

Preliminary note:

The Serthual scale that we present here was validated in Portuguese, a first time in 2006 (with 730 people). The results were very interesting in terms of both statistical and psychological significance. They are characterised by 10 dimensions mixing the Rogers items with those of the Toulousian scale. However, we proceeded to a second validation with 2179 people in 2011 (with an effort to balance the age/gender groups, and by avoiding taking into account incomplete documents. This second validation made it possible to find the 10 factors (or sub-factors) that had been obtained in the first version and that constitute the 10 dimensions that you will find attached Pierre Tap, Joao Hipolito and Odete Nunes.

Self-esteem scale

S.E.R.T.H.U.A.L.

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INDEX

Introduction	5
1. General characteristics	8
1.1 Technical data	8
2. Construction of the scale	9
2.1 A new scale of Self - the S.E.R.T.H.UAL	10
2.2 Important methodological innovation (non-inversion of negative items)	11
3. Statistical justification	14
3.1 Validity	14
3.2 Loyalty	16
3.3 Standardization	17
3.3.1 Characterization of the sample	17
3.3.2 Normative groups	18
4. General description of the balance	19
5. Application standards	22
5.1 Scope of application	23
5.2 Hardware	23
5.3 Application instructions	23
5.4 Scoring and grading	25
6. Interpretation of the results	25
6.1 Quantitative Assessment	26
6.2 Qualitative Assessment	26
6.2.1 Positive dimensions	26
6.2.2 Negative Dimensions	27

TABLE OF CONTENTS

Table 1. Reliability of dimensions and total scale, using the method of <i>divided halves</i> , with Spearman-Brown correction.....	16
Cronbach's Table 2. Positive dimensions of S.E.R.T.H.UAL.....	16
Table 3. Cronbach's scores - negative dimensions of the S.E.R.T.H.UAL	16
Table 4. Characterization of the sample, by gender, by age groups.....	17
Table 5. Characterization of the sample, by gender, by academic qualifications	18
Table 6. Items of the 10 dimensions of the S.E.R.T.H.UAL.....	20

INDEX OF FIGURES

Figure 1. overall N.E.T.E.S. scores by age and gender.....	11
Figure 2. N.E.T.E.S. scores without reversal of negative items, by age	12
Figure 3. Difference between positive and negative items (without reversal) in the N.E.T.E.S., by age	12

NORMATIVE TABLES - AGE GROUPS :

Age group 13-20	30
Age group 21-23	30
Age group 24-26	31
Age group 27-29	31
Age group 30-36	32
Age group 37-44	32
Age group 45-52	33
Age group 53-60	33
Age group 61-70	34
Age group 71-85	34

TABELAS NORMATIVAS - ACADEMIC QUALIFICATIONS :

4th year of school	35
6th grade schooling	35
Schooling in 9th grade	36
12th grade	36
Higher and postgraduate education	37

Introduction

The Self-Esteem Scale, named S.E.R.T.H.U.A.L. (*Self-Esteem* Rogers, Tap, Hipólito & UAL) is an instrument that results from an extensive study on the concept of self-esteem and has been validated for the Portuguese population. It is the result of a set of investigations carried out from two other instruments, the Rogers *Self-Esteem* Scale (Ro.S.E.S.) and the New *Toulouse Self-Esteem Scale* (N.E.T.E.S.).

The concept of self-esteem has been widely studied in the field of psychology, but there are very different opinions regarding its conceptualization, evaluation and underlying notions.

For a better understanding of this concept, and since this instrument has as a theoretical foundation the theory of the person-centered approach of Rogers, it is important, before proposing a definition of self-esteem, to define another one that is associated to it: the concept of *Self*.

According to Rogers, the perceived *Self* (or *Self-concept*, or *Self-structure*) is defined as "a conceptual, organized, fluid but coherent configuration of the characteristics of the *Self* that are available to consciousness" (1954, p. 56). This configuration is formed by self-perceptions of personal characteristics, self-perceptions from the relationship with others and the environment, and ideals that are perceived as having positive or negative value. (Rogers, 1951).

Today, the term *self* continues to be used and studied in the United States of America with this same definition. Several European researchers have pointed out, however, that most people find it difficult to reach the level of abstraction implied by the term "concept." There is also the risk of minimizing the affective and practical dynamics and the intrapersonal and interpersonal processes. More often, we speak of *self-image* or *self-presentation*. These same authors have shown the interest of replacing the term *self* concept by that of personal identity. Personal identity can be defined as a system of representations and feelings from which a person can define and recognize himself, or be defined and recognized by others. What makes the difference with the concept of *self* is the constant possibility to show that personal identity is a place of construction and the result of multiple comparisons with oneself or with others. It is in fact constantly solicited, in personal time, in terms of permanence and continuity (remaining oneself) or in terms of changes in personal characteristics (becoming oneself or becoming another).

But the personal identity is enriched and complexified in the articulation (internal and external) of multiple physical, social, professional and cultural identities. In a way, self-esteem constitutes the evaluative dimension of personal identity. A low level of self-esteem can be an indicator of identity difficulties, questioning of personal identity, its temporary impoverishment, among others.

Rogers (1954) also introduces a distinction which becomes very important, even fundamental, in the conceptualization of the *self*: the distinction between the real or perceived *self* and the ideal *self* or, better said, the *desired self* (Grummon, 1969). For the author, the gap between the perceived *self* and the desired *self* will be an indicator of the level of self-esteem felt by the person.

