

EMOTIONAL INTELLIGENCE AND LIFE SATISFACTION IN PORTUGUESE OLDER ADULTS

Ana Andrade ^{a*}; Rosa Martins ^a; João Duarte ^a; Helena Moreira ^{a,b}, António Madureira ^a & Carlos Albuquerque ^a

^a PhD, CI&DETS, Viseu Superior Health School, Viseu Politechnic Institute, Portugal

^b Centro Hospitalar Tondela Viseu, EPE, Viseu, Portugal

*Corresponding author

E-mail:anandrade67@gmail.com

Abstract

Aims: To assess the level of emotional intelligence of older adults; to verify if sociodemographic variables and life satisfaction are related to emotional intelligence and its dimensions (empathy, self-motivation, self-awareness, self-control and sociability).

Methods: Cross-sectional study, correlational-descriptive of quantitative characteristics.

Location: Portuguese older adults resident in the district of Viseu.

Participants: 1040 older adults, aged between 65 and 96 years, with an average of 74.14 years. All of them are resident in the Viseu district, retired and participated voluntarily in the study.

Main scales: Emotional Intelligence Measuring Scale (EIMS), Life Satisfaction Rating Scale and a sociodemographic characterization record.

Results: Of the surveyed older adults population, 39.7% have high emotional intelligence and 37.4% low emotional intelligence. Life satisfaction is related to the level of emotional intelligence. More than half (55.9%) of the population have high emotional intelligence and high life satisfaction.

For the dimensions of Emotional Intelligence (Empathy, Self Motivation, Self-Awareness and Sociability) and Life satisfaction (Health and physical ability, Mental and social engagement capacity) it was shown a statistical significance in the results.

Conclusions: The high emotional intelligence of older adults is related to a better life satisfaction. These two aspects should be considered when healthcare professionals are handling with older adults and this study contributes to procedures that should be regarded during the aging process in order to provide a better quality of life and well-being to the older adults.

Keywords: Emotional intelligence; older adults; life satisfaction.

Introduction

Emotional Intelligence (EI) emerges as an intrinsic ability that allows individuals to face more adaptively emotions and negative feelings caused by the setbacks of their daily life.¹

Emotional intelligence consists of skills in which the dimensions: self-control, self-awareness and self-motivation are directed to the internal connections and the knowledge of their own feelings and the use of these feelings are used to strengthen their internal patterns. Otherwise, empathy and sociability attach the individuals to their external connections.

Self-motivation is in the basis of the preparation and construction of social interactions as well as in the maintenance of psychosocial skills and it is related to the construction of the psychological well-being. The emotional ability is responsible for self-confidence, optimism and hope.^{2,3}

Some studies show that EI is related to satisfaction, self-esteem, lower rates of depression and it is a determinant for happiness. The healthier and the more optimistic individuals can adapt more easily to the changes associated with the aging process.⁴

Emotions can interfere with the subjective experience, behaviour and in a physiological level, i.e. they are the results of our own experiences, external stimuli with physiological manifestations and are an integral part of being a human. They are expressed automatically and unconsciously.⁵

The individual, when intervenes and takes his decisions, is based not only in his cognitive intelligence, but also in his emotions and feelings that, when guided and controlled, reveal a healthy EI. The theoretical basis of EI refers to the fact that people with intelligent behaviour exploit their qualities in order to overcome some obstacles and succeed in life.⁶

In this sense, Campos and Martins state that the concept of emotional intelligence combines cognitive and emotional systems, i.e., the individual uses emotions in order to develop more favourable behavioural answers to the situations he experiences in life.⁷

In Goleman's point of view, EI is the most important factor to determine the success of individuals, which means that people who develop qualities of human relationships are most likely to succeed in their daily life.¹ This is a model that covers five basic and interdependent skills: Self-awareness, Self-motivation, Self-control, Empathy and Sociability. The first three skills (self-awareness, self-motivation and self-control) report to the reactions of the self and how the individual controls his feelings. They are understood as the psychological bases that strengthen the internal structures of the individuals. The last two (empathy and sociability) are directed to the outside, related to the feelings of others and to the social interactions. They ensure the competences of the individuals in a social context.

