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Wisdom assessment: Portuguese adaptation of the Self-Assessed Wisdom Scale – SAWS – by Jeffrey Webster

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Abstract

Wisdom is conceived as the "existential art", a way of being that reveals itself not so much in lecturing, but rather in the ability to carry out life in the best possible way. The experimental focus on the study of wisdom has been intensified in recent years, given the acknowledged interest of cognitive and developmental psychologists about positive aspects of human development.

A Portuguese version of the *Self-Assessed Wisdom Scale* (Webster, 2003), is presented here. A summary of several psychometric features, despite the fact that the results obtained showed some differences when compared with those from the original psychometric study of the scale, points to a consistent dimensional structure. Global results suggest a distinction between skills involved in identifying emotions and the nature of experience, control and expression of those emotions. In this study, the *SAWS* presented sound psychometric properties which may find it suitable for experimental use with Portuguese population.

Keywords: wisdom; positive psychology; SAWS; psychological assessment

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Avaliação da sabedoria: Adaptação portuguesa da *Self-Assessed Wisdom Scale – SAWS –* de Jeffrey Webster

Resumo

A sabedoria é concebida como a "arte existencial", uma forma de ser que se revela não tanto na exposição teórica, mas sobretudo na capacidade de conduzir a vida da melhor forma. A incidência experimental, relativa ao estudo da sabedoria, intensificou-se nos últimos anos, dado o interesse declarado dos psicólogos cognitivistas e desenvolvimentistas pelos aspetos positivos do desenvolvimento humano.

Neste estudo, apresenta-se a versão para a população portuguesa da *Self-Assessed Wisdom Scale - SAWS* de Jeffrey Webster (2003). A síntese das propriedades psicométricas, apesar de algumas diferenças em relação ao estudo original, aponta para uma estrutura dimensional consistente. Os resultados sugerem a distinção entre as competências envolvidas na identificação das emoções e aquilo que é a vivência, o controlo e a expressão das próprias emoções. A *SAWS* apresenta qualidades psicométricas que permitem considerá-la como apta para ser utilizada na população portuguesa.

Palavras-chave: sabedoria; psicologia positiva; SAWS; avaliação psicológica

INTRODUCTION

It is our hope... that we will eventually be able to integrate disparate research literature by exploring how wisdom promotes the collaboration of mind and virtue toward a good life on an individual and societal level.

Kunzmann e Baltes (2003)

According to *Encyclopedia Britannica*, the word "wisdom" is already referenced in the writings of Ancient Egypt around the third millennium BC, being the ancient wisdom referred to vast bodies of knowledge. Although starting from different interpretations, all perspectives on the concept of wisdom witness the inter-relationship between things and events, placing fullness of life and human activity in the individual's creative source or in the cosmic sense. From a positive point of view, wisdom is revealed and explained, from the beginning, by the ability that man possesses to get rid of evil in all its forms: not only from ignorance, error and illusion, but also from suffering, sorrow, evil, discouragement and hatred. To the People of Israel, wisdom, as revealed by the texts of the Old Testament, is absolutely personified and almost always identified with God himself. In the Sacred Scripture, the spirit of wisdom explains the skills of the weaver and the carpenter; the *shrewdness* of the woman who saved her land, the art of governance and the *discernment* to get the best from the circumstances. From the fruitfulness of sacred texts, we see that the beginning of wisdom is God and when it is shared, it ennobles the old, guides the young, makes the woman a treasure and home a heaven. Using advice, correction and discipline, inviting to reflection and calling for caution, biblical wisdom seeks to make the perfect man, loved by God and loved by men.

In the philosophical and theological point of view, wisdom is often identified as a higher form of knowledge. It is not a mere knowledge, but rather the domain of it, a true art of living, whose success was ordered for the beautiful life, the fair life and the good life. True sophist knowledge lies in the hands of a knowledge regarded as remarkable in any area, emerging in a Socratic way through dialogue and systematic inquiry, along with rejection of all uncritical claims, to culminate in the existential challenge of the "Know thyself".

The safety of the wise is the freedom resulting from an unambiguous understanding and acceptance of the things from the Spirit. He is the only one that is self-sufficient in happiness; he is his own master, because he reaches the central question of human existence: "how to live?". We can easily understand that from a theological point of view, the more a man moves away from wisdom, the more he is subordinated to his opinions, a victim of his passions, deceived by false perceptions, subjugated to internal forces that lead him to act contrary to goodness desired by nature, the happiness to which he aspires. It still remains the religious and emotional idea that St. Augustine has formulated by "you only know by loving" which is reiterated in the speculative-contemplative wisdom of the Aristotelian conception of Thomas Aquino...

Perceived as a complex and multidimensional construct that characterizes particularly high levels of development, wisdom has interested Psychology scientists from the 1980s onwards, especially with the idea that suggests, within the "life span" paradigm, ways of adjustment that go on developing themselves over the life cycle and which may be experimentally verified. The first major approach on wisdom will always be attributed to Sternberg (1990) who presented in his book *Wisdom: Its nature, origins, and development*, in a structured manner and with an empirical trend, a vast synthesis of the concept.

Driven by the concern of a better conceptualization, these topic researchers, in more recent studies, traverse the description and definition of wisdom dimensions (Ardelt, 1997). They state that this construct is located at very high levels of human psychological function and, therefore, representing the ultimate stage of development.

In general, they all state that wisdom involves a coordinated and balanced relationship between the cognitive, affective and motivational components (Bailey & Russell, 2008; Baltes & Kunzmann, 2004; Maxwell, 2007).

