

# PERSPECTIVES FROM POSITIVE PSYCHOLOGY IN OLDER ADULTS: BRIEF LITERATURE REVIEW

*Nathália Brandolim Becker*<sup>1</sup>  
*Karine Alexandra Del Rio João*<sup>2</sup>  
*Saul Neves de Jesus*<sup>3</sup>  
*João Bonança*<sup>4</sup>  
*Rute Martins*<sup>5</sup>

## ABSTRACT

The present review aims to determine the main findings concerning positive psychology in older adults. We used the electronic databases Web of Science and EBSCO, which were efficient tools to find the necessary heterogeneity for the selection of studies published between 2005 and 2015, through the following keywords: “Positive Psychology” and “Older”. After selecting 12 studies, they were assessed regarding the following information: (a) source; (b) setting; (c) number of older adults (participants); (d) average age (SD); (e) inclusion criteria for each study; (f) instruments; and (g) the results of our investigative question. The results show that interventions with a positive psychology approach are favorable to the reduction of symptoms (anxiety and depression) and the increase of well-being; and positive psychology constructs have the same impact on well-being and on reducing symptoms, portraying a promising approach to public health. Our investigation showed the necessity to develop a new perspective on aging. Some of the assessed studies reported that it is possible to achieve this with the inclusion of positive psychology, which can facilitate this development.

Keywords: Older Adults, Elderly, Positive Psychology, Review.

JEL Classification: I31

## 1. INTRODUCTION

The world’s population is aging and the World Health Organization (WHO, 2015) reported that, in the next decades, namely by 2050, the world’s population aged over 60 years will have increased from the current 841 million to 2 billion, making the well-being of seniors a new challenge in global public health. In 2020, for the first time in history, the number of people over 60 years old will be higher than that of children up to 5 years old (WHO, 2015). Unfortunately, the increasing number of elderly people has not been accompanied by an increase in public services ready to take care of them (WHO, 2015). A contradiction is apparent in this situation, because higher life expectancy is not directly related to healthy living, since many elderly people are living longer but without quality of life, currently

<sup>1</sup> Nathália Brandolim Becker, University of Algarve, Research Centre for Spatial and Organizational Dynamics, Faro, Portugal. (nathalia\_brandolim@msn.com)

<sup>2</sup> Karine Alexandra Del Rio João, University of Algarve, Faro, Portugal. (delriokarina@gmail.com)

<sup>3</sup> Saul Neves de Jesus, University of Algarve, Faculty of Human and Social Sciences, Research Centre for Spatial and Organizational Dynamics, Faro, Portugal. (snjesus@ualg.pt)

<sup>4</sup> João Bonança, University of Algarve, Research Centre for Spatial and Organizational Dynamics, Faro, Portugal. (joaobonanca@gmail.com)

<sup>5</sup> Rute Martins, University of Algarve, Faro, Portugal. (a47281@ualg.pt)

depending on drugs or being kept in specialized institutions. This scenario indicates a public health problem that needs to be solved. The latest world report on ageing and health highlighted the need for a new global framework to cover the wide diversity of older populations and address the inequalities beneath it (WHO, 2015). From a global perspective, the described needs focus on the development of new health care systems in the long term; a change in the way of understanding aging; encouraging the development of new processing approaches; and strengthening the capacity to assist older people in adapting to the changing environment (WHO, 2015).

We suggest that the need to change the understanding of aging might be addressed with positive psychology. The focus is currently still on the disease model (WHO, 2015), of which the main feature is the repair operation of human injury (Seligman & Csikszentmihalyi, 2000), an approach that has not been adequate (WHO, 2015). In addition, positive psychology produced the goal of “catalyzing a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities” (Seligman & Csikszentmihalyi, 2000, p. 6). Thus, positive psychology has offered a new approach to mental health promotion (Kobau et al., 2011).