Emotional aspects and the development of certain skills enable positive use of emotions, helping in solving everyday problems, which reinforces the importance of talking about emotional intelligence in this life stage. Thus, the concept of EI in older adults refers to the way an individual responds to a particular emotional situation.⁸

Recognition of emotions and feelings by older adults enables the prevention of the effects caused by unpleasant emotions. There is interdependence between the emotional state, health status, quality of life and life satisfaction.⁵

Life satisfaction is a cognitive judgment of some areas such as health, work, house conditions, social relations and autonomy, among others, i.e. a careful process of judgment and overall evaluation of life.⁹

Satisfaction reflects somehow the individual subjective well-being, i.e., identify the form and the reasons that lead people to live their life experiences in a positive way.⁹

In scientific studies there are many concepts associated with life satisfaction, such as well-being, happiness and quality of life.¹⁰ Thus, it is easy to understand that life satisfaction comprises the concept of Subjective Well-Being, “where people do cognitive and subjective assessments about their life.”¹¹ The Subjective Well-Being is associated with elements related to the person, as values and emotions,¹¹ and includes the cognitive dimension (an evaluation judgment in terms of satisfaction with life, regarding life as a whole) and the affective dimension, which is expressed by the feeling of happiness or by emotions.¹²

Therefore, life satisfaction can be understood as the happiness that people feel in relation to their life, which may include health issues, family relationships or social contacts. The more happy and satisfied with life people are, the greater the positive view of daily events and the belief in their abilities and skills to solve these everyday occurrences they have.

The aspects health, independence, social relationships and satisfaction appear to be associated with a better aging process among older adults.¹³ Happiness also tends to decrease with the advance in aging process, particularly in women, highlighting even more those who have a lower socioeconomic status.¹⁴

Individuals with greater ability to understand and pay attention to their emotions were those who felt more fulfilled and realized in their personal life. So, there is a positive correlation between EI of older adults and their life satisfaction.¹⁵

This study aims to: assess the level of emotional intelligence of older adults; verify if sociodemographic and life satisfaction variables are related to the emotional intelligence and its dimensions (empathy, self-motivation, self-awareness, self-control and sociability).

Materials and methods

Cross-sectional quantitative study of descriptive correlational nature.

1040 individuals participated in this study, aged between 65 and 96 years (72.14 ± 7.222): 59.2% are women and 40.8% men. Most of the older adults (52.3%) are married and 33.9% are widowed. As for education level, 45.4% have an elementary level and 33.4% have any kind education level.

The inclusion criteria were: 1) people aged ≥ 65 years; 2) living in the Viseu district (central region of Portugal); 3) without cognitive impairment; 4) consent to participate voluntarily in the study.

For the data collection it was used a sociodemographic questionnaire, the Life Satisfaction Measuring Scale (LSMS) and the Emotional Intelligence Measuring Scale (EIMS).

The **socio-demographic questionnaire** consisted of a set of questions aimed to obtain information about the participants' age, gender, marital status and education.

The scale to measure **Life satisfaction** was created and validated for the Brazilian population by Neri in 1998.¹⁶ This scale allows to evaluate the degree of satisfaction with life. It consists of 12 items, grouped into four dimensions: Physical Health, Mental Health, Physical Capacity and Social Engagement. Each statement has five possible answers corresponding to different valuations, oscillating between 1 (very little satisfied) to 5 (Very much satisfied). All dimensions assess the individuals' perception on three aspects: their current abilities, a comparison with the abilities they had five years ago, as well as a comparison with other people from their age group. The total score of the scale was calculated using the four dimensions sum. This scale has an internal validity higher than 0.80.¹⁷

