

Retirement Resources Inventory in Portugal: An Adaptation and Validation Study

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Abstract: A quarter of Portugal's population is aged 65 years or over, mostly retired individuals. However, there is a lack of studies and instruments to facilitate retirement planning. This study aims to validate the Retirement Resources Inventory in Portugal to use it in future interventions. In total, 450 Portuguese retirees from all regions who responded to the inventory and sociodemographic questions participated in this study. According to the exploratory and confirmatory analyses, 23 items were found, confirming the four-factor model [$\chi^2(g) = 404.63(216)$; $CFI = 0.90$; $TLI = 0.88$; $RMSEA = 0.06$; $SRMR = 0.06$], with good evidence of internal and convergent validity. The first factor corresponded to physical and financial aspects, the second to social and family resources, the third to received support, and the fourth to emotional and cognitive resources. We recommend the replication of the RRI in a longitudinal study before and after retirement.

Keywords: retirement, inventories, planning, psychometrics

Inventário de Recursos Individuais para a Aposentadoria em Portugal: Um Estudo de Adaptação e Validação

Resumo: Um quarto da população de Portugal tem 65 anos ou mais, sendo a maioria aposentada. Apesar disso, há uma carência de estudos e instrumentos para facilitar o planejamento para a aposentadoria. O objetivo deste estudo foi validar o *Retirement Resources Inventory* – RRI neste país para utilizá-lo em futuras intervenções. Participaram deste estudo 450 aposentados portugueses de todas as regiões, que responderam ao inventário e a questões sociodemográficas. Das análises exploratórias e confirmatórias emergiram 23 itens, confirmando o modelo de quatro fatores [$\chi^2(g) = 404.63(216)$; $CFI = 0.90$; $TLI = 0.88$; $RMSEA = 0.06$; $SRMR = 0.06$], com boas evidências de validade interna e convergente. O primeiro fator correspondeu aos aspectos físicos e financeiros, o segundo aos recursos sociais e familiares, o terceiro ao suporte recebido e o quarto aos recursos emocionais e cognitivos. Recomenda-se a replicação do RRI em estudo longitudinal antes e após o evento da aposentadoria.

Palavras-chave: aposentadoria, inventários, planejamento, psicometria

Inventario de Recursos Individuales para la Jubilación en Portugal: Un Estudio de Adaptación y Validación

Resumen: Una cuarta parte de la población de Portugal tiene 65 años o más, y la mayoría está jubilada. Sin embargo, faltan estudios e instrumentos que faciliten la planificación de la jubilación. El objetivo de este estudio fue validar el *Retirement Resources Inventory* (RRI) en este país para que sea utilizado en futuras intervenciones. Participaron 450 jubilados portugueses de todas las regiones, quienes respondieron al inventario y a preguntas sociodemográficas. De los análisis exploratorio y confirmatorio emergieron 23 ítems, confirmando el modelo de cuatro factores [$\chi^2(g) = 404.63(216)$; $CFI = 0.90$; $TLI = 0.88$; $RMSEA = 0.06$; $SRMR = 0.06$], con buena evidencia de validez interna y convergente. El primer factor correspondió a los aspectos físicos y económicos, el segundo a los recursos sociales y familiares, el tercer al apoyo recibido, y el cuarto a los recursos emocionales y cognitivos. Se recomienda la replicación del RRI en un estudio longitudinal antes y después del evento de jubilación.

Palabras clave: jubilación, inventario, planificación, psicometría

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Scientific and technological advancements and the improvement of social and health conditions associated with them have contributed to the increase in the longevity of the world population. Portugal is one of the European countries where one of the most pronounced demographic aging processes is evident, namely people over 65 years old already representing about 22% of the population in 2019 (Instituto Nacional de Estatística [INE], 2021). This phenomenon has generated concerning challenges for the Portuguese government to maintain the country's economic conditions

and, at the same time, guarantee social rights (Nunes, 2017) to the significant increase in the retiree population.

Retirement has been considered one of the most significant life transitions in adulthood, which integrates organizational, financial, family, and psychological factors in a transition between working life and life without a job (Loureiro et al., 2015). It is an event in the life cycle that must be properly planned, considering the possible psychological and social transformation regarding the subject's identity, expectations, preferences, and meanings (Fonseca, 2011; Loureiro et al., 2015).