Thus, the acquisition of wisdom is presented, in the psychological field, as the supreme end of human development, particularly for the elderly. Both in the past and the present wisdom is stated as the prototype of the intellectual growth of adulthood, as it represents the ideal and the high end of human development (Sternberg & Jordan, 2005). In adulthood, action is a lot more preceded of reflection and followed by the analysis of its consequences. In this context, some authors have placed wisdom in a *post-formal* stage, also called dialectical or relativistic, which would appear after the stage of formal operations proposed by Piaget. The experimental trend has intensified in recent years, given the declared interest of developmental and cognitive psychologists on the positive aspects of human aging (Barros, 2004; Trowbridge, 2005). In fact, the study of healthy aging has triggered an endless interest in the study of wisdom.

The existing empirical research, which is often based on different conceptions of wisdom, lies in the belief that the reflective synthesis created by a person on any reality is already, in itself, a reflection of one's personal experience, as well as the structural basis from which arises all and any behaviour. In a manner considered to be an implicit and interactive one, the definitions that an individual may produce and hold about a particular construct tend to promote his behaviour; his behavioural experience; it is the basic structuring of our conceptions (Alves, 2007). It is therefore one of the most important and necessary dimensions, not only for adequate qualitative understanding of human behaviour, but also as an educational instrument at the service of the highest level of human excellence.

Recent research reveals not only statistical significant correlations between levels of wisdom and life satisfaction in adulthood (Ardelt, 2003, 2004), but also that wisdom requires intelligence and certain personality variables (Staudinger, 2008). Wisdom, as a multidimensional subject, has been carved as the ability to make decisions about one's own life, helping others to make decisions, managing social issues, being able to ask questions about matters of spiritual nature and about oneself (Kramer, 1990, 2003). Along with other authors (Barros, 2006; King, 2002), we can find in the studies conducted by Janson, Reichler, King, Madsen, Camacho and Marchese (2001) a positive association between wisdom and harmony, human warmth, intelligence, nature and spirituality. Robert Sternberg (2000) closely relates wisdom to moral judgement. Conley (2003) also highlights the emphasis on speculative and practical wisdom, something that may also be recognized by the religious value it contains. This author, like so many others, believes that the wisdom is identified with a very specific kind of knowledge that is supported by the ability to judge well. Hence, wisdom is linked to the ability to render good judgments. Other studies also indicate a relationship between wisdom and the transcendent dimension of human existence: spirituality (Ardelt, 2004).

Wisdom emerges from emotional self-regulation, as a concept related with emotional intelligence (Salovey & Mayer, 1990), and from intrapersonal intelligence (Gardner, 1983) and postformal thinking (Wu & Chiou, 2008) - which is translated into the ability to recognize and use emotions constructively. Wisdom also emerges from reflection. Constantly examining and reflecting about their existential experience, individuals create opportunities to identify personal strengths and limitations. This recognition allows a better understanding about the meaning of life and improves the ability to face future in a more profitable way. Open-mindedness is also suggested to be a dimension of wisdom, as this construct shelters the capacity to put up dissenting views, to embrace novelty and change and to cope with complex and differentiated situations. Wisdom not only integrates humour, an element that contributes to the reduction of psychological tension, but also cohesion and the efforts to analyse situations from a positive point of view. Wisdom is defined as the application of intelligence, creativity, and knowledge toward a good balance; among intra and interpersonal dimensions and extrapersonal interests, in order to achieve a truly balance during individual adaptation to existing environments. Finally, wisdom can be taught in schools (Sternberg, Reznitskaya, & Jarvin, 2007).

Though little versed in Portugal, wisdom, as a scientific subject, is nowadays worldwide regarded within the field of positive psychology as one of the most important and necessary dimensions, not only for the proper understanding of human behaviour, but also as an element to take into account in psycho-pedagogical interventions, aiming at promoting the highest level of human excellence. Therefore, it is without surprise that we have witnessed the appearance of several psychological scales that intend to measure wisdom along with the disclosure of their psychometric properties. In this context, our research will focus on the adaptation of the SAWS: Self-Assessed Wisdom Scale (Webster, 2003) for the Portuguese population. Its author, Jeffrey Webster, advocates for the presence of a penta-factorial structure of wisdom considering it as a multidimensional construct. The dimension of wisdom emerges, in his opinion, from those contents that stay in our personal structure after the resolution of an existential dilemma, like the positive resolution of a serious problem or the depth and differentiation obtained after an experience of scarcity or suffering. According to the author (Webster, 2003), wisdom is implicitly related to the experience of life, emotional control, reflection, mind openness and satisfaction.

Jeffrey Webster (2003) assessed the psychometric properties of his *Self-Assessed Wisdom Scale-SAWS* (see attached scale) by conducting three separate studies. In the

first study, he researched into the psychometric properties of a 30 item questionnaire that assessed five dimensions related to wisdom: experience, emotional self-regulation, reflection, openness of mind and mood. The obtained results indicated an acceptable internal consistency (a = .78) of the 30-item scale and an appropriate factorial structure, considering the original five theoretical factors. In the second study, the author used two groups of participants: the first one filled out the questionnaire with instructions to answer it according to the implicit theories of wisdom, while the second one answered the questions according to common sense. The first group scored significantly higher (t = 9:40, p<.001) than the second one, confirming the initial expectations of the author. Finally, the *third study* intended to assess the construct validity of the scale. Significantly positive correlations were found between the SAWS and two distinct variables, both involving aspects of wisdom: generativity and ego integrity. This analysis of the original form of the SAWS has provided good reliability and validity indexes.⁴ Recent studies have also confirmed the dimensional structure of the SAWS as well as the endurance of the scale to confounding variables, such as the social desirability effect (Alguraan, Alshraideh, & Bsharah, 2010; Taylor, Bates, & Webster, 2011). Monika Ardelt (2011), in a critical commentary to the conclusions pointed out by Taylor, Bates and Webster (2011), states that the SAWS contains a reflective wisdom component, a wisdom predictor, a consequence of wisdom, and two necessary but not sufficient wisdom components.