For our sample and after factor analysis was done, the scale to measure life satisfaction kept the 12 items but they were grouped into two factors. Factor 1 called “mental and social engagement” consisting of six different items (7, 8, 9, 10, 11 and 12) and the second factor “health and physical capacity” also comprised six items (1, 2, 3, 4, 5, and 6), with a very good internal consistency (Cronbach's $\alpha > 0.90$). The total score of the scale was calculated by the sum of these two factors. To assess the field Life satisfaction, in the overall, it was made a classification into three groups: Low satisfaction (≤ 34 points), Moderate satisfaction (35-39 points) and High satisfaction (≥ 40 points).

The scale of **Emotional Intelligence Measuring Scale (EIMS)** is an instrument developed and validated in Brazil by Siqueira, Barbosa and Alves in 1999 and aimed to assess the information processing about emotions and feelings experienced or observed in social interactions. It had 59 items.³

The EIMS was adapted and validated for the Portuguese population of older adults by Andrade Martins, Duarte and Madureira in 2014, which after exploratory and confirmatory factor analysis was composed of 33 items and five factorial dimensions: Empathy, Self-Motivation, Self-Awareness, Self-control and Sociability.¹⁸ (Table 1)

Table 1 – EIMS Dimensions (33 itens)

Dimensões	Itens
EIMS 1 - Empathy - twelve (12) itens.	2, 8, 10, 12, 14, 18, 20, 23, 27, 28, 30, 33
EIMS 2 –Self-motivation - ten (10) itens.	1, 4, 5, 6, 7, 9, 11, 16, 17, 29
EIMS 3 – Self-awareness – four (4) itens.	15, 19, 24, 25
EIMS 4 – Self-control – four (4) itens.	3, 13, 21, 26
EIMS 5 – Sociability – three (3) itens.	22, 31, 32

In the present study and after factor analysis they were eliminated from the scale the items 1,3, 7, 8 and 16. The final adjusted model was set with 28 items and 5 dimensions.

To classify the emotional intelligence of older adults in general terms it was adopted three groups of classification: Low emotional intelligence (≤ 75 %); Moderate emotional intelligence (76-80 %); High emotional intelligence (≥ 81 %).

Throughout all the process of data collection, the participation of people was voluntary, it was asked for participants' consent and it was guaranteed the confidentiality of their personal data.

Data analysis was done using the programs SPSS (*Statistical Package for Social Sciences*) version 22.0 (2014) to Windows and AMOS (*Analysis of Moment Structures*) version 22.0.

Results

Characterization of the Emotional Intelligence

Emotional intelligence of the older adults is evaluated using five dimensions (Empathy, Self-Motivation, Self-Awareness, Self-control and Sociability) and using the total value results. According to statistics it was found that the amplitude for the entire sample varies between 0.0 % and 97.62 %, with an average of 58.08 % and a standard deviation of 13.79 %. According to the dimensions it was found that in the field "Sociability" participants have lower rates (47.71 %) while the highest rates are observed in the fields "Self-control" and "Self-awareness". For the EI levels, 39.7 % of people have high EI and 37.4 % low EI.

Characterization of the Life's Satisfaction

The Life's satisfaction levels of the participants are evaluated in their overall value and according to two factors: "Health and physical ability" and "Mental capacity and social engagement". According to the average rates, the older adults have lower health and physical capacity results (mean = 47.27 % \pm 19:19 % SD) however they have higher mental capacity and social engagement results (mean = 57.35 % \pm 20:36 % SD) with an average index of Satisfaction (global) above 52.0 %. Based on the levels of Satisfaction it was found that, in the overall sample, men have High Satisfaction levels (40.5 % vs 46.0 %). 37.3 % of old women have Low Life's Satisfaction levels.