The literature has shown that well-being during retirement is a complex construct that is determined by multiple influences that can be attributed to sociodemographic characteristics, characteristics of previous work, characteristics of retirement and/or adaptation strategies adopted by the retiree (Amorim & França, 2019). Among such influences, individual resources stand out whose foundation is found in the theory of resource conservation. Hobfoll (1989) proposed this theory focusing on positive outcomes of psychosocial phenomena, such as well-being and resilience (Baltes, 1987). The theory suggests that people are motivated to acquire, to protect, and to maintain what they value, in the pursuit of well-being (Holmgren, Tirone, Gerhart, & Hobfoll, 2017).

In retirement, resources such as health, financial condition, social and family relations, psychological and motivational aspects, leisure activities, among others, are particularly relevant. The acquisition and maintenance of resources not only influence well-being, but the decision, preparation, and adaptation process (Hansson, Buratti, Thorvaldsson, Johansson, & Berg, 2020; Yeung, 2017).

In a study involving six European countries, Fouquereau, Fernandez, Fonseca, Paul and Uotinen (2005) concluded that the main determinants of satisfaction for retirees in these countries were health and resources, together with anticipated satisfaction with retirement. Despite this, when comparing scores between countries, Portugal showed the lowest level of satisfaction for retirement, in addition to significantly lower levels of satisfaction for family and marriage, for health and resources, and for anticipated satisfaction with retirement (Loureiro et al., 2015), however, they considered that further studies, with specific models in the Portuguese population, were necessary to better understand this matter.

Thus, developing validated instruments for Portuguese retirees will allow us to understand how the offer of resources can improve the well-being of retirees and contribute to the evolution of studies on this subject in Portugal. The Retirement Resources Inventory (RRI) was developed by Leung and Earl (2012) to measure the resources needed for well-being during the retirement process. The instrument presented six domains, as suggested by Wang and Shultz (2010) in adapting the conservation of resources theory to retirement. The resources addressed by the instrument are

physical resources, financial resources, social resources, emotional resources, cognitive resources, and motivational resources.

The RRI has been validated and used in populations other than Australia. It was applied to retirees from Hong Kong (Yeung, 2017; Yeung & Zhou, 2017) and Egypt (Fadila & Alam, 2016), in which the translation procedures and validity assumptions were fulfilled. In Brazil, Amorim and França (2019) adapted and validated the RRI with a sample of retirees from all states in the country. Gvozd, Rossaneis, Pissinati, Guirardello and Haddad (2019) also carried out a cultural adaptation with pre-retirees from Paraná. In both cases, evidence of validity was found. This study aimed to validate the Retirement Resources Inventory - RRI in this country to use it in future interventions.

Method

Participants

Retired men and women living in Portugal were selected to participate in this study. The exclusion criterion was simply not meeting this single inclusion criterion. A total of 450 retirees from all regions of Portugal participated in this study. Just over half of the sample were men (61.9%), aged from 45 to 90 years, with a mean of 68 years ($SD = 6.1$ years), with the age group 66–75 years being the most representative (56.7%). Most participants reported having a stable marital relationship (72.7%). Regarding schooling level, most had secondary education (37.4%), and a close percentage had a undergraduate degree (35.6%). Almost a fifth had finished graduate studies (18.3%) and about 1% had schooling levels lower than basic education.

Regarding monthly family income, a considerable proportion of the participants received three to six minimum wages (69.9%), while almost a quarter received more than six minimum wages. Less than one tenth of the participants (7.1%) received up to one minimum wage.

At the time of data collection, most participants (83.5%) were permanently retired and 16.4% were still working, most of which worked up to 30 hours per week. Regarding the loss of salary from retirement, the majority (81.5%) reported a salary loss of up to 40% and only 5.8% had a salary loss above 60%. The majority (94.2%) had up to three dependents.

Consistent with the Portuguese population distribution of retirees (Portdata, 2018), most participants resided in the Lisbon and Tagus Valley region (41.2%), followed by the North (24.5%), Center (19.8%), Alentejo (7.3%), Algarve (3.3%), Azores (2%), and Madeira (1.8%). Two subsamples were randomly created to perform the analyses from the total sample, one composed of 200 participants and another of 250 participants (Table 1).

