

Association between resilience and self-compassion in patients with fibromyalgia

Marcele Medina Silveira

Feevale University. Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0002-4124-2714>
Email: marcele.medina@gmail.com

Andrea Varisco Dani

Feevale University, Graduate Program in Cultural Diversity and Social Inclusion.
Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0002-1388-9481>

Cesar Augusto Kampff

Feevale University. Master in Psychology
Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0003-4338-5222>

Sabina Maria Stedile

Feevale University. Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0003-3398-7342>

Gilberto Nunes Monteiro

Feevale University. Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0002-1124-6909>

Elizangela Halinski Cardoso

Feevale University, Graduate Program in Cultural Diversity and Social Inclusion.
Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0002-8076-7353>

Geraldine Alves dos Santos

Feevale University. Graduate Program in Cultural Diversity and Social Inclusion.
Master in Psychology. Novo Hamburgo, Brazil
ORCID: <https://orcid.org/0000-0001-5620-9071>
Email: geraldinesantos@feevale.br

Abstract

Fibromyalgia is a chronic, non-inflammatory syndrome characterized by diffuse musculoskeletal pain and tender points in some body areas. Thus, studies based on fibromyalgia patients' experience are critical, as they end up having a loss in their personal relationships over time, personal chores, self-esteem, security, and motivation to life. The general objective of this study is to investigate the association between resilience and self-compassion in patients with Fibromyalgia. The present research has a quantitative, descriptive, and transversal design. This study will consist of Fibromyalgia patients from the Metropolitan Region of Rio Grande do Sul/Brazil. The sample was composed of 30 participants, over 25 years old, of both sexes, selected for convenience. These participants were invited based on contacts acquired in a social network of Fibromyalgia patients and care services for patients with the syndrome. The instruments used in data collection, all self-reported, were: Fibromyalgia Impact Questionnaire (FIQ), the Resilience Scale, and the Self-Compassion Scale. Descriptive analyzes were performed, showing the absolute value, the mean, and standard deviation. Association analyzes were also performed using the Spearman test and Linear Regression tests, with a significance level ≤ 0.05 . There was no significant difference between resilience and self-compassion over the study period. The participants presented the resilience variable with values that were found in the expected average. The present study showed a moderate correlation between resilience and self-compassion. The decrease in the impact of fibromyalgia is associated with less use of the problem-solving strategy and an increase in the Mindfulness strategy. Mindfulness is the most apparent component of self-compassion in the study. Therefore, it is possible to identify in this research the low level of the variable resilience in patients with the syndrome.

Keywords: Fibromyalgia syndrome; resilience; self-compassion; Mindfulness.

1. Introduction

Fibromyalgia syndrome is defined as a chronic non-inflammatory painful syndrome, with an unknown etiology manifested in the musculoskeletal system. It is characterized by pain throughout the body, distributed in ligaments, joints, bones, and mainly muscles^{1,2,3}. However, for Chaitow⁴, fibromyalgia is characterized by a generalized pain disorder with a high level of sensitivity in points spread throughout the body. These points are called Tender Points, which are characterized by 18 pain points. In addition to intense muscle pain distributed in various parts of the body, known as diffuse pain, it also presents symptoms such as stress, fatigue, and sleep syndrome⁵. Fibromyalgia syndrome can have stressors influenced by genetics, emotional, and environmental aspects, which cause anatomical changes in the endocrine system, in addition to depression, irritable bowel, and temporomandibular disorder. This syndrome can also be characterized in a psychosomatic way, with modulations in relation to pain originating in the central nervous system and spinal cord⁶.

Groddeck⁷ believes that the illness process happens through an unresolved conflict: something repressed, with the symptoms as symbolic. The repressed reason must be prevented from reaching consciousness. Also, Fibromyalgia is often associated with anxiety and depression, which generate relevant

symptoms, such as non-restorative sleep, chronic migraine, short-term memory problems, irritable bowel syndrome, fatigue, and blurred vision as mentioned above⁸.

It might become physically and emotionally exhausting to live part of the time in a framework of chronic pain. Pain can have severe consequences and significant losses in daily activities, compromising the individual's life, affecting not only him/her but also the family and close people. It is exhausting to live in pain. It requires great physical and mental effort. There is a search for cure and relief of symptoms that is difficult to find, which can then lead to hopelessness, sadness, and demotivation⁹. Sasdelli and Miranda¹¹ highlight the importance of empathy for the patient with Fibromyalgia, trying to understand what the pain represents to him/her and whether there is any secondary gain from the pain is essential. As the patient reports about his aches and representations, he/she starts to have more significant experience and understanding about what he/she feels, leaving the passive position of the experience and assuming a posture of growth. It is also considered that pain, in most cases, will be the person's eternal companion, who will subject him/her to some restrictions. Therefore, it is essential to give meaning to the process of becoming ill.