Sociodemographic variables vs Emotional Intelligence

The older adults who have High EI performance have the followings characteristics: they are women (57.4%) aged between 65-74 years (61.7%) and they have elementary education (46.2%). The older adults with Low EI do not have elementary education (42.9%).

Concerning the **age group** of the participants, there is a significant effect on the "Sociability" field ($F = 7.869$; $p = 0.005$) (Table 2), with a higher rate in the younger older adults (mean = 48.44 \pm 23.62 SD vs 46.64 \pm 24.19 SD)

Gender and **Marital status** have not relevant results in the different dimensions of emotional intelligence and in the global factor.

According to the **Education Level** it was found a statistical significance, except for the Self-control ($p = 0.879$) and Sociability fields which has a peripheral significance (Table 2). The older adults who have a graduation have in the overall better results of EI. The older adults who have no education are the ones with lower EI in all the fields under study.

Life Satisfaction vs Emotional Intelligence

The older adults who have High EI results are the ones that have High life satisfaction levels (55.9 %) and those with Low EI have Low Life satisfaction results (53.5 %).

Satisfaction with life reveals statistical differences in all the studied dimensions and in the global EI results except for the “Self-control” dimension, which reveals a minor relevance (Table 2). The average rates showed that the older adults with High Satisfaction with life’s results have better EI.

The factors for Life Satisfaction have a direct connection among themselves, so it is possible to infer that the higher EI results the better the mental and social abilities or health and physical conditions.

Table 2 – Effects of sociodemographic and satisfaction with life variables on the global EI results and its dimensions

Variables	Age Group			School Level			Life Satisfaction		
	f	p	(π)	f	p	(π)	f	p	(π)
Empathy	0.864	0.353	0.153	6.020	0.003	0.883	18.602	0.000	1.000
Self-motivationo	2.531	0.112	0.356	5.503	0.004	0.852	35.903	0.000	1.000
Self-awareness	0.019	0.891	0.052	3.359	0.035	0.635	12.672	0.000	0.997
Self-control	2.377	0.123	0.338	0.129	0.879	0.070	2.962	0.052	0.577
Sociability	7.869	0.005	0.800	2.984	0.051	0.580	4.570	0.011	0.776
Global EI	0.124	0.725	0.064	4.748	0.009	0.793	27.365	0.000	1.000

Discussion

This study aimed to assess the emotional intelligence in older adults and determine if the variables of sociodemographic background (such as age group, gender, marital status, education) and Life satisfaction are related to the emotional intelligence in older adults.

The EI is considered by some authors as a skill that can be developed in order to prevent or delay the difficulties throughout life, developing a healthier and productive aging ^{3,19}

In our study we found that **age** has a significant effect only in the Sociability scale/dimension, with higher rates in the younger older adults. Emotional development in the older people has a particular importance according to the management of emotions and the ability to express them and as

age increases EI decreases^{6, 20} However other studies report that as people get old EI also increases.^{8,21,22}

Between **gender** and EI there were no significant differences in statistics. Studies reveal that men have greater motivation levels as well as they are more self-aware when compared to women, nevertheless their age.²³ Older women present a subjective lower well-being.²⁴ In the study of the aging profile of the Portuguese population, women have a disadvantaged condition in their emotional state.²⁰

Marital status was not statistically significant due to the EI in older adults. Some studies found a negative correlation between marital status and the several dimensions of EI, i.e. married people were less awoken to feelings, had less empathy and less ability to adapt themselves to the changes and social abilities.²⁵ Widowhood and a decreased physical and mental health are associated with social isolation²⁶, while social engagement, marital status and control ability enhance their subjective well-being.²⁴

School influences Empathy, Self-motivation, Self-awareness and the global EI levels, and the older adults with a degree are the ones with higher values. In fact, it was observed that older adults, who did not have high levels of education, had also lower EI results. In a carried out study it was concluded that there was no statistically significant connection between the levels of Education and the dimensions of EI.²⁵