Table 1
Characteristics of the full sample and the two subsamples

Characteristic	Full sample (n = 450)	Subsample 1 (n = 200)	Subsample 2 (n = 250)
Sex			
Male	61.9	61.5	61.8
Female	38.1	38.5	38.2
Age			
Mean (Standard Deviation)	68.1 (6.1)	67.1(6.4)	68.8(5.8)
45 to 55 years	1.3	2.0	0.8
56 to 65 years	31.2	39	24.9
66 to 75 years	56.7	48.5	62.6
76 to 90 years	10.8	10	11.6
Civil Status			
Marriage or cohabitation	72.7	69.5	74.7
Single, divorced or separated, and widowed	27.3	30.5	25.3
Schooling level			
Literacy	0.9	0.5	1.2
Primary education	7.8	8.0	7.6
Secondary education	37.4	36.0	38.5
Undergraduate studies	35.6	34.0	36.9
Graduate studies	18.3	21.0	15.6

Instruments

The *Retirement Resources Inventory* - RRI (Leung & Earl, 2012) was used, initially consisting of 35 items and six domains and following a five point Likert scale, increasing from Strongly Disagree/Fully Disagree to Strongly Agree/Fully Agree. The domains are: (i) physical resources related to perceived health, lack of deficiency and energy levels; (ii) financial resources related to various sources of income, such as personal savings, investments, pensions and government benefits; (iii) social resources, related to sources of social support, the quality of interactions, and types of support received; (iv) emotional resources, related to the experience of positive emotions and emotional intelligence; (v) cognitive resources, related to self-esteem, sense of dominance and optimism; and (vi) motivational resources, related to persistence in the search for goals and flexibility in adjusting to goals.

Originally, the instrument was applied to 267 Australian retirees aged over 50 years, resulting in a three-factor structure that included the six predefined factors, and the first factor included items that assess emotional, cognitive or motivational resources, the second covered social resources and the third physical and financial resources. Overall, the three factors demonstrated good internal consistency (0.81 – 0.89) and retest reliability (0.83–0.88) in a one-month interval.

In the Brazilian validation, conducted by Amorim and França (2019), the results of the confirmatory factor analysis indicated an instrument with good adjustment indices [$\chi^2(gl)$ = 1274(364); CFI = 0,87; TLI : 0,86; $RMSEA$: 0,06], 29 items and five factors that corroborate the model proposed by Wang and Shultz (2010).

Procedures

Considering the validation of the RRI for Brazilian Portuguese (Amorim & França, 2019), according to the instrument validation steps suggested by Borsa, Damásio and Bandeira (2012) and the lack of RRI validation in Portugal, the Brazilian instrument was used and adapted for the Portuguese of Portugal. Therefore the scale was translated by two psychologists, one Brazilian resident in Portugal and another native and resident in Portugal. Then, two other Portuguese psychologists validated this same adaptation, and at this stage all items remained very similar to those of the original version, with some semantic adaptations.

Data collection. Data collection was performed online via a GoogleDocs form. As the data collection strategy, students from several Portuguese universities were asked to invite their retired parents to participate in this study by sharing the electronic form. This was also asked of professors and researchers from various locations in the country, in addition to support on social networks with the collaboration of companies and associations and, finally, the use of the snowball resource, where the participants themselves forwarded the form to other retirees. The data collection occurred from 2017 to 2019.

Data analysis. Firstly, the database was cleaned and the means and omitted cases as well as extreme cases were verified. Then, exploratory factor analyses (EFA) were performed with the first subsample, as it is the first application of the RRI in Portugal.

Subsequently, using the second subsample, confirmatory factor analyses (CFA) were conducted to identify the best fit model. Both for the EFAs and for the CFAs, the adjustment indices CFI , GFI , TLI , $SRMR$, $RMSEA$ and $Chi-squared$ were

considered, evaluated according to Byrne's recommendations (2010) on well-adjusted models. The criteria of satisfactory adjustment were the values of *CFI*, *GFI* and *TLI* close to 0.90 and *SRMR* and *RMSEA* close to or lower than 0.08.

