



ISSN: 2230-9926

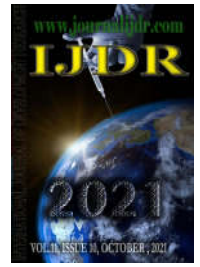
Available online at <http://www.journalijdr.com>

# IJDR

*International Journal of Development Research*

Vol. 11, Issue, 10, pp. 50960-50962, October, 2021

<https://doi.org/10.37118/ijdr.23185.10.2021>



RESEARCH ARTICLE

OPEN ACCESS

## ANALYSIS OF THE RELATIONSHIP BETWEEN DEPRESSION AND SELECTION, OPTIMIZATION AND COMPENSATION STRATEGIES IN OLDER PEOPLE

Martina Dillenburg Scur<sup>1</sup>, Cesar Augusto Kampff<sup>2</sup>, Deise Claudiane Rodrigues Antunes<sup>3</sup>, Sumaia Fey<sup>3</sup>, Marliese Christine Simador Godoflita<sup>3</sup>, Patrícia Tarouco Quincozes Felitti<sup>1</sup> and Geraldine Alves dos Santos<sup>4\*</sup>

<sup>1</sup>Postgraduate Program in Cultural Diversity and Social Inclusion, University Feevale; <sup>2</sup>Master Psychology, University Feevale; <sup>3</sup>Research Group Body, Movement and Health (CNPq), University Feevale; <sup>4</sup>Postgraduate Program in Cultural Diversity and Social Inclusion, Master Psychology University Feevale

### ARTICLE INFO

#### Article History:

Received 10<sup>th</sup> August, 2021  
Received in revised form  
26<sup>th</sup> September, 2021  
Accepted 17<sup>th</sup> October, 2021  
Published online 30<sup>th</sup> October, 2021

#### Key Words:

Successful aging,  
Depression,  
Older people.

#### \*Corresponding author:

Geraldine Alves dos Santos

### ABSTRACT

Life expectancy has increased considerably. As a result, older people acquire more and more visibility of their needs and become more active in society. This study aimed to verify if there is a relationship between depression and Selection, Optimization, and Compensation Strategies in older people living in the city of Ivoti/RS. The study had a descriptive, quantitative and cross-sectional design. The sample consisted of 193 subjects, of both sexes, between 60 and 79 years old. The following instruments were used for data collection: Sociodemographic data, Geriatric Depression Scale, and SOC Inventory. As a result, a significant and negative correlation was observed between depressive symptoms and SOC strategies: the more coping strategies available to individuals, the fewer depressive symptoms are found. The study concluded that SOC strategies positively contribute to the capacity and satisfaction with life demands, coping with crisis situations, mental illnesses, and maintaining skills.

Copyright © 2021, Martina Dillenburg Scur et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Martina Dillenburg Scur, Cesar Augusto Kampff, Deise Claudiane Rodrigues Antunes, Sumaia Fey et al. "Analysis of the relationship between depression and selection, optimization and compensation strategies in older people", *International Journal of Development Research*, 11, (10), 50960-50962.

## INTRODUCTION

Population aging is a worldwide phenomenon that started in high-income countries and has been growing in medium and low-income countries, including Brazil. According to the Continuous National Household Sample Survey (Pnad-C), which, in addition to the characteristics of households, regularly investigates information on gender, age, and color or race of residents, the country gained, between 2012 and 2017, 4.8 million on seniors, reaching the 30.2 million mark. Therefore, an 18% growth of this age group in 5 years. Although desirable and represents an achievement of humanity, this growth has social, economic, political, and health implications (Veras, 2018). Having successful aging is one of the widely spread themes among the media, services, research that inform laws and public policies in gerontology. In this area, it is accepted that chronological time must be followed by an active life, a need identified due to efforts carried out in recent years related to increased

production in science, technology, and health care practices for the old people. It is desirable that aging occurs with quality and maintenance of the autonomy of individuals, seeking to preserve the opportunity for older people to continue to participate in society, and minimize the possibilities of social exclusion (Teixeira, Neri, 2008). However, it is also known that old age is a period characterized by varied losses (family, friends, physical capacity, work activity, social roles, among others). These losses of old people may be experienced with great suffering, prolonged periods of mourning, and pathological conditions. For these reasons, old people are characterized as a vulnerable group for depression. The study of older people's abilities to deal with the aging process and losses is essential to consider ways to face the difficulties inherent in this life stage (Neri, 2014). Development can be understood as a multidirectional and multidimensional process, with variability and different courses according to each individual's life history. Among the emotional health outcomes, depression is considered a public health issue, being a psychiatric illness that significantly impacts the individual's functional capacity (OMS, 2017). According to Ferreira et al. (2014),