If the ideals and the values, of multiple origins, intervene in the construction of an idealized image of what we should be, this idealized image is not confused with the being that we wish to become and which will be neither perfect nor ideal, but which incites us to operate several changes (physical, moral, intellectual, professional, among others). But the self-esteem is not only the result of the good articulation between the real self and the desired self, it also depends directly on the relation between the *self* perceived and attributed by oneself and the *self* perceived and attributed by the others (Tap, 1988). Self-esteem is thus the complex and variable product of the articulation between the perceived real *self*, the projected, ideal, desired *self* and the attributed self (stereotyped or specific attributions).

According to Tap and Vasconcelos (2004), self-esteem is defined as a subjective experience that is verbally expressed and accompanied by meaningful behaviors. Its foundations and variations depend on the person's relationships with himself and with others.¹

According to Pires (2004)², the representation that people have of themselves, in the different contexts in which they are inserted, is a factor of impact on the way they experience what surrounds them. This representation integrates an evaluative component, supported by the whole of subjectively lived experiences.

In the same way, for other authors who are interested in the subject of self-esteem (Coll, Marchesi & Palácios, 2004), it is agreed that the dynamics of self-perception/evaluation is related to the individual history, integrating the successes and

¹ See in particular the chapter on self-esteem in this book.

² Pires, M. (2004). *Additivity and self-esteem: a comparative study*. Paper presented at the 6th National Congress of Health Psychology. Lisbon: Calouste Gulbenkian Foundation.

failures, with the experiences of acceptance and emotional support lived in the interpersonal context, namely in the relationship established with the significant figures.

In his preface to the book *"L'estime de soi. Perspectives développementales"* (Bolognini and Prêteur, 1998), Tap reminds us that the notion of *esteem* implies both *measurement (evaluation)* and *valuation (values)*. A self-evaluation test assumes, in fact, that the person has the possibility to analyze and measure, in his or her behaviors, the presence and intensity of specific feelings and emotions, to judge, positively or negatively, his or her attitudes, preoccupations, acts, potentialities or projects. This measurement thus implies the awareness, more or less clear, of the value, positive or negative, of the judgment made about oneself (for example: "I feel **good about** myself" or "I am **too** shy").

Self-esteem, as a component of psychological functioning, plays a fundamental role in the dynamics of the variables that allow people to assert their identity, develop strategies to manage situations that trigger stress, develop social integration skills and elaborate an existential project that gives meaning to life.

Thus, positive self-esteem depends on the way a person mobilizes different strategies and efforts to achieve a good personal, professional and social integration.

However, it seems to us that the measurement of the concept of self-esteem should not be simplified, because it presents a multidimensional complexity. The evaluation of how the person perceives and evaluates himself, in the different dimensions that constitute this component of personal identity, is more relevant than the verification of the general self-esteem.

The SERTHUAL scale includes five positive and five negative dimensions which, once analyzed, will allow us to obtain a profile of the person in relation to his/her self-perception.

1. General characteristics

1.1 Data sheet

Identification	
Name:	Self-Esteem Scale - S. E. R. T.H. U. A. L (Rogers <i>Self-Esteem</i> , Tap, Hipólito & UAL)
Test authors:	Tap, P.; Hipólito, J. & Nunes, O.
The authors of the manual:	Nunes, O.; Tap, P.; Pires, M.; Brites, R.; Pires, P.; Laneiro, T.; Hipólito, J.
Administration:	Individual or group
Duration:	10 to 15 minutes
Population:	13 to 85 years old
Objective:	Self-esteem assessment
Standardization:	Percentage of scores
Normative groups:	Gender, age level, and education level

2. Construction of the scale

The S.E.R.T.H.UAL scale is derived from the Rogers Self-Esteem Scale (Ro.S.E.S.) and the New Toulouse Self-Esteem Scale (in French, N.E.T. E.S.).

The Rogers Self-Esteem Scale (Ro.S.E.S.) is a translation of the scale first used by Rogers in a research study reported in the book *Psychotherapy and Personality Change* (1954). In this study, Rogers and Dymond (1954) wanted to see if there were differences in *self-perception* and incongruence between the perceived *self* and the desired self in a group of people who had undergone therapy, compared to a control group.

According to Rogers (1954), the application of the scale was based on the assumption that the individual has the ability to perceive himself or herself and to order these perceptions, as well as to order the characteristics and emotional states that he or she considers desirable or undesirable, resulting in the notion of a desired *self*. This was a Q-sort test that confronted the person with a large number of evaluative judgments (100), from most similar to most different from a given goal, which they had to rank in nine piles.

From this test, the authors selected 74 questions that they used in the construction of a new scale, which measured the gap between the perceived *self* and the desired *self*, thus determining the level of individual congruence. It consists of two distinct parts: the first, composed of 74 items, refers to the individual's perception of himself. Each person marks a number from 1 (strongly disagree) to 5 (strongly agree), depending on how they perceive themselves; the second part, composed of exactly the same 74 items, follows the same procedure. Here, the intention is that the person marks the numbers according to how they would like to perceive themselves.

The New Toulouse Self-Esteem Scale (N.E.T.E.S.) is derived from the Toulouse Self-Esteem Scale .: Oubrayrie, Safont, Tap, 1991; Oubrayrie, Leonardis & Safont, 1994).

In developing the Toulouse Self-Esteem Scale, the authors drew on existing scales (Coopersmith, 1959; Rosenberg, 1965; Fitts, 1965; Harter, 1982), but which did not allow for investigation of the areas of emotional control and future self-evaluation. This scale consists of 60 items, divided into five subscales: Emotional Self (ES), Scholastic Self (SC), Social Self (SS), Psychological Self (PS), and Future Self (FS).