In search of this significance and importance of knowing how to live in these conditions, I aimed to study the resilience of fibromyalgia patients. The study of resilience in the psychological sphere is still recent, dating from the last four decades. It is still in the process of construction, presenting, then, controversies and inaccuracies. According to Benetti and Crepaldi¹², there is a great evolution in research and scholars' thoughts regarding resilience. Still, according to the authors, this phenomenon is treated as an individual personality trait, which recently began to be studied as a base parameter in the relationship that the subject establishes with people significant to him or her. Therefore, the conceptualization of resilience was defined, at first, by a set of personality traits and abilities that make people who go through traumatic experiences, invulnerable. So, they do not develop psychic diseases, making them resistant¹³.

Resilience can promote a new meaning of life for the individual. It is considered an evolutionary and health concept characterized by the dynamic processes that integrate and organize human beings' adaptive experiences and functioning¹⁴. Job¹⁵ says that resilience is developed throughout life. The individual has his/her first experiences with childhood resilience, assuming that the family context contributes to its future development. However, resilience can be a protective factor for individuals from psychological imbalances, since childhood, in situations of vulnerability, which go through cases of exposure to intrafamily, urban and school violence, loss of loved ones, and separations^{16,17}. Therefore, individuals with the capacity to recover and have a healthy development in adulthood are considered resilient.

Corroborating the study, the question about self-compassion in fibromyalgia patients was present. Self-compassion is understood as an effective and adaptive emotional regulation tactic to deal with unwanted or unpleasant thoughts or feelings, painful or adverse life events, and, therefore, associated with emotional and psychological well-being. According to Neff¹⁸, self-compassion means compassion towards yourself, within yourself, for a balanced view of yourself, as well as of your negative emotional experiences. Being self-compassionate is about being kind to yourself when challenged with your own personal, emotional weaknesses or eventual difficulties, being more and more associated with resilience¹⁹.

The constitution of self-compassion helps individuals to solve problems that can reach resilience. More self-compassionate people do not blame themselves when they fail, becoming able to admit mistakes and modify behaviors, taking on new challenges. In this sense, high levels of self-compassion are related to the increase in feelings of happiness, curiosity, optimism, and connectivity, as well as the decrease in depression, anxiety, rumination, and fear of failure²⁰.

2. Method

The design was quantitative, descriptive, and transversal. A convenience sample was used to conduct the research. The minimum age of 25 years old was used as an inclusion criterion since it was decided to study an adult sample. Thirty women participated in this study, which was also opened to men, but no men volunteered. This study's population consisted of Fibromyalgia patients from the Metropolitan region of Rio Grande do Sul/Brazil. The exclusion criteria were people under 24 years of age, living outside the Metropolitan region of Rio Grande do Sul and without a medical report/diagnosis.

The data were collected online using the google forms platform. Participants filled out a brief sample characterization sheet with some personal data and three instruments, described below:

1. The Resilience Scale - this scale was developed by Wagnild and Young²¹ and has been used to measure resilience assessed by levels of positive psychosocial adaptation in the face of significant life events²². It consists of 25 items, with a Likert-type answer, ranging from 1 (strongly disagree) to 7 (strongly agree). Scores range from 25 to 175, and high values indicate high resilience²². This scale was adapted and considered relevant to Brazilian culture²².
2. Self-Compassion Scale - developed by Neff²³, and it comprises 26 items (each one evaluated by a five-point Likert scale) that aggregate the isolation facets of humanity, Mindfulness, identification, kindness to oneself, and severe self-criticism.
3. Fibromyalgia Impact Questionnaire (FIQ) - in 1991, Burckhardt et al.²⁴ proposed and tested an instrument to assess the quality of life specifically in fibromyalgia patients, the Fibromyalgia Impact Questionnaire (FIQ). This instrument comprises issues related to functional capacity, professional situation, psychological disorders, and physical symptoms. It consists of 19 questions, consisting of 10 items. The higher the score, the more significant the impact of fibromyalgia on quality of life. The authors concluded that the FIQ is valid for use in clinical and research situations. Furthermore, in Brazil, there is still no valid FIQ proposal.