In the search for evidence of convergent validity, Pearson correlations were performed with the second subsample between the RRI factors and sociodemographic characteristics (Valentini & Damásio, 2016). Low (0.10–0.29), moderate (0.30–0.49) and high (greater than 0.50) correlations were considered as suggested by Miles and Shevlin (2001). The analyses were performed using the software Jamovi version 1.1.9.0, Factor version 10 and MPlus version 7. In order to make the presentation of the results more readable, the tables contain the summary of the contents of each of the items.

Ethical Considerations

The research was submitted to the Research Ethics Committee of the Universidade de Aveiro (Opinion No. P7/2019).

The participants signed Informed Consent Form containing all the necessary information and the agreement to participate in this research with all its procedures, with it ensuring absolute confidentiality and anonymity of the data.

Results

Item properties

Firstly, the extreme and missing cases of the 35 items of the instrument were analyzed by evaluating the property and sensitivity distribution of the items. No missing data were identified and the item distribution properties were indicative of appropriate psychometric sensitivity. Table 2 presents these results for the original 35-items version, divided into six pre-defined theoretical dimensions, as indicated by Leung and Earl (2012).

Table 2
Descriptive analyses of RRI items ($n = 450$)

Dimension	Item	Mean	SD	Skewness	Kurtosis
Physical resources	1. General health condition	3.65	0.86	-0.85	0.99
	2. Physical illnesses	3.64	0.98	-0.19	-0.42
	3. Mental disorders	4.64	0.71	-2.20	4.98
	4. Energy for activities	3.57	0.70	-1.07	1.96
Financial resources	5. Income to support expenses	3.17	0.72	-0.70	0.81
	6. Financial support from savings	2.77	0.90	-0.64	-0.28
	7. Financial support from investments	2.22	1.00	0.05	-1.28
	8. Financial support from pension	2.61	0.99	-0.45	-0.88
Social resources	9. Contact with friends	3.48	1.00	-0.18	-0.69
	10. Contact with family	3.52	1.00	-0.42	-0.49
	11. Contacting people from different sources	3.37	1.10	-0.15	-0.83
	12. Supportive interactions with friends	3.39	1.02	-0.42	-0.57
	13. Supportive interactions with family	3.65	1.09	-0.63	-0.37
	14. Supportive interactions with various people	3.10	1.02	-0.17	-0.56
	15. Informational support	2.60	0.91	0.11	-0.23
Emotional resources	16. Emotional support	2.77	0.97	0.24	-0.31
	17. Concrete support	2.20	1.19	0.72	-0.49
	18. Positive emotions	3.49	0.72	-0.91	1.27
	19. Ability to perceive emotions	3.78	0.53	-1.01	2.29
Cognitive resources	20. Awareness of emotions	3.82	0.53	-1.27	4.21
	21. Ability to use emotions	3.64	0.60	-0.88	1.34
	22. Control over what happens	3.79	0.96	-0.74	0.18
	23. Value perception	4.24	0.64	-0.78	2.01
	24. Forgetting where they have been or what they have done	3.81	0.84	-0.45	-0.04
	25. Ability to remember events	3.70	0.66	-0.62	1.38
	26. Ability to remember meanings	3.73	0.64	-0.94	2.07
	27. Ability to acquire knowledge	3.58	0.64	-0.85	1.49
	28. Speed of processing information	3.54	0.68	-0.14	0.34
	29. Ability to solve problems	3.69	0.53	-0.72	0.88
	30. Ability to make decisions	3.65	0.54	-0.56	0.42
Motivational resources	31. Effort in the face of difficulties	3.94	0.62	-0.99	2.98
	32. Fighting for goals	4.12	0.59	-0.68	2.93
	33. Adapting to change	3.86	0.73	-0.76	1.45
	34. Motivation in the face of challenges	3.52	0.87	-0.58	0.07
	35. Creating unrealistic goals	3.86	0.84	-0.62	0.21

Exploratory factor analyses

Exploratory factor analyses were carried out with the objective of testing the structure found in the Portuguese and Australian samples and the theoretical model of Wang and Shultz (2010), using the first subsample, composed of 200 participants. The parallel analysis indicated the 4-factor solution when comparing the eigenvalues of the real data with those of random data.