The New Self-Esteem Scale of Toulouse (N.E.T.E.S.) is also composed of 60 items (Tap, Hipólito, Nunes & Santos, 2004): 30 items allow for a direct positive evaluation (e.g., "I have confidence in myself") and 30 items with a negative meaning, which implies an inversion of the answers (e.g., "I get discouraged easily in my activities").

The person must answer each item on a *Likert-type* scale from one to five (1= Totally disagree, 5= Totally agree). The final self-esteem score ranges from a minimum *score* of 10 to a maximum *score* of 50.

Both instruments, the Rogers Self-Esteem Scale and the new Toulouse Self-Esteem Scale, were validated for the Portuguese population (Tap, Hipólito, Melo & Tecedeiro, 2004), in a survey³ that aimed not only at validating the scales but also at demonstrating that after a factor analysis it is necessary not to reverse the negative items when calculating the final *score*, a procedure that will be discussed later.

2.1 A new scale of Self - "the S.E.R.T.H. UAL "

The comparison between the two previous scales, based on data obtained from a sample of 731 participants, led to the decision to develop a new Portuguese self-esteem scale, combining the advantages of the previous scales.

Using the statistical procedure of factor analysis, the major components of the *scores of the* participants who responded to both scales were evaluated, identifying 10 major dimensions, five of which were positive (A = General self-satisfaction, B = Socio-normative expansion, C = Sociopersonal maturity, D = Psychic and intellectual development, and E = Social, academic, and professional development) and five negative dimensions (F = Self-denial and self-deprecation, G = Relational tension, H = Abnormal disorder, I = Emotional tension, and J = Self-hostility).

Items with the highest factor weight (equal to or greater than . 60) were selected from all items on both scales for inclusion in the S.E.R.T.H.UAL.

³ Tap, P. Hipólito, J., Melo, C. & Tecedeiro, M. (2004). Escala de Toulouse e escala de estima de si de Rogers: comparação entre fumadores e não fumadores. *5th National Congress of Health Psychology*. "Health psychology in a changing world". Lisbon.

In 2006, the new self-esteem scale called S. E. R. T. H. UAL (Rogers, Tap, Hipólito & UAL Self-Esteem) was presented on⁴. It consists of 60 items: 30 positive items, integrated in five positive dimensions and 30 negative items integrated in five negative dimensions.

2.2 Important methodological innovation (non-inversion of negative items)

It seems important to point out, for the reader familiar with psychological assessment techniques, that the S. E. R. T. H. UAL scale (as well as the two scales used in its construction, the Rogers *Self-Esteem Scale* and the *New Toulousian Self-Esteem Scale*), has been developed according to a totally new technique in the organization of the test, which we will justify from a technical and scientific point of view

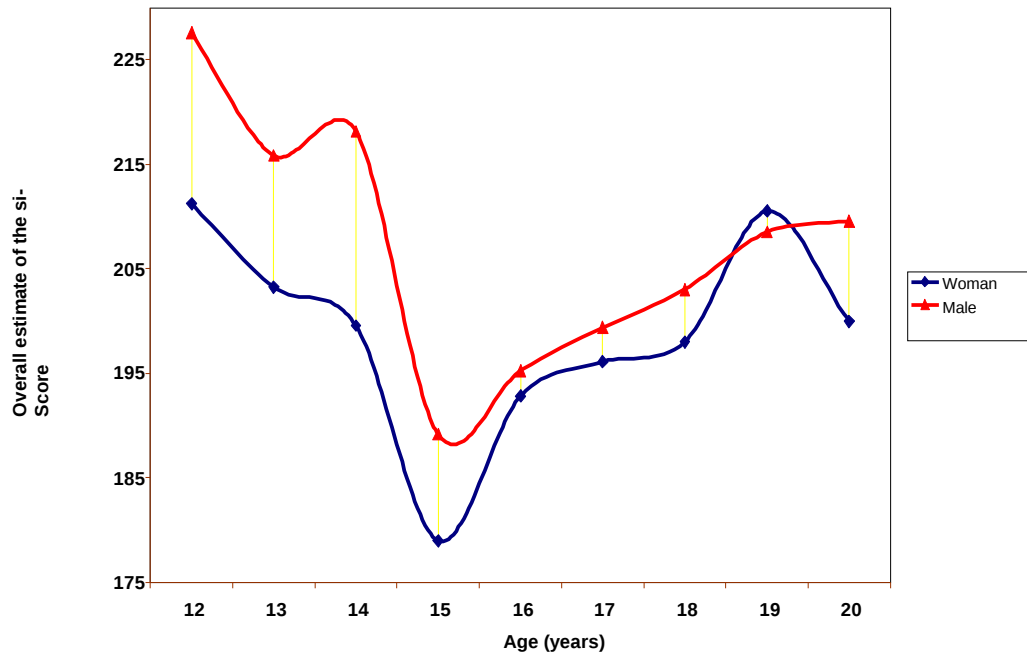
In most of the self-evaluation scales, the authors obviously choose items that directly measure the attitude or ability being studied. In the case of self-esteem, the items chosen tend to *value the person*: "I have a good self-image". However, the items can also conversely evoke a negative evaluation, a *devaluation*. For example: "I don't like my body". When the results are transcribed in order to obtain a global *score* (value or result) of self-esteem, the negative items are reversed⁵. We believe we can demonstrate that the elimination of negative self-esteem (transformed into low positive self-esteem) is a mistake, both from a psychological and technical point of view.