This research project was submitted to the Feevale University Research Ethics Council. Its nature and objectives were clarified, as well as the benefits, risks, and the absence of burden to the participants. It is in accordance with the Regulatory Guidelines and Norms for Research Involving Human Beings, present in Resolution no. 466 of December 12th, 2012, of the National Health Council²⁵.

The study took place only after acceptance by the ethics committee under opinion number 3,962,449. The volunteers' participation was consented through the acceptance of the Free and Informed Consent Term - FICT. The term clearly indicated the research's objectives and procedures, guaranteeing the privacy, confidentiality of information, and how the data collected was used. Besides, the freedom to withdraw without a loss was ensured.

3. Results

The presentation of results is organized in three stages. In the first, the results of the sample characterization will be presented. Afterwards, the descriptive results of the psychometric instruments used will be presented. Finally, correlational analyzes between the dimensions of self-compassion and resilience will be presented.

The characteristics of the 30 participants who made up the final sample of this research will be described, being 100% female (n=30) with an average age of 44.07 (SD=9.60), ranging in age from 27 to 57 years. Regarding the diagnosis, the average time was 6.53 years (SD=5.11), with a minimum of one year and a maximum of 20 years. The group that received the diagnosis less than or equal to 4 years ago (n=12) represented 40% of the sample, and those who received it within 5 years (n=18) were 60%. The study of comparison of means of the variable time of diagnosis was carried out using the Mann Whitney test. Still, no significant difference was found concerning the resilience and self-compassion variables.

Regarding education, 10% of the sample had incomplete primary education (n=3), 30% completed high school (n=9), 20% incomplete higher education (n=6), and the majority of 40% with higher education complete (n=12). In the analysis of the comparison of this variable's means using the Kruskal-Wallis non-parametric test, no significant difference was found with the resilience and self-compassion variables.

The resilience variable analysis showed an average of 129.33 points (SD=15.64), with a minimum result of 88 and a maximum of 155 points. Considering that the instrument has a Likert scale of 1 to 7 points, the instrument's average was 5.17 (SD=0.62). In the classification of the resilience variable, it was identified that 26.7% of the sample has low resilience (n=8), 60% average resilience (n=18), and 13.3% high resilience (n=4). This instrument has 5 dimensions, which increasingly appeared in the following sequence: Optimism (4.07; SD=1.05); Personal competence (5.07; SD=0.85); Self-discipline (5.12; SD=0.67); Autonomy (5.68; SD=0.91); Troubleshooting (6.01; SD=0.62). Thus, it is observed that the participants in our study with Fibromyalgia have, in general, higher levels of problem-solving and lower levels of optimism regarding the components of resilience. In the comparison of means of the variable resilience classification, using the Kruskal-Wallis test, a significant difference was found in the variables of self-compassion (p=0.004) and their dimensions of Over Identification (p=0.004), Isolation (p=0.013), Mindfulness (p=0.008), Self-Kindness (p=0.024) and Self-Criticism (p=0.019). The highest results of self-compassion are found in high resilience.

The variable self-compassion had a mean of 75.83 points (SD=18.96), with a minimum of 38 and a maximum of 114 points. The instrument has a Likert scale from 1 to 5, which had a mean of 3.03 points (SD=0.759). The instrument has six dimensions that are presented in an increasing way: Self-criticism (2.41; SD=1.02); Identification (2.59; SD=1.01); Isolation (2.95; SD=1.06); Self-Kindness (3.23; SD=0.830); Sense of humanity (3.61; SD=0.830); Mindfulness (3.67; SD=0.81). Therefore, it is observed that Fibromyalgia patients have, in general, higher levels of mindfulness and lower levels of self-criticism in relation to the components of self-compassion.

In the Fibromyalgia Impact assessment instrument (FIQ), which analyzes the period of the last seven days and presents a variation from 0 to 79 points, an overall mean of 46.47 points was identified

(SD=9.95), with a minimum score of 20 and a maximum of 66 points. Table 1 shows the descriptive analysis of the first part of the FIQ regarding functional capacity.