depression cannot be considered a natural consequence of aging. It is, likewise, a psychological morbidity associated with intense suffering and deterioration in the quality of life. Decreased quality of life is highly relevant when it comes to depression in older patients. In addition, it is stated that the reduction of physical activity or sedentary lifestyle during aging becomes a factor strongly associated with the evolution to cases of depression and physical disability (Araújo et al., 2018). Depression in old age is explained by several factors, including advanced age, low education, unfavorable socioeconomic status, low social support, stressful events, previous depression, adverse health conditions, functional limitation, and pain (Pinho; Custódio; Makdisse, 2009). Still, in this context, Castel (2011) refers to the profound transformations in the work process and social isolation as characteristics (but not the only ones) that place the individual within the exclusion zone. In the context of old age, this occurrence, among others, is linked to the detachment of senior people from formal work due to retirement, reflecting on the search for new alternatives of engagement and social reintegration to manage a healthy old age model avoiding weakening and social isolation. From another perspective, the Lifespan paradigm proposes that normative and non-normative factors, whether genetic-biological or sociocultural, influence the course of life, as well as the adaptive way of reacting to factors that limit or enhance development, involving a balance between gains and losses (Baltes et al., 1999; Baltes, 1987). From the assumptions of the LifeSpan paradigm, it was possible to recognize the chance of successful aging as a result of using strategies to face the challenges posed by losses and declines and to achieve personal goals, satisfaction, and maintenance of the level of functioning until old age (Camargo et al., 2014; Freire, Rezende, Rabelo, 2012). The proposal to maintain a balance between losses and gains guided the development of the Selection, Optimization, and Compensation (SOC) model, which presents strategies for coping with normative and non-normative changes throughout life. These strategies are selection, optimization, and compensation (Teixeira, Neri, 2008, Freire et al., 2012). Gonçalves (2015) believes that successful aging is compatible with a healthy and fulfilling life. Prevention plays a crucial role in this process, meaning that, according to each person's lifestyle, the aging process is different from person to person. Another aspect that this model values is an active performance in life, which implies the development of networks of social relationships, which can benefit health. But the involvement in active life can be related equally with the performance of activities on the part of old people. The present study was conducted due to the existing demand in the literature for evidence concerning the impact of depression on old people. The current investigation aimed to verify the existence of a relationship between Depression and Selection, Optimization, and Compensation Strategies in old people living in the city of Ivoti/RS in relation to the theoretical field of aging psychology.

## METHODS

The method had a descriptive, quantitative, and cross-sectional design. The sample of this study consisted of 193 subjects of both sexes, between 60 and 79 years old. The assessment instruments were applied in stages, respecting the subjects' willingness to use them. Data collection from these individuals was carried out on the five health centers in the city of Ivoti/RS. Inclusion criteria comprised people over 60 years of age, not being institutionalized or hospitalized, have mental and health conditions to have independence and autonomy to participate in the study. Exclusion criteria included presenting dementia processes, frailty syndrome, being hospitalized or institutionalized. The instruments used to analyze the variables depression and successful aging were GDS-15 and SOC-12. Geriatric Depression Scale (GDS) is one of the most used, mainly in Brazilian reality, initially consisting of 100 questions. It was reduced to 30 and later to only 15 questions, demonstrating sensitivity and specificity similar to the full scale. The Brazilian version GDS-15 offers valid measures for detecting major depressive episodes in old people. The scale is scored according to the presence of depressive symptoms, adopting a cutoff point of 6 symptoms (normal  $\leq 5$ ; mild depression  $\geq$

6 and  $\leq 10$  symptoms;  $> 10$  severe depression). It presents an easy and quick application, with questions that request yes or no answers, according to how someone felt about the last two weeks preceding the evaluation (Almeida, Almeida, 1999). SOC Inventory (Selection, Optimization, Compensation) explains the concept of successful aging developed by Baltes, Baltes, Freund, and Lang (1999). Its original version contains 48 items, but in this study, the reduced version described by Baltes (2002) as more favorable will be used. This version consists of 12 items that assess the use of SOC strategies by old people. Each item consists of two statements, one describing the SOC strategy's behavior and the other offering a reasonable option but not related to the SOC strategy. The participants must decide which of the two alternatives characterizes their behavior. After the classification and spreadsheet of the collected data, a correlation study was carried out using Pearson's correlation coefficient with an acceptance level  $\leq 0.05$ . The Statistical Package for the Social Sciences –SPSS Windows, v.25.0 - was used for the statistical study.