Let's take the example of a study carried out in the Toulouse region (France) on the self-esteem of 2184 adolescents aged 12 to 20 years. Using the classical technique (inversion of negative items to obtain a positive global *score*), we obtain the following curves (figures 1, 2 and 3), according to sex and age. The result is interesting and suggests that the "adolescent crisis" is at its peak at age 15.

Figure 1. Overall N.E.T.E.S. scores by age and gender

⁴ Tap, P., Hipólito, J., Pires, P., Brites, R. & Pires, M. (2006) *A new self-esteem scale (S.E.R.H.UAL)*. 6° Congresso Nacional de Psicologia da Saúde: "Saúde, bem-estar e qualidade de vida". Faro: Universidade do Algarve.

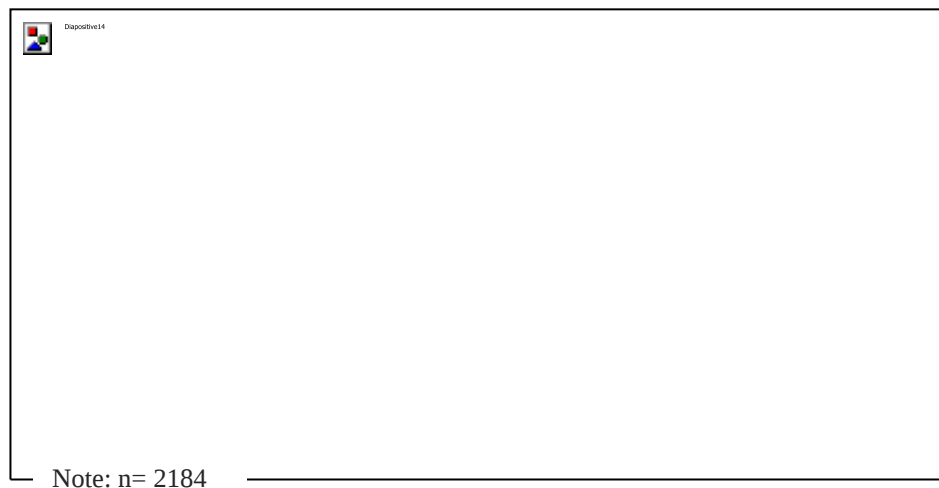
⁵ For example, if in the item "I get angry easily" the person assigns the value 5 (on a 5-point scale), perceived as the maximum negative, the value 1 will be assigned, perceived as the minimum positive. If the score is 4, negative, 2 will be entered as positive. We can then add up the scores of all the items (positive and negative reversed) to obtain a global positive self-esteem score.



Note: n= 2184

In contrast, if the negative *scores are* not reversed and positive and negative self-esteem are measured separately, the following two curves are obtained (Figure 2):

Figure 2. N.E.T.E.S. *scores* without reversal of negative items, by age



Note: n= 2184

If we differentiate between the positive *score* (almost always higher) and the negative *score*, we clearly obtain a curve relatively similar to the one obtained by the method of reversing the value of the negative elements (Figure 1). However, the notable differences concern the qualitative significance of the data obtained.

Figure 3. Difference between positive and negative (non-reversal) items on the N.E.T.E.S., by age



In psychological terms, therefore, the technique introduced here, which consists of studying the positive and negative *scores* separately, calculating the difference to obtain the final result, is more correct. In the example cited, we see that the 15-year-olds obtain similar *scores* to the others in the positive items, but feel more involved in the negative items, presenting significantly higher *scores* than the other groups.

In addition to these qualitative "psychological" arguments, there are important statistical arguments. In the study developed with the classical inversion technique, principal component analysis yields four factors. Two of these factors are composed solely of inverted items. Factor 1 (which explains 14.94% of the variance, $\alpha = .88$) is composed of 21 of the 30 inverted items. Factor 4 (which explains 3.76% of the variance, $\alpha = .70$) contains all of the remaining inverted items. This means that reversing the negative items does not remove the common devaluing characteristic. This type of result was frequently observed by us in several samples.

It therefore seems preferable to separate the positive and negative items in the analysis, provided that the preliminary factor analysis shows that the positive and negative items produce different factors and do not intermingle. This is precisely the case for self-esteem scales, in particular the three scales mentioned here (Ro.S.E.S, N.E.T.E.S and S.E.R.T.H.UAL).

3. Statistical justification

3.1 Validity

In psychometrics, validity is one of the most important assurance criteria, as it confers a high degree of objectivity to the test and allows us to determine "the degree to which the test actually measures what it sets out to measure" (Anastasi & Urbina, 2000, p. 22). In the case of the S.E.R.T.H.UAL validation, internal validity was determined.

Internal validity

We have already seen that the S.E.R.T.H.UAL scale is the result of a statistical analysis carried out on the items belonging to the two scales mentioned above and a comparative analysis carried out on the basis of the answers of a large group of participants, which allowed us to verify the concordance between the results obtained in the two scales.

Since these instruments have the same purpose, i.e., to assess self-esteem, and since both reference scales have high internal validity, we consider that construct validity is high.

For statistical validation purposes, the S.E.R.T.H.UAL scale was applied to a baseline sample of 1279 participants. The data obtained were subjected to an exploratory principal component analysis process with Varimax rotation. This procedure aimed to confirm the difference and natural separation between the positive and negative items that compose the scale. The result obtained showed the existence of four factors, two composed of positive items and two of negative items, allowing the confirmation of the hypothesis. Given this separation, it was considered appropriate to carry out independent procedures for the two sets of items. Thus, a principal component analysis with Varimax rotation was performed on the positive items of the scale, and an identical analysis was performed on its negative items.