Following the structure recommendation for this analysis, the following statistical treatment was performed using the weighted oblimin rotation, suitable for measurements with complex factor loading patterns, such as those of psychology

(Hauck Filho, 2016). Eleven items were removed for presenting commonalities below 0.30 (items 2, 3, 22, 23, 24, 25, 31, 32, 33, 34, and 35) and one item was excluded because it had a factor loading above 0.40 in more than one factor (item 14).

This model, composed of four factors and 23 items, showed good fit rates [$\chi^2(gf) = 413.33(167)$; $CFI = 0.88$; $GFI: 0.99$; $RMSR: 0.04$] and factor loadings above 0.41 in all items, in addition to estimating 60% of the explained variance. Despite this, some items continued to present a factor loading above 0.30 in more than one factor, which is why confirmatory factor analysis was chosen with a second subsample (Table 3).

Table 3

Factors and factor loadings resulting from Exploratory Factor Analysis (n = 200)

Item	F1	F2	F3	F4
1. General health condition	0.33			0.49
4. Energy for activities	0.37			0.41
5. Income to support expenses				0.76
6. Financial support from savings				0.85
7. Financial support from investments				0.65
8. Financial support from pension				0.66
9. Contact with friends		0.65		
10. Contact with family		0.73		
11. Contacting people from different sources		0.72		
12. Supportive interactions with friends		0.47	0.33	
13. Supportive interactions with family		0.51		
15. Informational support			0.71	
16. Emotional support			0.77	
17. Concrete support			0.65	
18. Positive emotions	0.45	0.32		
19. Ability to perceive emotions	0.59			
20. Awareness of emotions	0.69			
21. Ability to use emotions	0.61			
26. Ability to remember meanings	0.65			
27. Ability to acquire knowledge	0.62			
28. Speed of processing information	0.74			
29. Ability to solve problems	0.76			
30. Ability to make decisions	0.61			

Confirmatory factor analyses

In order to confirm or refute the factor structure found and to observe the adequacy of adjustment, confirmatory factor analyses were performed with the second subsample, composed of 250 participants. The four-factor model was tested using the weighted least squares estimator and adjusted variance estimation (WLSMV), considered a refinement of the weighted least squares estimator (WLS), as it assumes that the observed ordinal variables result from

a set of underlying continuous variables with the lowest level of bias (Beauducel & Herzberg, 2006). The model composed of four factors and 23 items showed excellent fit rates [$\chi^2(gf) = 404.63(216)$; $CFI = 0.90$; $TLI: 0.88$; $RMSEA: 0.06$; $SRMR: 0.06$], and all items presented factor loadings above 0.30 (Table 4), confirming the model found by previous exploratory analyses. The first factor corresponded to physical and financial aspects, the second to social and family resources, the third to the received support, and the fourth to emotional and cognitive resources.

Table 4

Factors and factor loadings resulting from Confirmatory Factor Analysis (n = 250)

Item	F1	F2	F3	F4
1. General health condition	0.30			
4. Energy for activities	0.67			
5. Income to support expenses	0.57			
6. Financial support from savings	0.67			
7. Financial support from investments	0.53			
8. Financial support from pension	0.55			
9. Contact with friends		0.58		
10. Contact with family		0.67		
11. Contacting people from different sources		0.65		
12. Supportive interactions with friends		0.72		
13. Supportive interactions with family		0.64		
15. Informational support			0.63	
16. Emotional support			0.73	
17. Concrete support			0.48	
18. Positive emotions				0.42
19. Ability to perceive emotions				0.34
20. Awareness of emotions				0.30
21. Ability to use emotions				0.32
26. Ability to remember meanings				0.39
27. Ability to acquire knowledge				0.37
28. Speed of processing information				0.42
29. Ability to solve problems				0.32
30. Ability to make decisions				0.31

Convergent validity

In the search for evidence of convergent validity, using and resorting to the total sample, Pearson's correlations were performed between the RRI factors and the sociodemographic variables that could theoretically be related to the resources measured by the instrument.