The **Life Satisfaction** field showed statistical differences in the studied dimensions and the global EI results, except for the Self-control dimension. These data conclude that older adults with a high life satisfaction have better EI. Studies support these findings, concluding that people with higher EI have greater life satisfaction levels and they establish a direct connection with the quality of life.^{15, 27, 28}

Researches show that genetic components are also associated with the emotional intelligence, however studies in the area of psychology have shown the contribution of relational experiences throughout life in the emotional intelligence of the older adults.²⁹

What was already known about this subject

The development of emotional intelligence provides better levels of self-esteem and self-awareness improving the ability of decision-making in everyday situations. Older people with high emotional intelligence show high satisfaction with life, which is reflected in a better quality of life and well-being.

Study's key points

Age and education influence the EI of the older adults. The younger participants with higher education have also a high EI.

Older adults with a high life satisfaction have a better EI, including better empathy, self-motivation, self-awareness and sociability.

Acknowledgements

The authors would like to thank the seniors who participate in this study.

Conflicts of interest

The authors declare that there are no conflicts of interest.

References

1. Queirós MM, Carral JMC, Fernández-Berrocal P. Inteligência Emocional Percebida (IEP) e Actividade Física na Terceira Idade. *Revista de Psicologia, Educação e Cultura*. 2004; 8(1): 187-209.
2. Goleman D. *Emotional intelligence*. New York: Bantam; 1995.
3. Siqueira MMM, Barbosa NC, Alves MT. Construção e validação fatorial de uma Medida de Inteligência Emocional. *Psicologia: Teoria e Pesquisa*. 1999; 15: 143-52.
4. Chamorro-Premuzic T, Bennett E, Furnham A. The Happy Personality: Mediational Role of Trait Emotional Intelligence. *Personality and Individual Differences*. 2007; 42: 1633-39.
5. Fragoso V. Escolha e decisão: educação emocional na senioridade. In: Alves J, Neto A. *Decisão – percursos e contextos*. Vila Nova de Gaia: Eu Editio; 2012. p. 397-403.
6. Urrutia Amable, Villarraga García. Una vejez emocionalmente inteligente: retos y desafíos. *Contribuciones a las Ciencias Sociales*, marzo 2010. Disponible en: www.eumed.net/rev/cccss/07/uavg.htm.
7. Campos S, Martins, R. A Inteligência Emocional em Professores de Educação Especial da Região de Viseu. *Millenium*. 2012; 43: 7-28.
8. Taylor D. (2011). An Age Old Problem: Exploring Options for Working with Older People. Literature Review. University of Technology Sydney [Internet]. 2010: 1-14. Available from: <http://www.respectforseniors.org/pdf/An%20Age%20Old%20Problem%20Exploring%20Options%20for%20working%20with%20Older%20People.pdf>.
9. Joia L, Ruiz T, Donalisio M. Condições associadas ao grau de satisfação com a vida entre a população de idosos. *Revista de Saúde Pública*. 2007; 41(1): 131-8.
10. Llobet MP, Ávila NR, Farràs Farràs J, Canut MTL. Qualidade de vida, felicidade e satisfação com a vida em anciãos com 75 anos ou mais, atendidos num programa de atenção domiciliária. *Rev. Latino-Am. Enfermagem* [Internet]. 2011;19(3):1-8. Available from: http://www.scielo.br/pdf/rlae/v19n3/pt_04.pdf.