Principal component analysis with Varimax rotation on the positive items of the scale demonstrated the existence of 3 factors.

The first positive factor is composed of 10 items and explains 30.05% of the variance (internal consistency: = .78). Because of the size of this factor and its

influence on the total variance, we performed a second principal component analysis with Varimax rotation, now on the items that compose it. This analysis revealed the existence of two sub-factors: the first, composed of five items, explained 42.99% of the variance ($= .76$); the second, composed of five items, explained 12.06% of the variance ($= .79$).

The second positive factor is composed of 11 items and explains 6.69% of the variance, ($= .79$). A second Principal Component Analysis with Varimax rotation was also performed on the items of this factor, which revealed the existence of two sub-factors: the first, composed of five items, explains 35.91% of the variance ($= .71$); the second, composed of six items, accounts for 8.64% of the variance ($= .71$).

The third positive factor is composed of seven items and explains 4.95% of the variance ($= .72$).

Regarding the analysis of the negative items of the scale, principal component analysis with Varimax rotation demonstrated the existence of three factors.

The first negative factor is composed of 18 items and explains 31.93% of the variance ($= .92$). Because of the size of this factor and its influence on the total variance, we performed a second principal component analysis with Varimax rotation, now on the items that include it. This analysis revealed the existence of two sub-factors: the first, composed of 12 items, explains 42.31% of the variance ($= .90$); the second, composed of six items, explains 6.84% of the variance ($= .80$). A third principal component analysis with Varimax rotation was also performed on the items composing the first sub-factor, due to their size and influence on the variance. This analysis revealed the existence of two subfactors, one composed of seven items, which explained 47.88% of the variance ($= .86$), and the other, composed of five items, which explained 7.25% of the variance ($= .79$).

The second negative factor is composed of seven items and explains 6.53% of the variance ($= .67$) and the third negative factor is composed of five items and explains 4.71% of the variance ($= .68$).

Thus, through this statistical process, we obtained a set of 10 factors, which served as the basis for creating the 10 dimensions that comprise the Scale. In the factors composed of six or more items, the five items with the highest factorial weight were selected for inclusion in the final version of the S.E.R.T.H.UAL.

3.2 Fidelity

We chose the *split-half* method to calculate reliability, which provides a correlation coefficient between two halves of the test ("artificially" split for effect, in an equal halves process). We also corrected by the Spearman-Brown formula (Table 1).

Table 1. Reliability of dimensions and total scale, using the method of *divided halves*, with Spearman-Brown correction.

	Method		N
	<i>Split-Half</i>	<i>Spearman-Brown</i>	
Positive dimensions	0.75	0.86	1279
Negative dimensions	0.64	0.78	1279
Full scale	0.71	0.83	1279

We also statistically evaluated the internal consistency of the total scale by obtaining **Cronbach's *alpha***, equal to .86, a high value. Since this test is composed of two types of items, i.e., there is a set of five positive dimensions and a set of five negative dimensions, we also evaluated the internal consistency of these "subscales" (Tables 2 and 3).

Table 2. Cronbach's scale - positive dimensions of the S.E.R.T.H.UAL

Dimension	
Overall self-satisfaction	.84
Socio-normative expansion	.62
Socio-personal maturity	.77
Physical and intellectual enhancement	.76
Soci academic and professional development	.60
General index of positive self-esteem	.91

Table 3. Cronbach's scale - negative dimensions of the S.E.R.T.H.UAL

Dimension	
Denial and self-deprecation	.82
Relational tensions	.73
Abnormalities	.65
Emotional tensions	.67
Self-hostility	.66

General index of negative self-esteem	.86
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The scale therefore generally has satisfactory or high levels of reliability, making it a stable instrument with respect to its items.

3.3 Standardization

3.3.1 Characterization of the sample

The sample used for the statistical validation of this scale is composed of 1279 participants of both sexes (607 males and 672 females), aged 13 to 85 years. We tried to maintain an approximately equal percentage of subjects in each age group (Table 4).

Table 4. Characterization of the sample by gender by age groups

Age group	Men		Women		TOTAL	
	N	%	N	%	N	%
13-20 years old	65	11%	78	12%	143	11%
21-23 years old	57	9%	93	14%	150	12%
24-26 years old	61	10%	60	9%	121	9%
27-29 years old	44	7%	54	9%	98	8%
30-36 years old	59	10%	79	12%	138	11%
37-44 years old	65	11%	55	8%	120	9%
45-52 years old	66	11%	64	10%	130	10%
53-60 years old	66	11%	76	11%	142	11%
61-70 years old	61	10%	52	8%	113	9%
71-85 years old	63	10%	61	9%	124	10%
TOTAL	607		672		1279	

This sample can also be characterized in terms of education level (Table 5).

Table 5. Characterization of the sample, by gender, by academic qualifications

Academic qualifications	Men N %		Women N %		TOTAL	
4th Class	90	15%	94	14%	184	14%
Grade 6	41	7%	32	5%	73	6%
Year 9	107	18%	77	11%	184	14%
Grade 12	157	26%	193	29%	350	27%
Baccalaureate	27	4%	34	5%	61	5%
Diploma	121	20%	188	28%	309	24%
Other	64	10%	54	8%	118	9%

3.3.2 Normative groups

From the baseline sample, the normative groups, i.e., the groups of participants whose results constitute the response norm, were formed. The normative groups were formed on the basis of gender, age, and academic qualifications.

