luis MAV, Martins JT. Bem-estar, qualidade de vida e esperança em cuidadores familiares de pessoas com esquizofrenia. Rev Port Enferm Saúde Mental. 2020; (23): 23-30. https://doi.org/10.19131/rpesm.0269

8. Flesch LD, Batistoni SST, Neri AL, Cachioni M. Fatores associados à qualidade de vida de idosos que cuidam de outros idosos. Rev Bras de Geriatr Gerontol. 2019; 22(3): e180155. https://doi.org/10.1590/1981-22562019022.180155

9. Freitag VL, Milbrath VM, Da Motta MGC. Madre-cuidadora de niño/ adolescente con parálisis cerebral: el cuidado de sí misma. Enfermería Global [Internet]. 2018. [acess 03 september of 2021]; 17(50): 349-60. https://doi.org/10.6018/eglobal.17.2.265821

10. Diener E. Subjective well-being. Psychological Bulletin. 1984; 95(3): 542-75. https://doi.org/10.1037/0033-2909.95.3.542

11. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: the PANAS scales. J Pers Soc Psychol. 1988; 54(6): 1063-70. https://doi.org/10.1037//0022-3514.54.6.1063

12. Nunes LYO, Lemos DCL, Ribas Júnior RC, Behar CB, Santos PPP. Análise psicométrica da PANAS no Brasil. Ciências Psicológicas [Internet]. 2019. [acess 03 september of 2021]; 13(1): 45-55. https://doi.org/10.22235/cp.v13i1.1808

13. Davidson KW, Mostofsky E, Whang W. Don't worry, be happy: positive affect and reduced 10-year incident coronary heart disease: the canadian nova scotia health survey. Eur Heart J. 2010; 31(9): 1065-70. https://doi.org/10.1093/eurheartj/ehp603

14. Bradley B, DeFife JA, Guarnaccia C, Phifer J, Fani N, Ressler KJ, Westen D. Emotion dysregulation and negative affect: association with psychiatric symptoms. J Clin Psychiatry. 2011; 72(5): 685-91. https://doi.org/10.4088/jcp.10m06409blu

15. Payne TW, Schnapp MA. The relationship between negative affect and reported cognitive failures. Depress Res Treat. 2014; 2014: 396195. https://doi.org/10.1155/2014/396195

16. Brasil. Ministério da Saúde [página na internet]. COVID-19 no Brasil [acess 11 october of 2021]. Available from: https://susanalitico.saude. gov.br/extensions/covid-19_html/covid-19_html.html

17. Zanon C, Dellazzana-Zanon LL, Wechsler SM, Fabretti RR, Rocha KN. COVID-19: implicações e aplicações da psicologia positiva em tempos de pandemia. Estudos de Psicologia [Internet]. 2020. [acess 03 september of 2021]; 37: e200072. https://doi.org/10.1590/1982-0275202037e200072

18. Asmundson GJG, Paluszek MM, Landry CA, Rachor GS, Mckay D, Taylor S. Do pre-existing anxiety-related and mood disorders differentially impact COVID-19 stress and coping? J Anxiety Disord. 2020; 74: 102271. https://doi.org/10.1016/j.janxdis.2020.102271

19. Albuquerque EPT, Cintra AMO, Bandeira M. Sobrecarga de familiares de pacientes psiquiátricos: comparação entre diferentes tipos de cuidadores. J Bras Psiquiatr. 2010; 59(4): 308-16. https://doi.org/10.1590/S0047-20852010000400007

20. Almeida LS, Freire T. Metodologia de investigação em psicologia e educação. 5ª ed. Braga: Psiquilíbrios; 2008. ISBN: 9729738858

21. Zanon C, Bastianello MR, Pacico JC, Hutz CS. Relationships between positive and negative affect and the five factors of personality in a brazilian sample. Paidéia. 2013; 23(56): 285-92. https://doi.org/10.1590/1982-43272356201302

22. Silva JV, Domingues EAR. Adaptação cultural e validação da escala para avaliar as capacidades de autocuidado. ACS. 2017; 24(4): 30-6. https://doi.org/10.17696/2318-3691.23.4.2017.686

23. Greetham DV, Hurling R, Osborne G, Linley A. Social networks and positive and negative affect. Procedia: Social and behavioral Sciences. 2011; 22: 4-13. https://doi.org/10.1016/j.sbspro.2011.07.051

24. Martins CAC. Autocompaixão, afeto positivo, afeto negativo e sintomatologia depressiva em adultos. Dissertação de mestrado em Psicologia Clínica e da Saúde. Universidade da Beira Interior. 2019.

25. Scorsolini-Comin F, Santos MA. A medida positiva dos afetos: bem-estar subjetivo em pessoas casadas. Psicol Reflex Crít. 2012; 25(1): 11-20. https://doi.org/10.1590/S0102-79722012000100003.

> Submitted: 11 october 2021. Approved: 29 july de 2022. Published: 22 september 2022.

O Mundo da Saúde 2022,46:321-330, e11742021