Table 1. Descriptive analysis of functional capacity

Variable	N	Min	Max	Mean	SD
Frequency of shopping	30	0	2	0.80	0.805
Frequency of laundry washing	30	0	3	0.97	0.809
Frequency of cooking	30	0	2	1.00	0.788
Frequency of doing the dishes	30	0	3	1.00	0.871
Frequency of cleaning the house (sweeping, wiping, etc.)	30	0	3	1.63	0.890
Frequency of making the bed	30	0	2	1.00	0.871
Frequency of walking several blocks	30	1	3	2.00	0.587
Frequency of visiting family or friends	30	0	2	1.40	0.814
Frequency of gardening	30	0	3	2.13	0.776
Frequency of driving a car or riding a bus	30	0	3	1.13	0.860

Table 2 shows the sample participants' perception concerning questions about the number of days they felt good, and days they could not perform their activities.

Table 2. Participants' perception of the last week

Variable	N	Min	Max	Mean	SD
In the past seven days, how many days have you felt good?	30	0	7	3.40	1.754
In the past seven days, because of fibromyalgia, how many days have you missed work (or stopped working if you work at home)?	30	0	7	2.37	1.991

Table 3 shows the participants' perception of their activity capacity, physical and emotional sensation, on a scale from 0 to 5, with 0 (not interfering) and 5 (very disturbing).

Table 3. Descriptive analysis of the participants' perception of activity capacity, physical and emotional sensation

Variable	N	Min	Max	Mean	SD
How much has fibromyalgia interfered with doing your job?	30	0	5	3,33	1,516
How much pain have you felt?	30	0	5	3,80	1,297
Have you felt tired?	30	2	5	4,43	0,858
How have you felt when getting up in the morning?	30	1	5	4,10	0,995
Have you felt stiff (or your body stuck)?	30	1	5	4,10	1,062
Have you felt nervous or anxious?	30	1	5	4,00	1,145
Have you felt depressed or discouraged?	30	1	5	3,87	1,106

In the correlation study carried out using the Spearman test, a moderate correlation was identified between the variables Resilience and Self-Compassion ($\rho = 0.636$; $p = 0.000$). The impact of fibromyalgia demonstrated a correlation with resilience (problem-solving) ($\rho = 0.496$; $p = 0.026$).

The optimism dimension of Resilience showed a correlation with Education ($\rho = -0.415$; $p = 0.022$). A correlation was also found in the Self-Compassion’s dimensions of Isolation of ($\rho = 0.363$; $p = 0.049$), Self-Kindness ($\rho = 0.431$; $p = 0.017$), Sense of Humanity ($\rho = 0.510$; $p = 0.004$) and Self-Criticism ($\rho = 0.366$; $p = 0.047$).

The dimension of Personal Competence of Resilience demonstrated correlation with the Self-compassion’s dimensions of Identification ($\rho = 0.521$; $p = 0.003$), Isolation ($\rho = 0.624$; $p = 0.000$), Mindfulness ($\rho = 0.500$; $p = 0.005$), Self-kindness ($\rho = 0.423$; $p = 0.020$), Sense of humanity ($\rho = 0.540$; $p = 0.002$) and Self-criticism ($\rho = 0.498$; $p = 0.005$).

The Resilience’s Self-Discipline dimension demonstrated a correlation with the Self-Compassion’s dimensions of Identification ($\rho = 0.434$; $p = 0.016$), Isolation ($\rho = 0.509$; $p = 0.004$), and Mindfulness ($\rho = 0.362$; $p = 0.050$).

Linear regression analysis was performed using the stepwise method, with a significance level ≤ 0.05 , with the total FIQ - Fibromyalgia Impact Assessment as the dependent variable. Table 4 shows the analysis of the explanatory model.

Table 4. Multiple Linear Regression of the dependent variable FIQ - Impact of Fibromyalgia

Model	Nonstandard coefficients		Standardized coefficients			Collinearity statistics	
	B	Standard error	Beta	t	Sig.	Tolerance	VIF
(Constant)	16,605	14,837		1,119	0,273		
Troubleshooting	8,814	2,591	0,551	3,402	0,002	0,883	1,132

In the analysis presented in Table 4, the relationship (signal and intensity) between the Fibromyalgia impact variable assessed by the FIQ (dependent, explained) was directly verified with the problem-solving variable, which is a dimension of the resilience variable. An indirect relationship between the impact of fibromyalgia and the Mindfulness dimension of the Self-Compassion variable was also identified. In this model, an R square (R^2) of 0.376 was obtained. This coefficient of determination is a measure of the efficiency of the regression equation. It indicates that 37.6% of the variations in fibromyalgia impact can be explained by variations in resilience (problem-solving) and self-compassion (mindfulness). In this group, it is noticed that the decrease in the impact of fibromyalgia is associated with less use of the problem-solving strategy and an increase in the Mindfulness strategy.