The normative tables show the scores obtained by each group in each of the 10 dimensions of the S.E.R.T.H.U.A.L. scale, converted into percentile scores. Converting raw scores into percentiles allows subjects to be distributed around the center of their score distribution, varying this distribution according to the mean of the normative group, so that each participant will be compared to his or her reference group (Cronbach, 1996).

The normative tables are included in this manual and can be consulted to perform the quantitative evaluation.

4. General description of the scale

The S.E.R.T.H.UAL scale is composed of 60 items, on which the person must position himself, according to the perception he has of himself. The values are ordered on a Likert-type scale (with values ranging from 1, which corresponds to "Totally disagree", to 5, which corresponds to "Totally agree").

The 60 items were grouped by the statistical procedure of principal component analysis (followed by a Varimax rotation) into 10 principal dimensions, five positive and five negative, which we will now name and describe:

Positive dimensions

A = Overall self-satisfaction: the person declares himself/herself optimistic and positive about him/herself, has a good opinion of him/herself, feels good about him/herself, is confident and shows a need for self-assertion.

B = Socio-normative expansion: the person expresses the desire to achieve great things in life and to assume a role in society; he/she wants to participate in solidarity movements; he/she enjoys the company and relationships in a group.

C = Socio-personal maturity: a sense of responsibility prevails in the person; he/she enjoys making decisions and carrying them out, with rationality and tolerance, emotional maturity; desire to satisfy superiors.

D- Physical and intellectual enhancement: the person considers him/herself to have a pleasing physique, is proud of his/her body and its development; considers him/herself sexually attractive; shows ambition; values him/herself intellectually.

E = Social, academic and professional appreciation: person has a kind attitude, shows appreciation for others; is hardworking, sociable; has confidence in future; is satisfied with professional and/or academic/school performance.

Negative dimensions

F = Denial and self-deprecation: the person perceives **him/herself** as a failure, without hope, no one can help him/her, he/she does not respect him/herself; he/she is apathetic and cannot cope with events.

G = Relational tensions: the person feels that others avoid him/her; he/she isolates him/herself, is not very active in groups, considers him/herself as unattractive; he/she perceives him/herself as less good than others and that others do not trust him/her

H = Abnormal Disorder: Person has few personal values or role models; exhibits sexual agitation and insecurity; is emotionally disturbed; perceives him/herself as not worthy of anyone's trust; does not value him/herself.

I = Emotional tension: The person does not control his **or** her aggressiveness; he or she is impulsive, angry, nervous and tense; he or she has an addictive personality; he or she is discouraged by his or her results.

J = Self-hostility: the person feels insecure; he or she is self-centered, afraid of failure, does not appreciate what he or she is doing or has done; he or she struggles internally, feeling unable to face crises and difficulties.

Table 6 shows the elements that make up each of the dimensions.

Table 6. Items of the 10 dimensions of the S.E.R.T.H.UAL

Positive dimensions	Positive elements
	7- I am optimistic 20- I have a positive attitude towards myself

A = Overall self-satisfaction	21- I am assertive (affirmative) 38- I feel good about myself 45- I have confidence in myself 49- I have a good opinion of myself
B= Socio-normative expansion	40- I will be happy with myself if I succeed. do great things in my life 43- I am very loyal to my friendships. 47- I like group activities 51- I think that everyone should assume a role in society 52- I would like to participate in solidarity movements 54- At work/university, others are looking for the my company
C= Socio-personal maturity	2- I am a responsible person 10- I usually manage to take my decisions and stick to them 14- I am a rational person 16- I am tolerant 28- I feel emotionally mature 41- My bosses/teachers are satisfied with me
D= Psychological and intellectual improvement	8- I am sexually attractive 17- I am ambitious 31- I am intelligent 37- I have a pleasant physical appearance 44- I am proud of my body 58- I am happy with the way my body is developing.
E= Social, academic and professional appreciation	5- I generally like people 24- I am kind 27- I am a good worker 34- I am very sociable 53- I have confidence in my future 60- I am satisfied with my professional/school results
Negative dimensions	Negative points
F= Self denial and depreciation	9- I feel like there is no help for me. 12- I feel apathetic 15- I feel like I'm not dealing with things 19- I don't respect myself 23- I am a loser

	32- I feel hopeless
G= Relational tensions	39- Others are suspicious of me 50- People are bored when they are in the my company 55- I feel like I'm doing worse things than others 56- I have an unattractive physical appearance 57- In a group, I like to take little initiative 59- In groups, I feel isolated.
H= Abnormal disorders	3- I have few values and standards of my own. 11- My decisions are not made by me own 25- I am afraid of sex 29- I am really upset 33- I am a person who cannot be trusted. 35- I have no value
I= Emotional tensions	4- I find it difficult to control my aggressiveness. 13- I am impulsive 36- I get angry easily 42- I think I am nervous and tense 46- To feel better, I use stimulants such as coffee, tobacco, alcohol, etc. 48- Poor work/school performance I get discouraged easily
J= Hostility towards oneself	1 - I often blame myself for the things I do. 6- My most difficult battles are with myself. 18- I avoid facing crises or difficulties 22- I have difficulty making decisions 26- I am afraid of failing at what I really want. 30- I feel bad about myself

5. application standards

5.1 Scope of application

The S.E.R.T.H.UAL, allows an individual or collective application, to people aged 13 to 85 years.

The total time required to apply the scale varies between 10 and 15 minutes, depending on individual characteristics. It is convenient to administer the scale in one go, without interruption.