METHODOLOGY

We have started our research by taking into account the guidelines of the *International Test Commission* (2003; 2010) concerning the translation and adaptation of psychological assessment instruments. Therefore, we have asked two experts to make a first translation of the scale from English into Portuguese. This translation was made on a total independent way, and was later compared and adjusted in what concerns the terminological precision in expressions that were not equivalent.

The resulting version was given to another expert who carried out the retroversion of the scale. By comparing the result of this retroversion with the original version, a few inconsistent aspects were explained. We have then prepared a final Portuguese version (40 items; 6 point Likert scale; five components of wisdom: experience; emotional self-regulation; reflection; openness and mood), which was

⁴ The author, whom we have contacted several times, has granted us permission to translate the SAWS and made some suggestions to improve its final version, especially in what concerns rigour and terminological clarification.

subsequently object of a thinking-aloud procedure. For that, we have asked 10 psychology students to carefully read and answer all items, and to write down all the difficulties of interpretation that came across the answering of the items of the *SAWS*. This pilot study allowed us to improve the final version of the scale.

The Portuguese version of the SAWS was then administered to an initial sample of 636 participants. However, we had to exclude 58 protocols (9% out of the total), due to high numbers of missing answers⁵ in socio-demographic fields, which means that our sample ended up consisting of 578 subjects, including students and professionals with academic training in three different scientific areas. Randomization was not performed, as the participants were recruited accordingly to a convenience factor accidental sampling. The participants' ages ranged between 18 and 90 years old. The largest group was the one comprising individuals aged 21-26 years (41.7%), followed by the group 38-60 years (21.5%). Older ages (61-90) are represented by 32 individuals (5.5%). The sample comprises 229 male individuals, e.g., 39.6%, and 349 female individuals, representing 60.4%. The sample includes 333 individuals (57.6%) who are students from a miscellaneous of academic courses, and 245 individuals (42.4%), who have a job or an occupation. Regarding the group of students, the nursing course, with 132 individuals (39.7%), appears to be the most represented, followed by the psychology course, with 127 individuals (38.1%), and the Theology course, with 74 (22.2%). The group of professionals consists mainly of teachers (30.6%) and nurses (23.7%), while doctors (6.5%) turn out to be the lowest represented occupation. We also highlight the unusual number of priests (15.9%) and nuns (15.1%).

For the academic training area 215 individuals (37.2%) are from Humanities, students and professionals of Psychology, Childhood Education, Languages (English, Portuguese, French), Philosophy and History; Health comprises 206 individuals (35.6%), who are students and professionals in medicine and nursing; and the area of theology consists of 157 individuals (27.2%), both students and professionals who are trained in Theology and Religious Sciences. If we consider the relationship between the variables Age, Sex, Activity and Training Area (Table 1), we become aware that the major group consists of 79 individuals (13.67%) who are female students in the area of humanities between 21and 26 years old. In the professionals' sample, the major group is composed of 41 individuals (7.09%) with ages between 38-60 years who are women working in the field of humanities.⁶

⁵ Missing data in socio-demographic variables, due to lack of answering, is the main factor responsible for the elimination of these protocols. Despite the underline on the absolutely anonymous nature of the answers, we have noticed that some participants had a clear concern about the possibility of being identified by some socio-demographic data, such as age, sex, activity and training area.

⁶ The lack of female students in the area of theology is due to the fact that we have focused our research exclusively on students attending a seminary. In the same area of theology, but in the professional group, females are represented by a sample of nuns.

Table 1	
Sample Distribution by Age and Sex According to the Activity and Training Area	

							Acti	vity							
				8	Student					Professional					
			Training Area												
		Hur	nanities	Η	ealth	Th	eology	Hu	manities	Η	ealth	The	eology		
Age	Sex	n	%	n	%	n	%	n	%	n	%	n	%		
10.20	Male	3	0.52	17	2.94	17	2.94	0	0.00	0	0.00	0	0.00		
18-20	Female	14	2.42	25	4.33	0	0.00	0	0.00	0	0.00	0	0.00		
21-26	Male	16	2.77	24	4.15	48	8.30	0	0.00	5	0.87	1	0.17		
21-20	Female	79	13.67	51	8.82	0	0.00	2	0.35	15	2.60	0	0.00		
27-37	Male	4	0.69	5	0.87	9	1.56	3	0.52	6	1.04	7	1.21		
27-37	Female	11	1.90	7	1.21	0	0.00	22	3.81	21	3.63	8	1.38		
38-60	Male	0	0.00	1	0.17	0	0.00	20	3.46	8	1.38	17	2.94		
56-00	Female	0	0.00	0	0.00	0	0.00	41	7.09	17	2.94	20	3.46		
61-90	Male	0	0.00	0	0.00	0	0.00	0	0.00	1	0.17	17	2.94		
01-90	Female	0	0.00	0	0.00	0	0.00	0	0.00	1	0.17	13	2.25		

RESULTS

For this study, considering the fact that it was the first time that the *SAWS* was administered in Portugal and also the proposals of several authors⁷, we have assessed the scale on dimensionality and reliability.