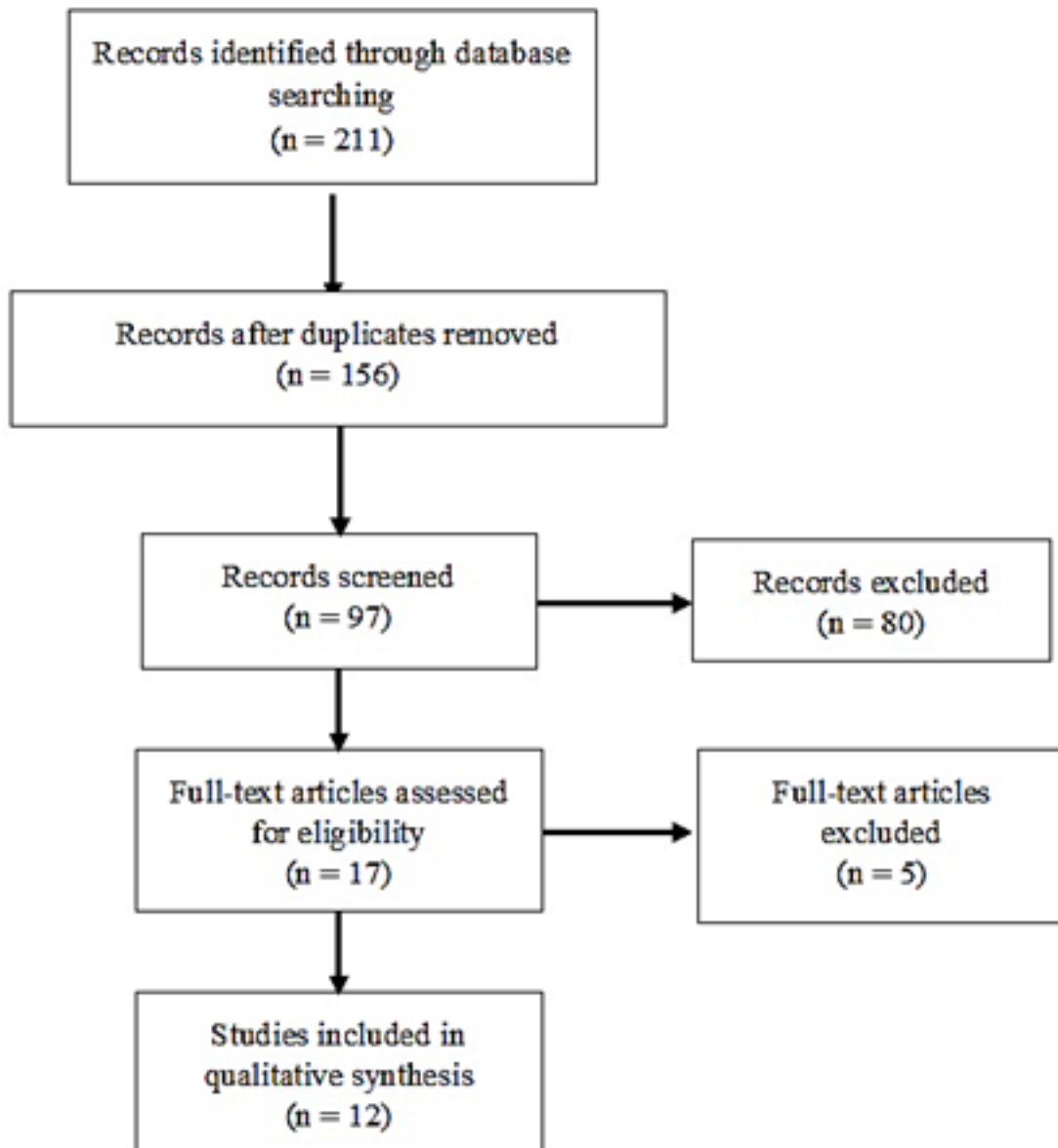
Investigations with seniors have used interventions of positive psychology methods with positive effects on well-being and on reducing anxiety and depression (Ho, Yeung, & Kwok, 2014; Proyer, Gander, Wellenzohn, & Ruch, 2014; Ramírez, Ortega, Chamorro, & Colmenero, 2014). Increasing the scientific redirection of negative affect (Seligman & Csikszentmihalyi, 2000) in future research may be essential to promoting well-being and long-term quality of life for elderly people. With this in mind, it becomes important to check the main studies that use the measurement of at least one of the constructs of positive psychology. No recent literature review dealing with a specific examination of the variables of positive psychology (measurable) in the elderly was found.

This brief literature review aims to determine the main findings in terms of positive psychology in the elderly, focusing on the prospects for future research. In this way we will try to clarify what has been found in the past decade in published empirical studies, so that, in accordance with the guidelines presented by the WHO (2015), subsequent research can contribute efficiently to the development of strategies and effective public policies with regard to aging.