4. Discussion

Fibromyalgia affects mainly women, reaching a level of 75 to 95% compared to men⁵. It affects mostly women in the age group between 30 and 60 years and may also appear during childhood and adolescence^{1,2,3}. In this study, it was possible to verify that the respondents' average age was in the age

group of 44 years old, varying between 27 to 57 years old. The participants' average diagnosis time was 6 years, with 60% diagnosed more than 5 years, with a minimum period of 1 year and a maximum of 20 years. Through this study, no difference was identified between resilience and self-compassion for the time of diagnosis. Another point considered in which it could give some alteration in resilience and self-compassion would be the participants' academic formation. However, there was no significant difference between resilience and self-compassion for the study's time, even though the majority, around 40% with completed higher education.

This study aimed to investigate the association between resilience and self-compassion in patients with Fibromyalgia. However, most participants, being 60%, had medium resilience, and the minority (13.3%) showed high resilience. It appears, then, that most fibromyalgia patients, seen by this study, do not show a high level of resilience, which is based on optimism, personal competence, self-discipline, autonomy, and problem-solving. It is observed that the study participants with Fibromyalgia have, in general, higher levels of problem-solving and lower levels of optimism regarding the components of resilience. Barbosa²⁶ cites optimism as the ability to believe that situations will change and always remain positive and hopeful about the future, managing adversities that may arise. Thus, this study's participants have certain disbelief concerning the future and the possibilities to improve from the syndrome. On the other hand, they showed higher levels of troubleshooting together with self-efficacy, meaning the individual's belief in finding solutions to problems that may arise²⁶.

Comparing the means of the resilience classification, a significant difference was found in the variables of self-compassion and its dimensions of identification, isolation, mindfulness, self-kindness, and self-criticism. The highest results of self-compassion are found in high resilience. Therefore, it was found that Fibromyalgia patients have, in general, higher levels of mindfulness and lower levels of self-criticism concerning the components of self-compassion. For Neff²⁷, mindfulness means keeping the conscience in balance, accepting one's painful feelings and thoughts, instead of identifying oneself with them. Although the components of self-compassion are conceptually and phenomenologically distinct, they are interactive and interdependent. Therefore, being self-compassionate implies the well-being of the self, changing warmly when necessary. Being self-compassionate presupposes wanting well-being for the self, encouraging the change in a warm way when necessary, and correcting painful and dysfunctional behaviors.

The present study showed a moderate correlation between resilience and self-compassion. Also, the impact of fibromyalgia, there was a more significant relationship between resilience. A systematization of the characteristics that define resilience is given by the ease of adaptation of some aspects, such as identifying stressful situations, being realistic in assessing the capacity for self-action, and others before stressful factors. It is also recognized by the interpersonal skills and, in solving-problems efficiently, self-esteem and self-control, which allows individuals to face new experiences with a sense of competence^{15,28}.

5. Conclusion

It was observed that the study participants with Fibromyalgia have, in general, higher levels of problem-solving and lower levels of optimism regarding the components of resilience. It may show that dealing with

the difficulties of the syndrome in everyday life makes them more resistant to dealing with problems and competent to solve them. However, from a general angle, because they have lived with pain and specific difficulties for so long, optimism may become low.

Generally, higher levels of mindfulness and lower self-criticism levels were also identified concerning the components of self-compassion. It may mean that, over time, people with fibromyalgia start to value the here and now more, meaningful to mindfulness, that is, the present moment, than to think so much about tomorrow, because they do not know if they will be well or with ache. This study group showed that the decrease in the impact of fibromyalgia is associated with less use of the problem-solving strategy and an increase in the Mindfulness strategy, which was the most apparent component of self-compassion in the study, identifying in this research the low level of resilience of women with the syndrome. The study also showed correlations of resilience and self-compassion in patients with the syndrome, although sometimes low.