## RESULTS AND DISCUSSION

A sample of 193 old people participated in the research: 66.3% were between 60 – 69 years old, and 33.7% were between 70 – 79 years old. Regarding gender, 28.5% of the individuals were male, and 71.5% were female. Concerning the education of the individuals, 82.9% have incomplete primary education, 5.9% have not studied, and 5.9% have higher education. Most elderly people interviewed (87%) presented an absence of depression, 11.9% mild depression and 1.0% severe depression. Table 1 shows the correlations related to successful aging strategies and the GDS variable, performed by Pearson's test. It was observed that the variables that had a statistically significant association with the depression variable were: SOC strategies ( $r = -0.268$ ;  $p = 0.000$ ), Elective Selection ( $r = -0.157$ ;  $p = 0.029$ ), Selection based on losses ( $r = -0.153$ ;  $p = 0.033$ ), Optimization ( $r = -0.210$ ;  $p = 0.003$ ) and Compensation ( $r = -0.174$ ;  $p = 0.015$ ).

**Table 1. Correlation analysis of the GDS with successful aging strategies (n=193)**

Variable	r	p
SOC	-0.268	0.000
Elective Selection	-0.157	0.029
Selection based on losses	-0.153	0.033
Optimization	-0.210	0.003
Compensation	-0.174	0.015

Therefore, some understandings may arise: the more successful aging strategies the individual uses, the fewer depressive episodes are present; the more individuals can define their choices of goals and actions, the fewer depressive episodes may appear; the more the individual uses strategies for successful aging based on selection based on losses, the lower proportion of depressive symptoms; the more there is the monitoring of the effects and strategies to be applied to achieve good results, the less there is a disposition for depressive episodes; the more the individual uses compensatory strategies to circumvent the effect of losses, the less depressive symptoms the individual presents. It is worth highlighting the selection variable based on losses with a higher significance level than the depression variable. It is understood that human development occurs in constant dynamic interaction with available resources and situations faced and is conditioned by individual factors, not only biological and psychological but also cultural and social context (Spinelli et al., 2018). In this sense, the relationship between SOC strategies and depressive symptoms was evaluated in some studies, demonstrating the importance of using these resources to minimize depressive symptoms (Shang et al., 2015). SOC resources can be understood as a way to regulate the consequences of stressors faced throughout life. Therefore, it is a way to mitigate damage, optimize what is possible and adapt to the changes that have occurred. Several studies in aging (Rudinge, Thomae, 1990; Baltes, Mayer, 1999) have shown that stressful situations can be an opportunity for personal development,

changing the effects on the psychological well-being and health of individuals according to the interference of several variables. In other words, life events and the resulting transitions are essential for understanding the factors involved in psychological development (Fonseca, 2007). In addition, there is the impact of non-normative events, which is enhanced by the experience of lack of control. Advanced age increases the possibilities of living with adverse events increase. However, the greater the sense of control over the event, the lower the chance of developing adaptation problems, such as social isolation, somatic illnesses, dependence, and depressive symptoms (Neri, 2014). Therefore, the modifying effect of SOC resources on the relationship with depression in old people reinforces the relevance of stimulating intervention and prevention programs in mental health. Studies have shown that the insertion of these strategies can help promote well-being, decrease depressive symptoms, and improve the ability to cope with illnesses and self-image (Riedel, Müller, Ebener, 2015; Unson, Richardson, 2013).

## CONCLUSION

By emphasizing the ability to recover in the face of adverse situations older people face, there is the deconstruction of a myth of the uniform decline in old age, characteristic of biological conceptions. Many people can sail well through the years. In this sense, aging in an active way is characterized by a biopsychosocial balance in the life of the old people, being guided by determining and essential factors for achieving elements such as autonomy, promotion of physical and mental health, disease prevention, and independence. Based on the findings, it is possible to conclude that selection, optimization, and compensation strategies contribute positively to the capacity and satisfaction with life demands, coping with situations of crisis, mental illness, and maintenance of skills. It is considered that the understanding and application of the use of SOC strategies can be of great relevance in the treatment and prevention of depression in old people, with theoretical and practical implications, being relevant to consider the role of self-regulation of losses in the treatment and prevention of depression. Thus, it is suggested that future investigations continue the study of the effects of SOC resources and their implications on the emotional state of old people.

## REFERENCES

Almeida O P, Almeida S A. 1999. Short versions of the Geriatric Depression Scale: A study of their validity for the diagnosis of major depressive episode according to ICD-10 and DSM-IV. *Int J Geriatr Psychiatry* 14(10): 858-65.

Araújo CAH, Giehl MWC, Danielewicz AL, Araújo PG, D'Orsi E, Boing AF. 2018. Ambiente construído, renda contextual e obesidade em idosos: evidências de um estudo de base populacional. *Cadernos de Saúde Pública* 34(5):1-15.