As a result of this analysis, significant correlations were found between all factors and in at least one of

the demographic variables, namely: the first factor was positively correlated with gender (women), increasing age, increasing schooling level, income and salary loss; the second factor was positively correlated with the increase in schooling level; the third factor with gender (women), increase in age and increase in the number of dependents; and the fourth factor with increasing age, increasing schooling level, and income (Table 5).

Table 5

Correlations between RRI factors and sociodemographic variables (n = 450)

	F1	F2	F3	F4
Gender	0.10*	0.08	0.25***	0.07
Age	0.11*	-0.01	0.13*	-0.11*
Civil status	-0.02	-0.04	0.04	-0.10*
Schooling level	0.24***	0.18**	0.03	0.35***
Income	0.38***	0.07	0.09	0.07
Salary loss	-0.23***	-0.05	-0.10	-0.03
No. of dependents	-0.03	-0.03	0.12*	-0.04

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; F1: physical and financial resources; F2: social and family resources; F3: received support; F4: emotional and cognitive resources.

Discussion

The participants of this study showed representative characteristics of the Portuguese population in their retired status. This property was only possible due to the careful stratification of the sample, achieved by gender and age. Regarding the RRI, we observed that the instrument assumed an intelligible character for the validity of the construct that it proposed to measure. This understanding stemmed from the fact that the respondents were restricted to the response options, even though items with different means and different standard deviations were verified, denoting that the distribution curves of the variables assumed different lengthening and flattening.

The *Financial Resources* and the *Social Resources* dimensions had the lowest descriptive means. The first translated into reduced desire for investment that Portuguese retirees have when they leave working life, to a certain extent resulting from the loss of salary that they experience with this status (Loureiro et al., 2015). The second denoted that Portuguese retirees lack informative, emotional and concrete support when they reach this status, the result of a possible distance from these social structures that the rhythm of active life would have caused.

The dimensions with items with the highest descriptive mean were those related to *Cognitive Resources* and *Motivational Resources*. In the case of *Cognitive Resources*, the item related to the perception of value stood out, which may have represented the fact that Portuguese retirees remain with a feeling of usefulness after working life, and this characteristic results from their contribution in supporting their descendants. (Loureiro et al., 2015). Regarding *Motivational Resources*, item 32 obtained the highest mean, since Portuguese retirees fight for their goals at this stage of their lives, even if not in all dimensions of their lives (Fonseca, 2011).

Moving on to the factor analysis and the *Physical Resources* dimension, the fact that items 2 and 3 have manifested an inconsistent behavior may have resulted from the participants not putting themselves in a perspective of suffering, relative to the condition of having a physical and/or mental illness. This perspective stems from the fact that, culturally, the Portuguese do not tend to attribute the meaning of suffering to chronic diseases that do not cause pain, physical damage, or mental disturbance that interfere with the normal development of their lives. This meaning of suffering becomes even less noticeable when they carry out health surveillance, thus feeling “safely” accompanied by their family health team.

Regarding the fourth dimension of the instrument, the items related to forgetfulness and control were not relevant, while the more robust items were associated with Emotional Resources. As for Cognitive Resources, items such as forgetting important aspects were no longer relevant, while the ability to remember meanings remained as the most relevant cognitive-emotional aspect in the fourth factor. Aspects related to self-esteem and forgetting important aspects seem to have been compensated by the ability to remember meanings.

When facing challenges, the Portuguese sample seemed to objectively consider what would be losses and gains, valuing and optimizing what they could count on during their retirement. This was a sample of retirees, that is, a sample formed by people who have already gone through the transitioning challenge, so the prevalence of emotional issues can be justified by what Baltes called compensation in lifelong development, highlighting the mechanisms of selection, optimization, and compensation for successful aging (Baltes, 1987). The same trend can be observed by the inconsistency of items 31, 32, 33, 34 and 35, referring to motivational resources such as adaptation, struggle and effort in the face of changes, challenges and difficulties, which do not seem to represent the investigated sample.

As such, we recommend that future studies compare individual resources for retirement using the RRI, assessing the transition (before retirement), the decision to retire, and people who already retired, thus verifying the differences and similarities between the models before, during, and after the retirement process, while considering those who have conducted planning or an intervention (França, Leite, Simões, Garcia, & Ataliba, 2019). Such comparison is necessary to confirm that the motivational aspects would remain in the final model for those who are in the transition to retirement.