Dimensionality of the SAWS

Jeffrey Webster (2003) defines wisdom as comprising five dimensions: experience, emotional self-regulation, reflection, openness of mind and mood. According to this author, the distribution of the items by dimensions is as follows: **Experience:** 1 - 6 - 11 - 16 - 21 - 26 - 31 - 36; **Emotional self -regulation**: 2 - 7 - 12 - 17 - 22 - 27 - 32 - 37, **Reflection**: 3 - 8 - 13 - 18 - 23 - 28 - 33 - 38, **Open-mindedness**: 5 - 10 - 15 - 20 - 25 - 30 - 35 - 40; **Mood:** 4 - 9 - 14 - 19 - 24 - 29 - 34 - 39.

The sample adequacy for a *Principal Components Analysis (PCA)* was analysed using the Kaiser's criterion (KMO) (Tabachnick & Fidell, 2006) and the results are suitable for factor analysis. Furthermore, the Bartlett's Test of Sphericity was significant (Table 2).

⁷ Vallego, Sanz and Blanco (2003) and Netemeyer, Bearden and Sharma (2003) suggest that different assessment instruments integrated in a study may be submitted to a new assessment of reliability.

Indicators	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.887
Bartlett's Test of Sphericity	$\chi^2(780)=7378.70, p<.001$

Table 2Indicators of Adequacy of the Sample and the Matrix Factorization

The number of individuals per item is near 15 and the participants exceed 500, thus exceeding by far the recommended minimum value of 5 subjects per item (Hair, Anderson, Tatham, & Black, 1995), which contributes to the stability of the factorial solution. These results meet the adequacy criteria on sample size and matrix, allowing us to proceed with the analysis.

Table 3Eigenvalues and Explained Variance of the Components of the SAWS

Factors	Eigenvalue	Variance explained	Cumulative variance
1 – Reflection	8.55	21.38%	21.38%
2 – Mood	3.21	8.02%	29.39%
3 – Emotional self-regulation	2.13	5.32%	34.71%
4 – Experience	1.64	4.11%	38.82%
5 – Open mindedness	1.50	3.74%	42.56%

First, using the same methodology as Webster (2003), we conducted a *Principal Component Analysis* with *varimax* rotation, to explore our data and confirm the similarity between their structure and the one found in the original form of the *SAWS*. Although there has been some convergence in the results, we found that 11 items were outside the originally predicted components. As some items had significant loadings in more than one factor, we also conducted an *oblimin* rotation to explore the possibility that factors are intercorrelated and thus finding a more clear structure.

Factorial distribution of the items

Table 4 presents the distribution of the items by the five orthogonal factors. The commonality (h2) varied between .18 and .67, with an average of .43.

Table 4

Items Distribution by Factors of the SAWS and Factorial Loadings (ACP, 5 Factors, Varimax)

Items*	F1	F2	F3	F4	F5	h^2
8- I often think of my own past.	.76	01	07	.10	.04	.59
28 - Remembering my past helps me understand the im-	.75	.12	.13	.27	.00	.67
portant things in my life.						
13- I often dedicate myself to the remembering of past	.74	02	05	07	.19	.59
events 3- I often relate past with present situations.	.66	06	02	.11	.10	.46
18- Reviewing my past helps me to have a good perspec-	.00	00	02	.11	.10	.40
tive of my current concerns.	.65	.16	.32	.02	.15	.57
23 - I often recall the past to see if I have changed since						
then.	.65	.25	03	.19	.06	.52
38- Reliving past events increases my confidence to live	61	15	26	10	02	50
today.	.61	.15	.26	.19	.02	.50
33 - I often notice that my past can be an important source	.55	.09	.34	.29	.08	.52
of knowledge.	.55	.07	.01	.27	.00	.52
40 - I wonder many times about the mysteries of life and	.32	.14	.07	.23	.03	.18
what lies beyond death.						
29 - I often use humour to put other people at ease.	.14	.68	.02	.20	.14	.54
19 - I laugh easily.	.03	.66	.01	.13	.15	.48
4 - I am able to laugh in embarrassment situations.	.02	.62	01	03	.22	.44
24 - At this point in my life it is easy for me to laugh at my mistakes.	.01	.56	.27	04	.15	.40
14- When I face major life transitions I try and find a						
funny side.	.08	.53	.45	.02	.09	.50
9- There may be funny elements even in very difficult life's						
situations.	.16	.53	.22	.20	14	.41
30 - I like being surrounded by people whose views are	.07	.43	.19	.08	24	.29
quite different from mine.	.07	.43	.19	.08	.24	.29
10- Besides my favorite kind of music I like to listen to	.04	.41	.07	.33	10	.29
other musical styles.						
39 - To comfort others I often make fool of me.	.15	.31	22	06	.27	.25
12- I am in tune with my own emotions.	.09	.12	.65	.15	.22	.50
2- I easily adjust my emotions to the present situation.	.08	.14	.57	.03	.10	.36
7- When I take personal decisions I do not let myself take	.00	.01	.57	.09	04	.33
over by emotions.						
32- I am able to control my emotions when the situation demands it.	.01	.11	.52	.25	.19	.38
34 - Now I know I can truly appreciate the little things in						
life.	.22	.08	.43	.40	03	.40
35- I have a lot of curiosity to know more about other				•		•
religions and other philosophies.	.09	.17	.37	.28	.16	.28
36- I have learnt valuable life lessons with others.	.13	.22	.20	.62	.01	.50
11- Throughout my life I have dealt with many types of	11	10	17		05	40
people.	.11	.19	.17	.57	.05	.40