7. References

1. Feldman, D. (1999). Fibromialgia aspectos clínicos. *Revista de Fisioterapia da Universidade de São Paulo*, 6: 33-34.
2. Skare, T. L. (1999). *Reumatologia princípios e prática*. Rio de Janeiro: Guanabara Koogan.
3. Lima, C. P., Carvalho, C. V. (2008). Fibromialgia uma abordagem psicológica. *Aletheia*, 28: 146-158.
4. Chaitow, L. (2002). *Síndrome da fibromialgia: Um guia para o tratamento*. São Paulo: Manole.
5. Ferreira, E. A. G., Marques, A. P., Matsutani, L. A., Vasconcellos, E. G., Mendonça, L. L. F. (2002). Avaliação da dor e estresse em pacientes com fibromialgia. *Rev. Bras. Reumatol*, 42(2).
6. Littlejohn, G. (1989). Medicolegal aspects of fibrositis syndrome. *J Rheumatol*, 19: 169-173.
7. Groddeck, G. (1997). *O livro Disso*. São Paulo: Perspectiva.
8. Grace, G. M., Nielson, W. R., Hopkins, M., Berg, M. A. (1999). Concentration and Memory Deficits in Patients with Fibromyalgia Syndrome. *Journal of Clinical and Experimental Neuropsychology*, 21(4): 477-487.
9. Turk, C.D., Gatchel, J.R. (1996). *Psychological Approaches to pain management a practitioner's handbook*. New York: The Guilford Press.
10. Angelotti, G. (2001). Dor crônica: Aspectos Biológicos, Psicológicos e Sociais. In: V. A. A. Camon (Org.). *Psicossomática e a Psicologia da Dor*. (pp. 113-130). São Paulo: Pioneira.
11. Sasdelli, E. N., Miranda, E. M. F. (2001). Ser: o sentido da dor na urgência e na emergência. In: V. A. A. Camon (Org.). *Psicossomática e a psicologia da dor* (pp. 93-112). São Paulo: Pioneira.
12. Benetti, I. C., Crepaldi, M. A. (2012). Resiliência revisitada: Uma abordagem reflexiva para principiantes no assunto. *Revista Electrónica de Investigación y Docencia (REID)*, 7: 7-30.
13. Anthony, E. J., Cohler, B. J. (1987). *The invulnerable child*. New York: Guilford Press.
14. Castro, E. K., Moreno-Jiménez, B. (2007). Resiliencia em niños enfermos crônicos: aspectos teóricos. *Psicologia em Estudo*, 12: 81-86.

15. Job, J. R. P. P. (2000). *A escritura da resiliência: testemunhas do holocausto e a memória da vida*. 208 f. Tese (Doutorado em Psicologia Clínica) – Pontifícia Universidade Católica de São Paulo, São Paulo.
16. Pinheiro, D. P. N. (2004). A resiliência em discussão. *Rev. Psicologia em Estudo*, 9(1): 67-75.
17. Munist, M., Santos, H., Kotliarenco, M. A., Ojeda, E. N. S., Infante, F., Grotberg, E. (1998). *Manual de identificación y promoción de la resiliencia en niños y adolescentes*. Washington: Oscar Órdenes.
18. Neff, K., Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, 12(2): 160-176.
19. Krieger, T., Altenstein, D., Baettig, I., Doering, N., Grosse Holtforth, M. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, 44(3): 501-513.
20. Neff, K., Vonk, R. (2009). Self-compassion versus global self-esteem: two different ways of relating to oneself. *Journal of Personality*, 77(1): 23-50.
21. Wagnild, G. M., Young, H. M. (1993). Development and psychometric evaluation of the resilience scale. *Journal of Nursing Measurement*, 1(2): 165-177.
22. Pesce, R. P., Assis, S. G., Santos, N., Oliveira, R. V. C. (2004). Risco e proteção: em busca de um equilíbrio promotor de resiliência. *Psicologia: Teoria e Pesquisa*, 20(2): 135-143.
23. Neff, K. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2: 223-250.
24. Burckhardt, C. S., Mannerkorpi, K., Hedenberg, L., Bjelle, A. (1994). A randomized, controlled clinical trial of education and physical training for women with fibromyalgia. *J Rheumatol*, 21: 714-20.
25. Brasil. (2016). *Proposta de emenda à Constituição*, nº 510, de 07 de Abril, 2016.
26. Barbosa, G. S. (2006). *Resiliência em professores do ensino fundamental de 5ª a 8ª série: Validação e aplicação do “Questionário do índice de resiliência: adultos Reivich - Shatté/Barbosa”*. São Paulo: (Doutorado em Psicologia Clínica) Pontifícia Universidade Católica – São Paulo.
27. Neff, K. (2003). Self-compassion: an alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2: 85-101.
28. Szymans, H., Yunes, M. A. M. (2001). Resiliência: noção, conceitos afins e considerações críticas. In: J. Tavares (Org.). *Resiliência e educação* (pp. 13-42). São Paulo: Cortez.