Baltes P B. 1987. Theoretical propositions of the lifespan developmental psychology: On the dynamics between growth and decline. *Developmental Psychology* 23:611-696.

Baltes PB, Mayer KU (1999). *The Berlin Aging Study: Aging from 70 to 100*. Cambridge University Press.

Baltes MM (2002). *New frontiers in the future of aging: from successful aging of the young old to the dilemmas of the fourth age*. Valencia.

Baltes PB, Baltes MM, Freund AM, Lang F (1999). *The measure of selection, optimization and compensation by self-report: technical report*. Berlin: Max-PankInstitut für Bildungs Forschung.

Camargo BV, Contarello A, Wachelke JFR, Moraes DX, Piccolo C (2014). Representações Sociais do Envelhecimento entre Diferentes Gerações no Brasil e na Itália. *Revista Psicologia em Pesquisa* 8(2). Retrieved in <https://doi.org/10.24879/201400800200233>.

Castel R (2011). *Desigualdade e a Questão Social*. São Paulo: Educ.

Ferreira L, Roncada C, Tiggemann CL, Pieta Dias C (2014). Avaliação dos níveis de depressão em idosos praticantes de diferentes exercícios físicos. *ConScientiae Saúde* 13(3):405-410.

Fonseca AM (2007). Subsídios para uma leitura desenvolvimental do processo de envelhecimento. *Psicologia: Reflexão e Crítica* 20(2): 277-289. <http://dx.doi.org/10.1590/S0102-79722007000200014>

Freire AS, Resende MC, Rabelo DF (2012). Enfrentando mudanças no envelhecimento: o modelo de seleção, otimização e compensação. *Perspectivas em Psicologia* 16(1):190-210.

Gonçalves CD (2015). Envelhecimento bem-sucedido, envelhecimento produtivo e envelhecimento ativo: reflexões. *Estudos Interdisciplinares sobre o Envelhecimento* 20(2):645-657.

Neri AL (2014). Conceitos e teorias sobre o envelhecimento. In: Malloy-Diniz LF, Fuentes D, Cosenza RM (Orgs.). *Neuropsicologia do Envelhecimento: Uma abordagem multidimensional*. Porto Alegre: Artmed. pp. 1-26.

OMS. Organização Mundial da Saúde (2017). Depressão e outros transtornos mentais comuns: estimativas globais de saúde. World Health Organization. Disponível em: <https://apps.who.int/iris/handle/10665/254610>.

Pinho MX, Custódio O, Makdisse M (2009). Incidência de depressão e fatores associados em idosos residentes na comunidade: revisão de literatura. *Revista Brasileira de Geriatria e Gerontologia*, v.12, n.1, p.123-140.

Riedel N, Müller A, Ebener M (2015). Applying Strategies of Selection, Optimization, and Compensation to Maintain Work Ability-A Psychosocial Resource Complementing the Job Demand-Control Model? Results From the Representative IliA Cohort Study on Work, Age, and Health in Germany. *Journal of Occupational and Environmental Medicine* 57(5):552-561. <https://doi.org/10.1097/JOM.0000000000000402>

Rudinger G, Schmitz-Scherzer R (1976). Sample and methods. In: Thomae H (Ed.), *Patterns of aging: Findings from the Bonn Longitudinal Study of Aging* Basel: Karger.

Shang L, Riedel N, Loerbroks A, Müller A, Wege N, Angerer P, Li J (2015). The Association Between Effort-Reward Imbalance and Depressive Symptoms Is Modified by Selection, Optimization, and Compensation Strategy. *Journal of Occupational and Environmental Medicine* 57(11):1222-1227. <https://doi.org/10.1097/JOM.0000000000000546>

Spinelli LF, Pagnussato F, Ribeiro TA, Guareze FS, Feder MG, Macedo CAS, Moreira LF, Galia CR (2018). Comparação clínica, laboratorial edensitométrica de pacientes com coxartrose e com fraturas do colo femoral. *Revista do Colégio Brasileiro de Cirurgias* 45(5): p.1-9.

Teixeira INDAO, Neri AL (2008). Envelhecimento bem-sucedido: uma meta no curso da vida. *Psicologia*. USP 19(1):81-94

Unson C, Richardson M (2013). Insights into the experiences of older workers and change: through the lens of selection, optimization, and compensation. *The Gerontologist* 53(3):484-494. <https://doi.org/10.1093/geront/gns095>

Veras RP (2018). Envelhecer no Brasil: a construção de um modelo de cuidado. *Cien Saude Colet*. 23(6):1929-1936.

\*\*\*\*\*