Items*	F1	F2	F3	F4	F5	h^2
6- I have taken important decisions throughout my life.	.18	06	.33	.56	.09	.47
1- During my life I have already overcome many painful facts.	.29	15	02	.52	.14	.39
21 - I have met a lot of the negative side of life (e.g., dishonesty, hypocrisy)	.18	.08	26	.46	.37	.45
26- I went through many difficult changes throughout life.	.38	08	16	.46	.31	.48
31 - I discovered by myself that "not everything that shines is gold."	.14	.21	.15	.42	.08	.27
5- I love to read books that challenge me to think differently about many issues.	01	.11	.24	.41	.20	.28
27- I am good at identifying subtle emotions in myself.	.13	.09	.31	.11	.67	.59
17- I am very good at interpreting my emotional states.	.13	.09	.36	.00	.63	.56
15- I love to try a variety of different ethnic foods.	02	.23	.11	.11	.57	.41
20 - I often try new things.	.01	.48	.07	.07	.48	.47
16- I have gone through various moral dilemmas.	.27	.08	16	.14	.48	.36
22 - I can easily express my emotions without feeling like I am losing control of the situation.	.05	.17	.35	.15	.39	.33
37 - It seems I have a certain gift to understand the emotions of others.	.18	.19	.24	.36	.39	.40
25 - Controversial works of art play an important and valuable role in society.	.10	.29	.08	.13	.31	.21
* Ordered by the higher factorial loading magnitude						

* Ordered by the higher factorial loading magnitude.

The first component grouped items of the reflection factor (8, 28, 13, 3, 18, 23, 38, 33) with item 40 of open-mindedness dimension. The second factor corresponds almost entirely to mood factor (29, 19, 4, 24, 14, 9, 39), without the item 34, and with items 10 and 30 of openness. In the third factor, four items of emotional self-regulation were grouped (12, 2, 7, 32), one of mood (34) and one of open-mindedness (35). The fourth factor comprised seven items of experience (36, 11, 6, 1, 21, 26, 31) and item 5 of open-mindedness. Finally, factor 5 joined four items from emotional self-regulation (27, 17, 22, 37), three from open-mindedness (15, 20, 25) and one from experience (16).

Given the fact that some items have significant loadings in more than one factor, suggesting a non-independence relationship between the factors that were extracted, it was advisable to perform an *oblimin* rotation of the five factors. The results for this procedure showed no substantial changes in the items distribution: the *first factor* grouped the items of *emotional self-regulation* (12, 2, 7, 32) and one of *open-mindedness* (35). The *second factor* corresponds almost entirely to the *reflection* factor (8, 28, 13, 3, 18, 23, 38, 33) with item 40 of *open-mindedness*. The *third factor* corresponds almost entirely to *humour factor* (29, 19, 4, 24, 14, 9, 39) without the item 34 and with items 10, 20 and 30 of *open-mindedness*. The *fourth*

factor comprised three items of emotional self-regulation (27, 17, 22), two of *open-mindedness* (15, 25) and one from *experience* (16). Finally, *factor* 5 grouped seven items of *experience* (36, 11, 6, 1, 21, 26, 31), one item of *emotional self-regulation* (37), one of *mood* (34) and item 5 of *open-mindedness*.

The analyses on the differences between the orthogonal and oblique solutions, showed that item 20 "I often make an effort to try new things" **passes from** the factor *open-mindedness* **to** *mood*; item 34 "now I know I can truly appreciate the little things of life" **goes from** *emotional self-regulation* **to** *experience* and item 37 "it seems that I to have a certain gift to understand other people's emotions" **goes from** *emotional self-regulation* **to** *experience*.

We have also rehearsed a *Principal Component Analysis (PCA)* and forced the extraction of four factors with *varimax* rotation. The results pointed to: (1) the *first factor* grouped items from *reflection* (8, 28, 13, 3, 18, 23, 38, 33) with item 20 from *open-mindedness*, item 26 from *mood* and item 1 from *experience*. *Factor 2* grouped four items from *emotional self-regulation* (12, 2, 7, 32), four items from *experience* (36, 11, 6, 31), two items from *open-mindedness* (35, 5), one item from *mood* (34) and one item from *emotional self-regulation* (22). In *factor 3* we found seven of the eight items of *mood* (29, 19, 4, 24, 14, 9, 39), and three items from *emotional self-regulation* (27, 17, 37), two items from *open-mindedness* (15, 25) and two items from *experience* (16, 21).

Factors	1	2	3	4	
2	06				
3	.19	17			
4	.08	23	.27		
5	.21	36	.23	.20	

Table 5Correlation Matrix between the Factors of the SAWS

Table 5 shows the *factor correlation matrix* obtained in the oblique solution, representing the correlation between the extracted factors which are important to decide between the two solutions, the orthogonal (*varimax rotation*) and the oblique (*oblimin rotation*). Facing these results, its theoretical interpretations in the light of the wisdom theory and the construct of the original scale by Webster (2003), we ended up valuing the solution that emerged from the *varimax* rotation of 5 factors as the most appropriate and parsimonious. In so doing, we have valued the distribution and grouping of items on the original 2^{nd} factor (emotional)

self-regulation - 2, 7, 12, 17, 22, 27, 32, 37) that now appear in the 3rd factor (12, 2, 7, 32) along with features clearly oriented towards management and emotional control, and in *factor* 5 (27, 17, 22, 37) with features clearly oriented towards the identification and inner experience of emotions. We will, therefore, proceed with the 5 factors *varimax* rotation (Table 4), locating the factors according to the original Webster (2003) suggestion.

