

A Proposal for Evaluating Cognition in Assertiveness

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This article presents the development process and initial psychometric features of an instrument for evaluating cognition in assertiveness. This is an essential social skill for adolescent development and seems to encompass emotional, behavioral, and cognitive aspects. The instrument was created by combining both empirical and theoretical methods for item construction, aiming to evaluate the cognitive realm of assertiveness. A sample of 996 adolescent students was used to test for reliability and validity. Results indicate good psychometric properties. The instrument is composed of 4 subscales: Outer Emotional Support, Functional Personal Ability, Interpersonal Management, and Affective Personal Ability. The Assertive Interpersonal Schema Questionnaire may potentially be a useful tool in the diagnosis of, understanding of, and development of a treatment plan for individuals with persistent difficulties in social events.

Keywords: cognition, assertiveness, evaluation, instrument, adolescence

The concept of assertiveness has received extensive attention and reformulation since its earlier definition as standing up for personal rights (Rakus, 1991). More recently, it has been defined as a social ability that is associated with skillful social performance in different kinds of social events (Arrindell & van der Ende, 1985). Assertiveness is especially needed in adolescence in order for adolescents to face the increased social demands placed upon them, both from adults and from peers (Engels, Dekovic, & Meeus, 2002; Fredriksen & Rhodes, 2004; Tarrant, MacKenzie, & Hewitt, 2006). Although its distinctive features remained controversial for an extensive period of time (Rakus, 1991), recent research has tried to provide a clear and content-based definition of the concept and has specified three main attributes of assertiveness: behavior, affection, and cognition (Vagos & Pereira, 2009).

Behavior and affection have been repeatedly addressed, in both theoretical and practical perspectives. Several classes of assertive behavior have been identified, and these include, for example, expressing positive and negative feelings, refusing unreasonable requests, taking initiative, apologizing, dealing with personal faults, and standing up for personal rights. In what concerns nonverbal actions, an individual is assertive when his or her tone of voice and rhythm of speech are clearly perceptible, and when personal space is respected and preserved in social interactions. More importantly, an assertive behavioral response is characterized by consistency between verbal and nonverbal components of behavior. The assertive individual clearly states what he or she wants to say and emphasizes the message with consistent gestures,

postures, speech rhythm, and tone of voice (Alberti & Emmons, 1990; Castanyer, 2005; Del Prette & Del Prette, 1999; Jardim & Pereira, 2006; Lorr & More, 1980; Martins, 2005; Rakus, 1991). At the affective level, assertiveness is associated with expressing interpersonal behavior without exaggerated or undue anxiety or anger (Arrindell & van der Ende, 1985; Wolpe, 1973).

Recent perspectives that take into consideration the variety of assertive responses and the influence of contextual variables on behavior have associated assertiveness with the presence of cognitive processes or social values, which play a central role in eliciting assertive behavioral responses that are in accordance with social demands in a given event (Golden, 1981; Heimberg & Becker, 1981; Rakus, 1991; Robinson & Calhoun, 1984; Thompson, Bundy, & Wolfe, 1996). This cognitive perspective on assertiveness has been gathering support (Bruch, Kaflowitz, & Berger, 1988; Heimberg & Becker, 1981; Robinson & Calhoun, 1984; Vagos & Pereira, 2007a, 2007b, 2008). Assertiveness has been associated with specific cognitive interpretations of the social world, including views of the self, others, and the interactions between them (Vagos & Pereira, 2009).

This set of social cognitive representations fits the description of interpersonal schemas (Baldwin, 1997; Beck, 1996; Safran, 1990), which consist of core beliefs associated with certain aspects of interpersonal events and relationships. These core beliefs develop from early experiences with significant others and become stable in late adolescence, though they are still permeable to change. They are part of pathological (Young, Klosko, & Weishaar, 2003) and normal (Elliot & Lassen, 1997) psychological functioning. An assertive interpersonal schema may be an accurate representation of cognition in assertiveness (Vagos & Pereira, 2007b). In fact, self-schemas have been previously associated with assertiveness. Research has shown that assertive individuals recollect more childhood assertive experiences and more assertive adjectives from a list. Also, they declare a higher probability of engaging in future assertive behavior (Bruch et al., 1988).

Despite this evidence, measurement instruments for the cognitive realm of assertiveness are scarce. One such instrument was

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developed by Golden (1981), and it attempted to measure thoughts and beliefs associated with assertiveness. However, in this instrument assertiveness was viewed from a narrow perspective, as it was associated only with refusing unreasonable requests, which underestimates the complex but crucial area of cognition in assertiveness (Golden, 1981). Nowadays, the concept of assertiveness transcends refusing unreasonable requests, and so instruments must reflect this conceptual change. A proposal for evaluating cognition in assertiveness that took this broader view of the construct into consideration was recently anticipated (Vagos & Pereira, 2007b). The current work intends to present its development process and to evaluate its psychometric properties.