11. Silva S. Qualidade de vida e Bem-estar Psicológico em Idosos [Mestrado]. Porto: Faculdade de Ciências Humanas e Sociais, Universidade Fernando Pessoa; 2009.
12. Galinha, I, Pais Ribeiro, JL. História e Evolução do conceito de Bem- Estar Subjectivo. *Psicologia, Saúde e Doenças*. 2006; 6(2): 203-14.
13. Fernández-Ballesteros RLF., Garcia, D, Abarca, E, Blanc, A, Efklides, D, Moraitou, R, Kornfeld, AJ, Lerma, VM, Mendoza-Numez, NM, Mendoza-Ruvalcaba, T, Orosa, C Paul & S. Patricia. The concept of 'ageing well' in ten Latin American and European countries. *Ageing & Society*. 2010; 30: 41-56.
14. Cabral MV, Ferreira PM, Silva PA, Jerónimo P, Marques T. Processos de envelhecimento em Portugal. Lisboa: Fundação Francisco Manuel dos Santos; 2013.
15. Teixeira INDAO, Neri AL. Envelhecimento bem-sucedido: uma meta no curso da vida. *Rev.Psicol. USP*. 2008; 19(1): 81-94.
16. Freire SA, Resende MC, Rabelo, DF. Rede de relações sociais de participantes de centros sócio-educativos. In: Actas do 5º Congresso Nacional de Psicologia da Saúde: A psicologia da saúde num mundo em mudança; 2004. Jun. 28-30; Lisboa: Instituto Superior de Psicologia Aplicada; 2004. p. 777-83.
17. Lopes, LO & Cachion IM. Impacto de uma Intervenção Psicoeducacional sobre o Bem-Estar Subjetivo de Cuidadores de Idosos com Doença de Alzheimer. *Temas em Psicologia*. 2013; 21 (1): 165-81.
18. Andrade A, Martins R, Duarte J, Madureira A. Validation of Emotional Intelligence Measure (MIE) for the Portuguese population. *Atención Primaria*. 2014; 46 (especial congreso): 92-100.
19. Almeida, A. (2013). Envelhecimento activo: faça mais por si. *Psicronos*. [Internet]. Acedido em: http://www.psicronos.pt/artigos/envelhecimento-activo-faca-mais-por-si_6.html.
20. Oliveira CR, Rosa MS, Pinto AM, Botelho MAS, Morais A, Veríssimo, MT. Estudo do Perfil do Envelhecimento da População Portuguesa. Lisboa-Coimbra: Eurotrials; 2010.
21. Matthias K, Theodor J, Louise PH. Emotional development across adulthood: Differential age-related emotional reactivity and emotion regulation in a negative mood induction procedure. *International Journal of Aging & Human Development*. 2007; 64(3): 217-44.
22. Bradberry T, Greaves J. Guia Prático da Inteligência Emocional. Lisboa: Bertrand Editora; 2008.
23. Queros NC.; Neri AL. Relações entre bem-estar psicológico e satisfação com a vida na meia-idade e na velhice. *Envelhecimento e Saúde*. 2005; 13 (3): 64.
24. Paúl C, Ribeiro O. Manual de Gerontologia: Aspetos biocomportamentais, psicológicos e sociais do envelhecimento. Lisboa: Lidel; 2012.
25. Birol C, Atamturk H, Silman F, Sensoy S. Analysis of the emotional intell level of teachers. *Procedia Soc. Behav. Sci*. 2009; 1: 2606–14.

26. Pocinho L, Pais A, Santos E, Nunes A, Santos G. (2013). Solidão e abandono social na terceira idade. In: Pocinho R, Santos E, Pais A, Navarro E. Envelhecer Hoje. Viseu: Psicosoma, 2013. p. 45-73.
27. Oliveira JHB. Psicologia do envelhecimento e do idoso. 3ªed Porto: Legis; 2008.
28. Mayer JD, Salovey P, Caruso DR, Cherkasskiy L. (2011). Emotional Intelligence. In: Sternberg RJ, Kaufman SB. The Cambridge Handbook of Intelligence. New York: Cambridge University Press; 2011. p. 528-45.
29. Guerreiro, J. (2013). O papel da inteligência emocional nos desafios de um envelhecimento adaptado [Internet]. Disponível em: http://www.psicronos.pt/artigos/o-papel-da-inteligencia-emocional-nos-desafios-de-um-envelhecimento-adaptado_4.html.