This self-filled instrument allows to analyze the individual level of Self-Esteem, obtaining three general levels of: a positive Self-Esteem index, a negative Self-Esteem index and a general Self-Esteem index, resulting from the difference between the positive and the negative index.

The results also allow the individual to be compared to the norm, checking his or her results against the normative sample in terms of percentages.

5.2 Hardware

Are required for the application of the self-esteem scale:

- The Answer Sheet
- The Quote Sheet and Profile
- A Pencil
- The Manual

The manual includes theoretical information about the construction of the scale and its development, description of the self-esteem scale, norms of application, scoring and respective interpretation of the results, characterization of the normative sample, respective tables and criteria of guarantee of the scale.

5.3 Application instructions

As with other psychometric tests, appropriate general application procedures should be followed.

Environmentally, the room where the application takes place should have a pleasant temperature and good lighting. The furniture should consist of appropriate chairs and tables. Materials should be prepared well in advance and a careful supply should be kept for this session. Make sure that there are enough answer sheets (in case of group application) and that there are two pencils per person (so that, in case one of them becomes unusable, the person does not have to interrupt the completion of the scale). Motivation should be facilitated by encouraging a sincere and spontaneous attitude in the execution of the task. A low involvement of the person in the task can lead to biased answers.

Despite the simplicity of the application of this scale, the examiner must be properly informed about the application instructions. He or she must ensure that individuals understand how to complete the scale, or else repeat it, taking care not to add instructions that are not in this Manual, or distort those that are. Although there is no time limit for filling in the scale, the technician must pay attention to very long filling times, trying to understand the difficulties and possible biases. Once the application is launched, it is advisable that people fill in the answer sheet silently, without interruption or intervention by the technician.

1. At the outset, the attention of the people who will be completing the scale should be solicited. Then, a brief general explanation of the purpose of the instrument should be provided to ensure motivation and authenticity of responses.
2. Pencils and answer sheets must be provided in advance, stating:

Please check to see if you have a sheet like this (show), if so, please fill in the details requested at the top of the sheet: Name, age and education level⁶.

3. After filling in the personal data, in the case of group applications, the Ladder instruction is read aloud. In the case of individual applications, the person can read the instruction in silence, with the presence and attention of the technician to clarify any doubts.

⁶ Note: In the case of search applications, unnecessary identifiers or those that could compromise the anonymity of responses can be removed.

Below is a list of statements. Considering 1 (Strongly Disagree) and 5 (Strongly Agree), please check (with a cross) each one according to your current perception of yourself. Try to answer all questions truthfully. There are no right or wrong answers. There is no time limit to complete the test.

Once the person has finished, the examiner should ensure that all items have been completed. If not, the examiner should ask the person to fill in the blanks, thus clarifying the difficulty, with all due attention.

5.4 Scoring and rating

This scale allows us to access the person's self-esteem, obtaining an individual profile composed by the score obtained in each of the dimensions of the scale. It also allows us to compare the individual results with those of the normative sample, in terms of percentage.

The value attributed to each item of the scale by the person must be entered in the respective dimension on the rating sheet, which will allow the calculation of the average and the total *score* of each one. These results allow the elaboration of the individual profile of the general positive self-esteem index and the general negative self-esteem index, present in the same sheet, as well as the general self-esteem index, which results from the difference between the positive and the negative index.

The results obtained in each dimension also allow them to be compared with the normative sample by means of the respective reference tables. The average obtained by the person in each dimension will be converted into a percentage score, which allows the person to be placed in relation to his or her reference group.

6. Interpretation of the results

The self-esteem scale allows two types of evaluation: a quantitative, or inter-individual, type and a qualitative, or intra-individual, type. These results allow us to access and understand the level of self-esteem through the positive general self-esteem index, the negative general self-esteem index, and the general self-esteem index, which is the result of the difference between the positive and negative.

6.1 Quantitative Assessment

This evaluation allows us to situate each person in relation to his or her reference group, in relation to each dimension of self-esteem. It is done by comparing the results obtained with the results of the normative sample group, in percentage scores (profile sheet).

6.2 Qualitative Assessment

It is an intra-individual analysis, developed from the individual profile of the person. It allows us to know to which areas the person gives the most importance, in the perception that he/she has of himself/herself, either in the positive or negative dimension of self-esteem, and from this analysis to elaborate a profile of the general index of positive self-esteem and of the general index of negative self-esteem.

Although we propose, in general terms, some guidelines for the interpretation of the results, this process must always be conducted on the basis of the person's life history and personal characteristics.

6.2.1 Positive dimensions

A - Overall self-satisfaction

A person who scores high on this dimension is perceived as having an optimistic and positive view of themselves, confident and with a clear need to assert themselves and others.

B - Socio-normative expansion

A person who scores high on this dimension reveals a desire to achieve goals that are generally very important and to play a role in society. He/she seeks to participate in solidarity movements and values interpersonal and group relationships.

C - Socio-personal maturity

High scores on this dimension reveal that the person perceives themselves and feels responsible, that they like to not only make decisions but to see them through. They

value rational thinking and tolerance and demonstrate emotional maturity. He/she often likes to satisfy his/her superiors.

D - Intellectual and psychic improvement

High scores on this dimension show that the person perceives his or her body in an extremely positive way, both in terms of physical attributes (feeling sexually attractive and proud of one's body), and intellectual abilities (such as ambition or intelligence).

E - Social, academic and professional development

A person who scores high on this dimension sees themselves as kind, grateful, hardworking, and sociable. They show confidence in the future and are satisfied with their work, academic and school performance.