## **2. METHOD**

The present review reports an investigation of positive psychology aspects in older adults undertaken during the month of November 2015. We used the electronic databases Web of Science and EBSCO, which were efficient tools in finding the necessary heterogeneity for the selection of studies published between 2005 and 2015 through the keywords “positive psychology” and “older,” covering the largest possible amount of studies (n = 211). The next step consisted of removing the duplicated findings (n = 156) and considering some eligibility criteria: the samples should a) consist exclusively of older people or they should be clearly differentiated from the overall sample; b) be empirical studies; c) measure a certain range or actual effectiveness of any program related to positive psychology; d) provide sufficient results for the discussion of the measurement of a particular variable of positive psychology; and e) be written in the English or Portuguese language. Then, the articles assessed as eligible (n = 15) were evaluated. A further 3 studies were excluded given that they did not show the statistical information necessary to understand the results and did not present cohesive conclusions about a construct of positive psychology in older people.

**Figure 1. Phases of the review. The number (n) of studies that remained in the sample was present in each phase**



Source: Own elaboration

After the selection of 12 studies, they were assessed regarding the following information: (a) source; (b) setting; (c) number of older adults (participants); (d) average age (SD); (e) inclusion criteria for each study; (f) instruments; and (g) the results of our investigative question. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was applied to the method of selection and classification of the studies under review (Liberati et al., 2009).

### 3. RESULTS

The characterization of “positive psychology” followed the same approach. All the investigations measured at least one scale of a construct of positive psychology, but some interventions were carried out using the approach of positive psychology with regard to the

use of the variables that comprise it (Ho et al., 2014; Proyer et al., 2014; Ramírez et al., 2014). The theoretical perspective was confirmed by the selection of studies with identical subjects (i.e. older adults). Some studies used the general population for comparative purposes (Işık & Üzbe, 2015; Ruch, Proyer, & Weber, 2010; Westerhof & Keyes, 2010); however, we considered only those that differentiated the elderly population in the analysis of the results.

In these investigations the constructs of “positive psychology” measured through self-report questionnaires were: a) life satisfaction; b) happiness; c) well-being; d) gratitude; e) meaning in life; f) positive emotions; and g) quality of life. The methodological approach was not common to all the studies: some were studies on methods of intervention and quantitative studies, though all were considered to be empirical studies.

Table 1 displays the source, setting, number of older adults overall and per genre, average age, standard derivation, and inclusion criteria for the sample in each investigation. The total number of participants was 4823 (2580 females and 2243 males). This figure does not take into consideration 2 samples for which their papers did not present the exact values of the group of older adults (Işık & Üzbe, 2015; Westerhof & Keyes, 2010). The average age was 73.29 years, calculated from the average values given in the papers comprising only older adults as participants. In the selected investigations, different ages were considered for older adults: a) people over 50 years old (Proyer et al., 2014; Yamada, Merz, & Kisvetrova, 2014); b) people over 55 years old (Smith & Hollinger-Smith, 2015); c) people over 60 years old (Gana, Bailly, Saada, Joulain, & Alaphilippe, 2013; Ho et al., 2014; Ramírez et al., 2014); and d) people over 65 years old (Homan, 2014; Işık & Üzbe, 2015; Koopmans, Geleijnse, Zitman, & Giltay, 2010; Ruch et al., 2010; Westerhof & Keyes, 2010; Wolverson, Clarke, & Moniz-Cook, 2010).

Regarding the setting (Table 1), the majority (n = 9) of the papers considered persons of the general community, namely people who were without cognitive deterioration, non-institutionalized, and not undergoing current psychotherapeutic or psychopharmacological treatment, meaning that most of the participants in these investigations were possibly not sick. On the other hand, three studies were performed with older adults who were using permanent medical services, that is, residents of nursing homes, people diagnosed with dementia, or home care clients.