Internal consistency and item analysis of the SAWS

In order to study internal consistency of the *SAWS*, we will now show the internal consistency of the scales, through the Cronbach's alpha of the Portuguese version of the *Self - Assessed Wisdom Scale*. Through item-total corrected correlations, and also by considering means and standard deviations, we will try to understand the positioning of each item within the correspondent dimension that in this study will be referred to as subscale, and the contribution of each dimension to the understanding of wisdom as a construct.

The analysis of means, standard deviations and corrected item-total correlations for the *reflection* subscale revealed that all the items are, with the exception of item 13, above the fourth point of the 6 point Likert scale. Items 33 and 40 got the highest average (4.66) and item 33 obtained the lowest standard deviation (1.02). The fact that the overall mean for this subscale is high (4.39), tells us that *reflection* is one of the most valued dimensions in wisdom behaviour. All corrected correlations, with the exception of item 40, were greater than .50. The Cronbach's alpha coefficient was .85.

The mean scores for the items in the *Mood* subscale were superior to 4, with the exception of items 24 and 39. The overall mean score for this subscale was 4.36. This factor got an Eigenvalue of 3.21 (Table 3), explaining 08.02 % of the variance. The corrected correlations ranged between .26 and .57, with an average of .4. The value for the correlations on items 10 and 39 indicate little relationship between these items and the subscale total. The internal consistency of this subscale was also checked by the Cronbach's alpha coefficient (.76)⁸.

The analysis of means, standard deviations and corrected item-total correlations for the *Emotional self -regulation* subscale revealed that all items scores are above 4, with the exception of item 7. The overall mean for this subscale is 4.36. For this factor, we have obtained an Eigenvalue of 2.13 (Table 3), explaining 5.32% of the

⁸ According to the analysis of the relationship between the subscales of the SAWS and the variables identified and worked in our research, item 39 will be deleted because it depresses the values found for Cronbach's alpha. Without item 39, the Cronbach's alpha raises from .74 to .76.

variance. The corrected item-total correlations ranged between .35 and .53, with an average of .42. The internal consistency for this subscale, also checked by a Cronbach's alpha coefficient was .67. We remind that, differently from the original study, this 3^{rd} factor comprises items (12, 2, 7, 32) that are clearly oriented towards management and emotional control.

All items in the *Experience* subscale score above 4, with an overall mean of 4.91. This subscale appears with clearly higher averages which may indicate that, for the participants involved in the study, this dimension expressed in a more intense way the wisdom behaviour. All correlations were greater than .30, and the Cronbach's alpha coefficient stood at .71.

The items in the *Open-mindedness* subscale scored above 4, with the exception of items 16 and 17. The overall mean was 4.12. All correlations were greater than .30 and the Cronbach's alpha coefficient was .74. Contrary to the results found by Webster (2003) in his study, in *factor 5* the items 27, 17, 22 and 37 appear incorporated with clearly oriented features towards identifying and experiencing inner emotions.

Table 6Summary of the SAWS

Factors	No. of items	Average	Sd	Cronbach's Alpha
Reflection	9	4.39	1.19	.85
Mood	9	4.36	1.19	.76
Emotional self-regulation	6	4.36	1.14	.67
Experience	8	4.91	1.09	.71
Open-mindedness	8	4.12	1.19	.74

CONCLUSION

Considering the results obtained by Webster (2003), we have hypothesised that the SAWS would reveal good psychometric properties when applied to the Portuguese population. The synthesis of the psychometric properties of the SAWS, for the sample used in this study, is satisfactory, despite some differences from the original study. The results point out a good internal consistency of the Portuguese version of the instrument, which allows us to suggest the use of this scale for future research in the Portuguese population, although studies on confirmatory analysis and factorial structure should be conducted. This study, therefore, opens the way and encourages further work on the development of the Portuguese version of the SAWS and its use on future research about wisdom. Differently from Webster's original study (2003), the items oriented to the identification of emotions are clearly separated from those connected with the inner experience of emotions. Concerning these results, we recall that Salovey & Mayer (1990), Goleman (2000), and other theorists of emotional intelligence clearly distinguish between the skills of **perceiving** or identifying our own or other emotions and the experience, control and **expression** of emotions. We therefore believe that in future researches it will be necessary to take into account this distinction. The results with the *SAWS: Self-Assessed Wisdom Scale* (Webster, 2003) emerge in almost all the investigations made in recent years on this subject, and they were on the basis of the development of various scales for the assessment of wisdom. We refer here the **FVS**: Foundation Value Scale (Janson et al., 2001), **3D-WS**: Three-Dimensional Wisdom Scale (Ardelt, 2003); **WDS**: Wisdom Development Scale (Greene & Brown, 2009) and wisdom assessment methodology used by Jeste, Ardelt, Blazer, Kraemer, Vaillant and Meeks (2010).