The instrument’s robustness should be highlighted, given the convergent validity verified in the correlation between some items. The association between schooling level and acquisition of resources stands out, as in Portugal better jobs/professional categories are associated with a higher academic level, resulting in higher salary remuneration and, after getting retired, higher pensions (Fonseca, 2011). Associations between women and the support received were also observed, denoting that Portuguese women have a greater connection with social networks from which comes greater knowledge about sources of support they can turn to.

Regarding the first factor, women had more physical and financial resources, and the older the individual is, the fewer the resources that Portuguese retirees consider to have at their disposal. Also, the negative correlation observed with the pension variable reveals the loss of income associated with this new status, as observed in the Portuguese population (Fonseca, 2011).

Regarding factor 2, the association between schooling level and social and family resources demonstrates that formal education influences the ability to access resources not only for the retirees but also their families (Loureiro et al., 2015). Regarding the third factor, it was confirmed once again that women express themselves as receiving more support (Loureiro et al., 2015), a situation that is observed in Portuguese culture because they are attributed the competence to take care of themselves and their families, which implies being holders of knowledge and relationships, and thus a greater formal and informal support network. It was also found that as they age, Portuguese retirees show a decrease in received support, in its various aspects, representing a possible difficulty in accessing sources of support or obtaining the support they need. On the other

hand, the greater the number of dependents, the greater the support that Portuguese retirees reported experiencing, as it is related to more support from children and grandchildren.

Regarding factor 4, schooling level and income were related to the support received by Portuguese retirees. The higher the schooling level and income, the greater the resources they have access to, influencing the knowledge about these resources and ways of reaching them, namely financial means (Amorim & França, 2019). Similarly to factor 3, the older the individual, the lower the emotional, cognitive and motivational resources they consider receiving.

In this validation process, it was equally interesting to observe a different behavior of the RRI instrument when, compared to other countries and cultures, different results were obtained from the descriptive and confirmatory factorial analyses in the *Social Resources* items. The “Support” factor did not appear in any other country where this instrument was validated. This situation implies that the support received by Portuguese retirees is extremely important, even though the means of these items were low. In Portugal, the importance of the community and family to overcome the isolation they feel at this stage may justify this factor (Bárrios, Fernandes, & Fonseca, 2018).

Affective and family support, suggested in the items of contacts and supportive interactions with friends and family was more relevant to the detriment of informative, emotional or concrete support. This fact confirms what Loureiro et al. (2015) found in their study on the retirement transition with the retirees’ families. According to the authors (idem), in the retirement transition, there is a collective feeling that, despite being experienced by only one of the family members, is mentioned as an event and an adaptation process that involves and belongs to the whole family. This was previously reported by Loureiro et al. (2015) in what they called a feeling of ‘Being a Family’, especially in the case of married individuals who have been together for many years, as if retirement represented a common goal.

From a cultural point of view, it should be noted that cross-cultural comparisons need to consider not only attitudes and resources throughout the retirement transition, but the political, social and economic scenario of the country at the time of the investigation (Amorim & França, 2019). For example, if we compare Portugal with Brazil in June 2021, the former can be considered a predictable, economically, politically and socially stable country with great support from the population, a fact that is not happening in Brazil, where the current scenario is one of a lot of uncertainty (“Brazil’s dismal decade”, 2021). Thus, future cross-cultural research with the RRI and other topics on the retirement process is recommended, namely attitudes, planning, decision and well-being during the retirement process.

With regard to the study’s contribution to the field of Psychology, especially to Social Psychology, the importance of creating and adapting instruments that can be used by psychologists who work in retirement planning is highlighted. It is still relevant to apply the same instrument to individuals who have already retired, both for comparing

the effectiveness of prior planning and for evaluating the adaptation of retirees, and intervention proposals for their support and well-being.

The objective of this study was achieved, since the final instrument presented adequate psychometric properties, allowing its use in different Portuguese contexts of the retirement process. However, we recommend replication with samples of pre-retirees who have been facing the legal possibility of retirement in Portugal for at least five years. Likewise, longitudinal studies are suggested in order to compare the results of the RRI before and after retirement.

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