**Table 1. Articles Included in the Literature Review, Participant Characterization, Setting, and Inclusion Criteria (N = 12)**

Source	Setting	Number of older adults (F/M)	Average age (SD)	Inclusion criteria
Ramírez et al. (2014)	DC <sup>1</sup>	46 (29/17)	71.18 (7.06)	Did not demonstrate cognitive deterioration, aged 60 or older, and gave their informed consent.
Koopmans et al. (2010)	NI <sup>2</sup>	861 (451/410)	75.00 (5.70)	Non-institutionalized elderly men and women aged 65, who agreed to be interviewed at baseline (informed consent)
Ruch et al. (2010)	CD <sup>3</sup>	1792 (919/873)	37.83 (12.80)	German-speaking, completed the questionnaires online
Homan (2014)	CP <sup>4</sup>	106 (73/33)	75.30 (7.0)	People from three community programs aimed at older adults who gave informed consent
Yamada et al. (2014)	HC <sup>5</sup>	361 (239/122)	77.30 (n.i.)	Aged 50 years old and lacking cognitive impairments
Westerhof & Keyes (2010)	NI <sup>2</sup>	1340 (670/670)*	48.32 (17.66)	Dutch-speaking non-institutionalized individuals, households in the Netherlands

Proyer et al. (2014)	OR <sup>6</sup>	510 (163/347)	55.58 (5.16)	Adults over 50 years old, completed baseline questionnaires online, currently not in psychotherapeutic or psychopharmacological treatment, and no current use of illegal drugs on a regular basis
Ho et al. (2014)	CC <sup>7</sup> ; NH <sup>8</sup>	74 (66/8)	77.97 (7.03)	Adults over 60 years old, not clinically depressed, and with intact verbal and hearing abilities for interpersonal communication
Gana et al. (2013)	NI <sup>2</sup>	899 (512/387)	72.73 (5.68)	Non-institutionalized age cohort of residents from the "Center of France" region
Smith & Hollinger-Smith (2015)	CC <sup>7</sup>	164 (121/43)	n.i.	Aged 55 or older, living in a large metropolitan area, and agreed to participate in the study
Wolvenson et al. (2010)	MC <sup>9</sup>	10 (7/3)	81.10 (n.i.)	Diagnosis of dementia, within the mild level of severity of the MMSE <sup>10</sup> , an awareness of memory difficulties and diagnosis, people over the age of 65, with sufficient verbal fluency and able to give informed consent
Işık & Üzbe (2015)	CD <sup>3</sup>	335 (190/145)*	n.i.	Adult population

\* All participants (all ages)

DC<sup>1</sup> – day center (members); NI<sup>2</sup> – non-institutionalized; CD<sup>3</sup> – community dwelling; CP<sup>4</sup> – community programs aimed at older adults; HC<sup>5</sup> – home care clients; OR<sup>6</sup> – online registration; CC<sup>7</sup> – community centers; NH<sup>8</sup> – nursing homes; MC<sup>9</sup> – memory clinic; MMSE<sup>10</sup> – Mini Mental State Exam.

Table 2 presents the main results according to the purpose of this review and the instruments used to collect data from each study conducted from the perspective of positive psychology in older adults. The evaluation tools were separated into three categories: a) negative measures of states of humor and affection; b) measures of cognition and health status; and c) positive measures of states of humor and affection. Regarding the main results, a positive psychology approach decreased the state/symptoms of anxiety and depression, reducing the negative impact of comorbidity as well as increasing specific memory, life satisfaction, happiness, and gratitude. It was also demonstrated that constructs of positive psychology, such as life satisfaction, resilience, happiness, and the ability to enjoy positive experiences (i.e. psychological well-being), had an impact on reducing mortality and depression in older adults, even though they showed lower levels of subjective well-being than younger ones.

**Table 2. Main Results of the Studies Conducted on Positive Psychology in Older People (N = 12)**

Source	Instruments	Results
Ramírez et al. (2014)	STAI <sup>1</sup> ; BDI <sup>2</sup> ; AMT <sup>3</sup> ; MEC <sup>4</sup> ; LSS <sup>5</sup> ; SHS <sup>6</sup>	Those participants who followed the program showed a significant decrease in states of anxiety and depression as well as an increase in specific memories, life satisfaction, and subjective happiness compared with the control group.
Koopmans et al. (2010)	SSWO <sup>7</sup> ; PA <sup>8</sup>	Happiness predicted lower mortality, which may partly be mediated by more physical activity and lower morbidity.
Ruch et al. (2010)	VIA-IS <sup>9</sup> ; SWLS <sup>10</sup> ; OTH <sup>11</sup>	Humor presented a strong positive correlation with life satisfaction, as well as with a pleasurable and engaged life, but a weaker one with meaningful life. The oldest participants had the lowest correlation coefficients.
Homan (2014)	AGI <sup>12</sup> ; ECR <sup>13</sup> ; PWB <sup>14</sup>	Secure (non-anxious) attachment to God predicted positive relationships with others, self-acceptance, environmental mastery, and personal growth. Avoidant attachment did not predict any of the well-being indices.