In general, we concluded about the importance of continuing to invest in the study of wisdom, this mixture of ideal superhuman attribute and pure knowledge. Common experience and the scientific research define wisdom as: a set of arrangements that involve the clarity of analysis; prudent intervention; healthy and transparent reasoning; holistic perspective; knowing when to act and when not to; foresight and anticipation of problems; a spiritual attitude. We need to continue to invest in operationalizing this construct and in developing educational systems that offer training programs dedicated to helping people achieve wisdom. Ferrari and Potworowski (2008) said they were absolutely convinced that wisdom can and should be taught as existentially regenerative energy. Since wisdom always expresses itself in the uniqueness of the wise person, it is uttered in different ways and in different degrees. This will only be possible if we continue to invest in the psychological interpretation of Wisdom that is not a thing, it is a whole array of ways of being good, to live well and deal with the world.

REFERENCES

- Alquraan, M., Alshraideh, M., & Bsharah, M. (2010). Psychometric Properties and Differential Item Functioning (DIF) Analyses of Jordanian Version of Self-Assessed Wisdom Scale (SAWS-Jo). International Journal of Applied Educational Studies, 9(1), 52-66.
- Alves, P. J. (2007). Sabedoria: construção de uma nova escala. *Psicologia, Educação e Cultura, 11*(2), 289-306.
- Ardelt, M. (1997). Wisdom and life satisfaction in old age. Journal of Gerontology: Psychological Sciences, 52B(1), 15-27.

- Ardelt, M. (2003). Empirical assessment of a Three-Dimensional Wisdom Scale. Research on Aging, 25, 275-324.
- Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, 47, 257-285.
- Ardelt, M. (2011). The measurement of wisdom: a commentary on Taylor, Bates, and Webster's comparison of the SAWS and 3D-WS. *Experimental Aging Research*, 37(2), 129-241. doi:10.1080/ 0361073X.2011.554509
- Bailey, A., & Russell, K. (2008). Psycho-social benefits of a service-learning experience. Journal of Unconventional Parks, Tourism & Recreation Research, 1, 10-17.
- Baltes, P., & Kunzmann, U. (2004). The two faces of Wisdom: Wisdom as a general theory of knowledge and judgment about excellence in mind and virtue vs. wisdom as everyday realization in people and products. *Human Development*, 47, 290-299.
- Barros, J. (2004). Psicologia Positiva. Porto: Edições Asa.
- Barros, J. (2006). Espiritualidade, sabedoria e sentido de vida nos idosos. Psychologica, 42, 133-145.

Conley, K. (2003). Wisdom. New Catholic Encyclopedia, 14, 984-987.

- Ferrari, M., & Potworowski, G. (2008). *Teaching for Wisdom: Cross-cultural perspectives on Fostering Wisdom*. New York: Springer.
- Gardner, H. (1983). Frames of Mind: The theory of multiple intelligences. New York: Basic Books.
- Goleman, D. (2000). Inteligência Emocional. Lisboa: Temas e Debates.
- Greene, J., & Brown, S. (2009). The Wisdom development scale: further validity investigations, *The International Journal Aging and Human Development*, 68, 289-320. Retrieved from http:// www.wisdompage.com/WisdomResearchers/WDSValidity.pdf
- Hair, J., Anderson, R. E., Tatham, R. L., & Black, W. (1995). *Multivariate data: Analysis with readings*. New Jersey: Prentice-Hall.
- International Test Commission (2003). Adaptação portuguesa das directrizes internacionais para a utilização de testes. Lisboa: Cegoc.
- International Test Commission (2010). International Test Commission Guidelines for Translating and Adapting Tests. Retrieved from: http://www.intestcom.org
- Janson, L., Reichler, A., King, C., Madsen, D., Camacho, J., & Marchese, W. (2001). The measurement of Wisdom: A preliminary effort. *Journal of Community Psychology*, 29, 585-598.
- Jeste, D., Ardelt, M., Blazer, D., Kraemer, H., Vaillant, G., & Meeks, T. (2010). Expert Consensus on Characteristics of Wisdom: A Delphi Method Study. *The Gerontologist*, *50*, 668-680.
- King, J. (2002). SQ: Spiritual Intelligence: the ultimate intelligence. *Psychology and Psychotherapy*, 75, 116-117.
- Kramer, D. (1990). Conceptualizing wisdom: The primacy of affect-cognition relations. In R. Sternberg (Ed.), Wisdom: Its nature, origins, and development (pp. 279-313). Cambridge, UK: Cambridge University Press.
- Kramer, D. (2003). The ontogeny of wisdom in its variations. In J. Demick, & C. Andreoletti (Eds.), Handbook of adult development, (pp. 131-151). New York: Kluwer Academic Plenum Publishers.
- Kunzmann, U., & Baltes, P. (2003). Beyond the traditional scope of intelligence: Wisdom in action.
 In R. Sternberg, & J. Lautrey (Eds.), *Models of Intelligence: International perspectives* (pp. 329-343). Washington: American Psychological Association.
- Maxwell, N. (2007). From knowledge to wisdom: the need for an academic revolution. *London Review* of Education, 5, 97-115. doi:10.1080/14748460701440350
- Netemeyer, R., Bearden, W., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA: Sage Publications.