Instrument Development Process

Following the guidelines provided by T. Kline (2005), the first step in creating an evaluation tool for assessing cognition in assertiveness was to achieve a conceptual framework for this construct, which is presented in Table 1. Previous works, both theoretical and empirical, were considered. On the one hand, a recent theory review coded and organized different definitions and attributes associated with assertiveness in earlier works, defining cognition in assertiveness as relating to specific positive representations of the self, others, and the relationships among them (Vagos & Pereira, 2009). On the other hand, empirical research has negatively associated assertiveness with some maladaptive interpersonal schemas as defined by Young et al. (2003), namely, abandonment, emotional deprivation, defectiveness/unlovability, failure to achieve, and subjugation. Adolescents with distinct levels of assertiveness scored significantly different on measures of those schemas (Vagos & Pereira, 2007a, 2007b).

Items were formulated to serve these two criteria: (a) relate to the theoretical definition of the concept and (b) represent contents that had differentiated individuals on the basis of their level of assertiveness. Hence, the scale was rationally developed, combining both theoretical and empirical methods, in order for the items to provide evidence on test content and be relevant to the planned interpretation of the test scores.

A Likert-type scale with 5 points ranging from a positive to a negative perspective was used. This type of scale is theoretically supported and is considered to be adequate for measuring attitudes. The sampling procedure was multistage: First we selected geographically close subjects, and then we stratified them into three school year groups and randomly selected participants from each group. These processes, as well as the sample size, are adequate to analyze the validity of the interpretations proposed for the results of the instrument (P. Kline, 2000; T. Kline, 2005).

This work intends to present such psychometric analysis, considering three kinds of results: reliability analysis based on internal consistency and standard error of measurement; validity evidence based on internal structure, resulting from a factor-analytic evaluation in which the contents indicated by the subscales of the instrument should concur with the conceptual framework of the construct; and validity evidence based on relations to other variables, namely, demographic variables and another instrument measuring similar constructs. We expected gender differences in assertive schemas to be in accordance with the findings of previous studies on assertiveness that have pointed to women as having more assertive behavioral responses (Arrindell et al., 2001; Bridges, Sanderman, Breukers, Ranchor, & Arrindell, 1991; Vagos & Pereira, 2010). Considering age, the results appear to be contentious. Previous research with Portuguese samples found that older students experience higher levels of discomfort or tension when being assertive, contrary to American samples (Arrindell et al., 2001), but that they also practice more assertive behavioral responses (Vagos & Pereira, 2010). These results may be justified by incongruence in overall psychological functioning, which may result from specific developmental features of adolescence.

Method

Participants

The total sample was composed of 996 students from seven academic institutions in Portugal. The students ranged in age from 15 to 22 years ($M = 16.73$, $SD = 1.15$). Regarding gender, 39.4% ($n = 392$) were male and 60.6% ($n = 602$) were female. Students were equivalently distributed across school year: 32.8% attended the 10th grade ($n = 327$), with a mean age of 15.82 years ($SD = 0.93$); 32.3% attended the 11th grade ($n = 322$), with a mean age of 16.7 years ($SD = 0.95$); and 34.8% attended the 12th grade ($n = 347$), with a mean age of 17.6 years ($SD = 0.78$). An analysis of variance (ANOVA) showed these mean ages to be significantly different, $F(2, 993) = 338.39$, $p = .000$. Post hoc tests showed that 12th graders were significantly older than 10th graders ($p = .000$) and 11th graders ($p = .000$), who were also significantly older than 10th graders ($p = .000$).

A subsample 679 students, ranging in age from 15 to 20 years old ($M = 16.68$, $SD = 1.13$) also completed the Scale for Interpersonal Behavior. Regarding gender, 38.6% ($n = 261$) were male and 61.4% ($n = 416$) were female. Regarding school year, 31.8% attended the 10th grade ($n = 215$), with a mean age of 15.7 years ($SD = 0.84$); 36.2% attended the 11th grade ($n = 245$), with a

Table 1
Conceptual Framework for Cognition in Assertiveness

Theory review: Assertiveness (Vagos & Pereira, 2009)	Empirical works: Nonassertiveness (Vagos & Pereira, 2007a)
The social world is based on caring, respect, acceptance, and mutual understanding.	Others are unstable and cold in their interactions.
Both the self and others have unique and maybe conflicting personalities, but deserve the same social rights and respect.	The self is unlovable and faulty and has a high tendency for failure in everyday tasks; spontaneous expression of emotions and speech must be controlled.
Relationships are by nature horizontal, aiming at achieving common goals.	Relationships are sustained only if others are allowed to control and subjugate the self.

mean age of 16.69 years ($SD = 0.86$); and 32.1% attended the 12th grade ($n = 217$), with a mean age of 17.65 years ($SD = 0.65$).

Two students included in both samples did not provide information on any of the demographic variables that were considered. There were no significant differences between the total sample and subsample, either in age ($t = 1.271, p > .05$), gender, or school year distribution.