Yamada et al. (2014)	CCI <sup>15</sup> ; QOL <sup>16</sup> ; AAQ <sup>17</sup>	The negative impact of comorbidity on the quality of life might be mitigated by promoting a positive self-perception of aging in older people.
Westerhof & Keyes (2010)	MHC-SF <sup>18</sup> ; BSI <sup>19</sup> ; PC <sup>20</sup> ; ADL <sup>21</sup> ; SH <sup>22</sup>	Older adults, except for the oldest, scored lower on psychopathological symptoms and were less likely to be mentally ill than younger adults. Although there were fewer age differences for mental health, older adults experienced higher levels of emotional well-being, similar levels of social well-being, and slightly lower levels of psychological well-being.
Proyer et al. (2014)	AHI <sup>23</sup> ; CES-D <sup>24</sup>	Three out of the four interventions (i.e. gratitude visit, three good things, and using signature strengths in a new way) increased happiness, whereas two interventions (three funny things and using signature strengths in a new way) led to a reduction of depressive symptoms in one post-measure. Positive psychology interventions yielded similar results in people aged 50 and above and in younger people.
Ho et al. (2014)	GDS <sup>25</sup> ; GQ <sup>26</sup> ; LSL <sup>5</sup> ; SHS <sup>6</sup>	The intervention reduced the number of depressive symptoms and increased the levels of satisfaction, gratitude, and happiness.
Gana et al. (2013)	SWLS <sup>10</sup> ; SPH <sup>27</sup>	The findings from both unconditional and conditional models indicated a linear increase in LS for an eight-year period. As expected, the results showed significant random variation in both interception and slope, indicating that the participants started at different levels and changed at different rates.
Smith & Hollinger-Smith (2015)	SBI <sup>28</sup> ; ROAS <sup>29</sup> ; SL <sup>30</sup> ; SHS <sup>6</sup> ; CES-D <sup>24</sup>	In older adults greater resilience and greater ability to savor positive experiences both predicted greater happiness, lower depression levels, and greater life satisfaction (i.e., greater psychological well-being). However, the relationship between savoring experiences and psychological well-being was stronger in people with lower resilience.
Wolverson et al. (2010)	MMSE <sup>31</sup> ; GRAD <sup>32</sup> ; CSDD <sup>33</sup> ; SEIS <sup>34</sup>	Eight themes were extracted and subsumed under two higher-order themes: “live in hope or die in despair” and “keep living and keep living well.” The participants described how their internalized hope-fostering beliefs, which were often learned during childhood, were challenged by the reality of hope-hindering experiences associated with old age and dementia. A balancing process of reappraisal enhanced resolution and the sense of stability and then allowed them to develop positive attitudes towards common age-related health constraints and social circumstances.
Işık & Üzbe (2015)	MLQ <sup>35</sup> ; PANAS <sup>36</sup> ; ABPT <sup>37</sup>	Young adults’ search for meaning in life was higher than that of either middle-aged adults or older adults. Positive affect, extroversion, openness to experiences, agreeableness, and conscientiousness correlated with both the presence of meaning in life and the subject’s search for meaning in life.