- Salovey, P., & Mayer, J. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9, 185-211. Retrieved from http://www.unh.edu/emotional_intelligence/EIAssets/EmotionalIntelligenceProper/EI1990%20Emotional%20Intelligence.pdf
- Staudinger, U. (2008). A Psychology of Wisdom: History and recent developments. *Research in Human Development*, 5, 107-120.
- Sternberg, R. (1990). *Wisdom: Its nature, origins, and development*. Cambridge, UK: Cambridge University Press.
- Sternberg, R. (2000). Wisdom as a form of giftedness. Gifted Child Quarterly, 44(4), 252-260.
- Sternberg, R., & Jordan, J. (2005). A handbook of wisdom. Cambridge, UK: Cambridge University Press.
- Sternberg, R., Reznitskaya, A., & Jarvin, L. (2007). Teaching for wisdom: what matters is not just what students know, but how they use it. *London Review of Education*, 5, 143-158. doi:10.1080/14748460701440830
- Tabachnick, B. G., & Fidell, L. S. (2006). *Using Multivariate Statistics* (5th edition). Boston: Pearson Education.
- Taylor, M., Bates, G., & Webster J. (2011). Comparing the psychometric properties of two measures of wisdom: predicting forgiveness and psychological well-being with the Self-Assessed Wisdom Scale (SAWS) and the Three-Dimensional Wisdom Scale (3D-WS). *Experimental Aging Research*, 37(2), 129-141. doi:10.1080/0361073X.2011.554508
- Trowbridge, R. (2005). *The Scientific Approach to Wisdom*. Retrieved from http://www.wisdompage. com/TheScientificApproachtoWisdom.doc
- Vallego, M., Sanz, U., & Blanco, B. (2003). *Construcción de escalas de actitudes tipo Likert*. Madrid: La Muralla.
- Webster, J. (2003). An exploratory analysis of a self-assessed wisdom scale. Journal of Adult Development, 10, 13-22.
- Wu, P., & Chiou, W. (2008). Postformal thinking and creativity among late adolescents: a post-Piaget. Adolescence, 43, 237-251.

SELF-ASSESSED WISDOM SCALE - SAWS JEFFREY WEBSTER, 2003

This brief questionnaire is intended to investigate how people of different ages understand themselves in relation to life experiences and whether these perceptions are modified or not as they age.

It is requested to rate the following statements using the scale below. Remember that there are no "right" or "wrong" answers and that all responses are anonymous. Take your time, answer according to your first impressions. Please, to the right of each statement tick one of the numbers containing the assessment scale.

- 1 = Strongly disagree
- 2 = Moderately disagree
- 3 = Slightly disagree
- 4 =Slightly agree
- 5 = Moderately agree
- 6 = Strongly agree

1 - During my life I have already overcome many painful facts.	1	2	3	4	5	6
2 - I easily adjust my emotions to the present situation.	1	2	3	4	5	6
3 - I often relate past with present situations.	1	2	3	4	5	6
4 - I am able to laugh in embarrassment situations.	1	2	3	4	5	6
5 - I love to read books that challenge me to think differently about many issues.	1	2	3	4	5	6
6 - I have taken important decisions throughout my life.	1	2	3	4	5	6
7 - When I take personal decisions I do not let myself take over by emotions.	1	2	3	4	5	6
8 - I often think about my own past.	1	2	3	4	5	6
9 - There may be funny elements even in very difficult life's situations.	1	2	3	4	5	6
10 - Besides my favourite kind of music I like to listen to other musical styles.	1	2	3	4	5	6
11- Throughout my life I have dealt with many types of people.	1	2	3	4	5	6
12 - I am in tune with my own emotions.	1	2	3	4	5	6
13 - I often dedicate myself to the remembering of past events.	1	2	3	4	5	6
14 - When I face major life transitions I try and find a funny side.	1	2	3	4	5	6
15 - I love trying a variety of different ethnic foods.	1	2	3	4	5	6
16 - I have gone through various moral dilemmas.	1	2	3	4	5	6
17 - I am very good at interpreting my emotional states.	1	2	3	4	5	6
18 - Reviewing my past helps me to have a good perspective of my current concerns.	1	2	3	4	5	6
19 - I laugh easily.	1	2	3	4	5	6

20 - I often try new things.	1	2	3	4	5	6
21 - I have met a lot of the negative side of life (e.g., dishonesty, hypocrisy)	1	2	3	4	5	6
22 - I can easily express my emotions without feeling like I am losing control of the situation.	1	2	3	4	5	6
23 - I often recall the past to see if I have changed since then.	1	2	3	4	5	6
24 - At this point in my life it is easy for me to laugh at my mistakes.	1	2	3	4	5	6
25 - Controversial works of art play an important and valuable role in society.	1	2	3	4	5	6
26 - I went through many difficult changes throughout life.	1	2	3	4	5	6
27 - I am good at identifying subtle emotions in myself.	1	2	3	4	5	6
28 - Remembering my past helps me understand the important things in my life.	1	2	3	4	5	6
29 - I often use humour to put other people at ease.	1	2	3	4	5	6
30 - I like being surrounded by people whose views are quite different from mine.	1	2	3	4	5	6
31 - I discovered by myself that "not everything that shines is gold."	1	2	3	4	5	6
32 - I am able to control my emotions when the situation demands it.	1	2	3	4	5	6
33 - I often notice that my past can be an important source of knowledge.	1	2	3	4	5	6
34 - Now I know I can truly appreciate the little things in life.	1	2	3	4	5	6
35 - I have a lot of curiosity to know more about other religions and other philosophies.	1	2	3	4	5	6
36 - I have learnt valuable life lessons with others.	1	2	3	4	5	6
37 - It seems I have a certain gift to understand the emotions of others.	1	2	3	4	5	6
38 - Reliving past events increases my confidence to live today.	1	2	3	4	5	6
39 - To comfort others I often make fool of me.	1	2	3	4	5	6
40 - I wonder many times about the mysteries of life and what lies beyond death.	1	2	3	4	5	6