6.2.2 Negative dimensions

F - Denial and self-deprecation

A person who scores high on this dimension sees themselves as a useless person for whom there is no hope. They feel that no one can help them, they have no self-esteem and feel apathetic. He/she sees him/herself as unable to cope with life's events.

G - Relational tensions

High scores on this dimension show that the person perceives themselves as unattractive and feels that others avoid them. They tend to isolate themselves from others, are not very active in group situations, and see themselves as unattractive, less good than others, and that others cannot trust them.

H - Abnormalities

High scores on this dimension indicate that the person is perceived as having few values and principles or personal role models. They are emotionally disturbed and show feelings of fear about sex. There is a total devaluation of self and he/she believes that he/she does not deserve anyone's trust.

I - Emotional tensions

A person scoring high on this dimension feels that they cannot control their aggression, are often impulsive and angry with feelings of nervousness and tension. They have an addictive personality and often feel discouraged by their results.

J - Self-hostility

High scores on this dimension reveal that the person is perceived as very insecure, with feelings of extreme passivity and lack of energy. They reveal a constant fear of failure and constantly devalue their achievements. They feel unable to resolve their internal conflicts and cope with crisis situations or difficulties.

Normative tables p.30

TABLE: Age group 13-20 years[illegible]**TABLE: Age Group 21-23**[illegible]

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Percentile	Gender Female	Male gender
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[illegible]

p. 34 TABLE: Age Group 61-70

[illegible]

TABLE: Age group 71-85 years

[illegible]

p.35 TABLE: Academic Qualifications - 4th year

Percentile s	Gender Female										Male gender										Percentiles
	Positive dimensions					Negative dimensions					Positive dimensions					Negative dimensions					
	A	B	C	D	E	F	G	H	I	J	A	B	C	D	E	F	G	H	I	J	
99	30	30	30	26	30	28	28	30	26	30	30	30	30	30	30	23	27	26	29	27	99
95	30	30	30	23	30	26	25	25	21	26	29	30	28	28	30	22	25	24	23	25	95
90	29	30	29	23	29	24	23	24	21	25	29	30	28	26	29	20	21	22	22	23	90
80	27	30	27	21	27	20	18	21	18	23	26	29	26	24	27	19	18	19	20	21	80
70	25	29	27	21	26	18	17	19	17	20	26	27	25	22	26	17	15	18	17	20	70
60	24	27	25	20	25	16	15	17	16	18	24	24	23	20	24	16	14	16	16	19	60
50	23	26	24	18	24	14	13	15	15	18	23	23	22	18	22	14	13	14	14	17	50
40	22	24	23	16	23	13	12	14	14	16	21	21	22	17	20	12	12	12	13	16	40
30	20	23	21	15	21	10	11	11	13	15	20	20	20	16	18	9	10	10	12	15	30
20	17	21	19	13	20	9	10	9	11	14	17	18	18	13	17	8	9	9	10	13	20
10	14	18	17	11	17	7	8	7	10	13	14	15	14	10	14	6	6	6	10	11	10
Average	22.26	24.56	23.27	17.47	23.16	14.85	14.24	15.27	14.93	18.13	21.80	22.71	21.67	18.43	21.67	13.44	13.41	14.21	14.96	17.32	Average
Standard deviation	9.93	4.93	4.64	4.37	4.55	5.92	5.38	5.98	4.12	4.61	5.5	5.69	5.39	5.61	5.36	5.20	5.13	5.57	4.89	4.38	Standard deviation
N	672	672	672	672	672	672	672	672	672	672	607	607	607	607	607	607	607	607	607	607	N

TABLE: Academic Qualifications - Grade 6

Percentile s	Gender Female										Male gender										Percenti les
	Positive dimensions					Negative dimensions					Positive dimensions					Negative dimensions					
	A	B	C	D	E	F	G	H	I	J	A	B	C	D	E	F	G	H	I	J	
99	30	30	30	29	29	27	22	24	26	28	30	30	30	30	30	30	30	30	30	28	99
95	28	30	30	27	28	26	21	23	25	27	30	30	30	29	30	25	25	23	23	26	95
90	27	30	29	25	28	21	19	22	22	24	30	30	29	28	30	22	23	21	23	25	90
80	25	30	27	22	26	17	18	17	19	21	28	29	27	25	29	19	21	19	20	21	80
70	24	26	26	21	25	15	17	14	18	20	27	29	25	23	27	16	18	18	18	19	70
60	22	26	24	19	24	13	16	14	17	18	25	27	24	22	26	15	16	15	16	18	60
50	21	25	23	18	22	11	14	12	17	18	24	27	23	20	26	14	14	14	16	17	50
40	19	24	22	17	22	10	12	9	15	17	21	24	23	19	23	12	12	12	14	16	40
30	18	24	21	16	20	8	11	8	14	16	20	23	21	17	22	10	10	10	13	14	30
20	17	21	18	15	20	7	10	6	12	15	18	21	18	16	19	8	8	7	10	12	20
10	14	20	17	9	19	6	8	6	10	12	13	17	16	14	16	6	6	6	9	10	10
Average	20.69	24.84	22.94	17.94	22.81	12.34	14.10	12	16.31	17.72	22.73	24.66	22.73	20.51	24	13.66	14.56	13.76	15.49	16.85	Average
Standard deviation	4.80	3.80	4.19	5.17	3.44	5.67	4.27	5.53	4.20	4.31	5.53	4.71	4.80	4.88	5.28	5.72	6.21	5.73	4.97	5.08	Standard deviation

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