STAI<sup>1</sup> – State and Trait Anxiety Inventory; BDI<sup>2</sup> – Beck Depression Inventory; AMT<sup>3</sup> – Autobiographical Memory Test; MEC<sup>4</sup> – Mini-Cognitive Exam; LSS<sup>5</sup> – Life Satisfaction Scale; SHS<sup>6</sup> – Subjective Happiness Scale; SSWO<sup>7</sup> – Scale of Subjective Well-being for Older Persons; PA<sup>8</sup> – physical activity; VIA-IS<sup>9</sup> – Values in Action Inventory of Strengths (humor scale); SWLS<sup>10</sup> – Satisfaction with Life Scale; OTH<sup>11</sup> – Orientations to Happiness Scale; AGI<sup>12</sup> – Attachment to God Inventory; ECR<sup>13</sup> – Experiences in Close Relationships Scale; PWB<sup>14</sup> – psychological well-being; CCI<sup>15</sup> – Charlson Comorbidity Index; QOL<sup>16</sup> – Quality of Life (World Health Organization), Whoqol-Bref and Whoqol-Old; AAQ<sup>17</sup> – Attitudes to Aging Questionnaire; MHC-SF<sup>18</sup> – Mental Health Conditions; BSI<sup>19</sup> – Brief Symptom Inventory; PC<sup>20</sup> – physical conditions; ADL<sup>21</sup> – activities of daily living; SH<sup>22</sup> – subjective health; AHI<sup>23</sup> – Authentic Happiness Inventory; CES-D<sup>24</sup> – Center of Epidemiologic Studies Depression Scale; GDS<sup>25</sup> – Geriatric Depression Scale; GQ<sup>26</sup> – Gratitude Questionnaire; SPH<sup>27</sup> – self-perceived health; SBI<sup>28</sup> – Savoring Beliefs Inventory; ROAS<sup>29</sup> – Resilience in Older Adults Survey; SL<sup>30</sup> – satisfaction with life; MMSE<sup>31</sup> – Mini Mental State Exam; GRAD<sup>32</sup> – Guidelines for Rating Awareness in Dementia; CSDD<sup>33</sup> – Cornell Scale for Depression in Dementia; SEIS<sup>34</sup> – Semi-structured Interview Schedule; MLQ<sup>35</sup> – Meaning in Life Questionnaire; PANAS<sup>36</sup> – Positive and Negative Schedule; ABPT<sup>37</sup> – Adjective-Based Personality Scale.

#### 4. DISCUSSION

This brief literature review intended to perform a survey of the empirical studies conducted in the last decade on positive psychology in the elderly, taking into consideration the results found. It also aimed to report the perspectives that are still essential in this field of research,

hence enabling a dialogue with the guidelines presented by the WHO (2015) and making it possible to explore perspectives for future research in this area of investigation. The age defined by each paper for older adults presented variations starting at 50 years old, showing a lack of consensus (Proyer et al., 2014; Yamada et al., 2014). However, around the age of 60, when major disabilities and losses are more obvious (WHO, 2015), one can be considered an older adult. This difference is evident according to countries' income, since, on average, the health conditions of older people are worse in countries where the income is low than in higher-income countries, as well as the life expectancy, considering the lower average of older people (WHO, 2015). However, regardless of the country in which the investigations were conducted, a standard age could be established to consider aging and therefore enable greater generalization power and comparability of the results presented worldwide.

We understand that the age considered is important for us to know a person's point in life, their capabilities and limitations, and whether they can expect a healthy or ailing old age. This subject is associated with healthy aging considering the process of developing and maintaining the functional ability that enables well-being in old age (WHO, 2015). Thus, well-being along with quality of life are the main goals of mental health promotion as understood by the approach of "positive psychology" that is at issue in this review (Kobau et al., 2011).

The contents of the analyzed studies were presented as the ability to understand and intervene, taking into consideration positive attributes, psychological assets, and strengths, through positive emotions, positive individual traits, positive relationships among groups, and enabling institutions that foster positive outcomes (Kobau et al., 2011). The majority of them ( $n = 9$ ) were performed with people who were considered to be healthy, an important indicator that research has been seeking possible contributions from non-clinical specimens or samples without limiting diseases. In view of what Buysse (2014) reported on the need for special care to look more at good health, perhaps science can move forward and contribute to people's health.

The need to change focus has also been reported more recently by the World Health Organization (2015) as being essential for a new way of understanding aging. Therefore, when we consider the results of these investigations, we notice that a positive psychology approach shows favorable results in reducing symptoms (anxiety and depression) and increasing well-being; positive psychology constructs have the same impact on well-being and on the reduction of symptoms, portraying a promising approach to public health (Kobau et al., 2011).

It is important to consider that there are limitations in this research with regard to the non-tireless conducting of empirical studies on the subject, and we cannot determine the generalizability of the presented results with complete accuracy. It is also important to note that, regardless of the inability to reach the maximum total number of studies, it was possible to access recent information sources, including articles published in recent years. The studies contained in this brief literature review can be used as a source capable of dealing with the most recent guidelines for thematic research on the elderly.

Finally, our study showed the necessity to develop a new perspective on aging. Some studies reported that it is possible to achieve this, and the inclusion of positive psychology can make the task easier. The best way to give our older people better life quality is through positive actions, which will demonstrate a better view of life.

## ACKNOWLEDGMENTS

This paper is financed by National Funds provided by FCT- Foundation for Science and Technology through project UID/SOC/04020/2013.

N.B. Becker received a doctoral fellowship from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) process BEX 1990/15-2.

## REFERENCES

- Buysse, D. J. (2014). Sleep Health: Can We Define It? Does It Matter? *Sleep*, 37, 9–U219. doi:10.5665/sleep.3298
- Gana, K., Bailly, N., Saada, Y., Joulain, M., & Alaphilippe, D. (2013). Does life satisfaction change in old age: Results from an 8-year longitudinal study. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, 68(4), 540–552. doi:10.1093/geronb/gbs093
- Ho, H. C. Y., Yeung, D. Y., & Kwok, S. Y. C. L. (2014). Development and evaluation of the positive psychology intervention for older adults. *The Journal of Positive Psychology*, 9(3), 187–197. doi:10.1080/17439760.2014.888577
- Homan, K. J. (2014). Symbolic Attachment Security and Eudemonic Well-Being in Older Adults. *Journal of Adult Development*, 21, 89–95. doi:10.1007/s10804-013-9182-6
- Işık, Ş., & Üzbe, N. (2015). Personality Traits and Positive / Negative Affects : An Analysis of Meaning in Life among Adults. *Education Sciences: Theory and Practice*, 15(3), 587–596. doi:10.12738/estp.2015.3.2436
- Kobau, R., Seligman, M. E. P., Peterson, C., Diener, E., Zack, M. M., Chapman, D., & Thompson, W. (2011). Mental Health Promotion in Public Health: Perspectives and Strategies From Positive Psychology. *American Journal of Public Health*, 101(8), e1–e9. doi:10.2105/AJPH.2010.300083
- Koopmans, T. A., Geleijnse, J. M., Zitman, F. G., & Giltay, E. J. (2010). Effects of Happiness on All-Cause Mortality During 15 Years of Follow-Up: The Arnhem Elderly Study. *Journal of Happiness Studies*, 11(1), 113–124. doi:10.1007/s10902-008-9127-0
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gotzsche, P. C., Ioannidis, J. P. A., ... Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *Bmj*, 339(jul21 1), b2700–b2700. doi:10.1136/bmj.b2700
- Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2014). Positive psychology interventions in people aged 50-79 years: long-term effects of placebo-controlled online interventions on well-being and depression. *Aging & Mental Health*, 7863(April), 37–41. doi:10.1080/13607863.2014.899978
- Ramírez, E., Ortega, A. R., Chamorro, A., & Colmenero, J. M. (2014). A program of positive intervention in the elderly: memories, gratitude and forgiveness. *Aging & Mental Health*, 18(4), 463–70. doi:10.1080/13607863.2013.856858
- Ruch, W., Proyer, R. T., & Weber, M. (2010). Humor as a character strength among the elderly: empirical findings on age-related changes and its contribution to satisfaction with life. *Zeitschrift Für Gerontologie Und Geriatrie*, 43(1), 13–18. doi:10.1007/s00391-009-0090-0



- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist*, 55(1), 5–14.
- Smith, J. L., & Hollinger-Smith, L. (2015). Savoring, resilience, and psychological well-being in older adults. *Aging & Mental Health*, 19(3), 192–200. doi:10.1080/13607863.2014.986647
- Westerhof, G. J., & Keyes, C. L. M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, 17(2), 110–119. doi:10.1007/s10804-009-9082-y
- Wolverson, E. L., Clarke, C., & Moniz-Cook, E. (2010). Remaining hopeful in early-stage dementia: A qualitative study. *Aging & Mental Health*, 14(4), 450–460. doi:10.1080/13607860903483110
- World Health Organization. (2015). World report on ageing and health. (W. H. Organization, Ed.) World Health Organization. Luxembourg: World Health Organization. doi:10.1007/s13398-014-0173-7.2
- Yamada, Y., Merz, L., & Kisvetrova, H. (2014). Quality of life and comorbidity among older home care clients: role of positive attitudes toward aging. *Quality of Life Research*, 1661–1667. doi:10.1007/s11136-014-0899-x