Instruments

Assertive Interpersonal Schema Questionnaire (AISQ). The AISQ (see Appendix) was designed to assess the realm of cognition in assertiveness, conceptualized as a set of core beliefs about the self, others, and social events or interactions. The individual is asked to decide whether each statement is characteristic of a possible description of him- or herself on a 5-point Likert scale, ranging from *not at all like me* to *completely like me*. The answers of each subject are summed to obtain the total score. This instrument was built based on guidelines provided by P. Kline (2000) and T. Kline (2005).

Scale for Interpersonal Behavior (SIB). The SIB was used as a related measure to gather evidence on convergent validity for the proposition that the AISQ may measure cognition in assertiveness. It is a multidimensional measure for assertiveness that evaluates its affective and behavioral realms. It is composed of 50 items answered on two scales, one for distress associated with self-assertion in several social situations (SIB Distress) and another for likelihood of engaging in assertive behavioral responses (SIB Performance). Both scales are answered on a 5-point Likert scale, ranging from *not at all* to *extremely* in the first case and from *I never do* to *I always do* in the second case. The answers from a given subject are summed to obtain the total score, which varies from 50 to 250 in each scale. The Portuguese version of this instrument has showed good psychometric properties (Vagos & Pereira, 2010; Vagos, Pereira, & Vieira, 2008) and was the version used in the present study. Reliability values for the present study were $\alpha = .96$ for the SIB Distress scale and $\alpha = .93$ for the SIB Performance scale.

Procedure

Permission for the administration of the instruments was sought both nationally and locally. After permission was granted, teachers administered the instruments in the classroom. The instruments were presented alongside a cover page where demographic questions were asked and information on the goals of the work was given. All the students were also guaranteed confidentiality and voluntary participation. Filling out the questionnaires took about 15–20 min.

All analyses (factor analysis; reliability; correlation analysis; and mean comparisons considering gender, age, and school year) were conducted using SPSS Version 15.0.

Results

Exploratory Factor Analysis

We preformed an exploratory factor analysis using the principal-components method with oblimin rotation, because the

factors to be obtained should be correlated, providing homogenous components of cognition in assertiveness that are also distinct among themselves. The scree plot test was considered adequate to select the factors to be retained (Zwick & Velicer, 1986), and a four-factor solution seemed to be the best fit (*Kaiser–Meyer–Olkin measure of sampling adequacy* [KMO] = 0.92). The rotated factors accounted for 53.01% of the total variance. Items were retained if their loading value was higher than 0.40, and items were assigned to the factor where they loaded the highest (see Table 2).

On the basis of content analysis, the factors were named Outer Emotional Support, Functional Personal Ability, Interpersonal Management, and Affective Personal Ability. The first refers to a positive representation of others as suppliers of support, acceptance, and affection (e.g., “When I am sad, angry, or upset, I have someone to support me and help me feel better”); the second pertains to a representation of the self as possessing the abilities needed to manage daily life (e.g., “I am capable of performing tasks at work (or school) as well as most people”); the third relates to the ability to solve problems as part of interpersonal encounters (e.g., “When someone I like pulls away from me, I try to understand why and solve the situation”); and the fourth conveys beliefs about the self being lovable (e.g., “I feel I am special to some people”).

Four items did not load significantly onto any factor (Items 1, 6, 11, and 21). Examination of their content led us to conclude that these items contained a double meaning that could be confusing, ambiguous, or misleading (e.g., “Sometimes I worry that people I am close to may leave or abandon me, but I think I could handle it”). Considering that they also showed low correlation with the overall scale, they were excluded from the instrument and all the remaining analyses. The final version of the instrument was composed of 21 items, as seen in the Appendix.

Descriptive and Internal Consistency Analysis

A descriptive and internal consistency analysis using the Cronbach’s alpha coefficient is presented in Table 3, for the results from the AISQ subscales and total scale. Reliability coefficients for the scores of both the total scale and subscales of the AISQ were adequate. Skewness and kurtosis analysis indicated that none of the results from the subscales or the total scale followed a normal distribution.

Correlations Between Scales and Subscales

We found significant positive correlations between results from the total scale and subscales of the AISQ (see Table 4). The results from each subscale correlated more strongly with the total scale than with each other.

Validity Evidence Based on Relations to Other Variables

Mean comparisons by gender, age, and school year. Female students showed significantly higher scores than male students on the AISQ total scale ($z = -2.644, p = .008$), Outer Emotional Support subscale ($z = -6.635, p = .000$), and Affective Personal Ability subscale ($z = -4.46, p = .000$). Male students obtained significantly higher scores on the Functional Personal

Table 2
Exploratory Factor Analysis of the Assertive Interpersonal Schema Questionnaire

Variable	Outer Emotional Support	Practical Personal Ability	Interpersonal Management	Affective Personal Ability
Item 2	0.771			
Item 7	0.836			
Item 8	0.451			
Item 17	0.683			
Item 22	0.629			
Item 4		0.584		
Item 14		0.764		
Item 19		0.856		
Item 24		0.867		
Item 5			0.582	
Item 9			0.458	
Item 10			0.526	
Item 15			0.526	
Item 16			0.734	
Item 20			0.614	
Item 23			0.579	
Item 25			0.462	
Item 3				0.612
Item 12				0.522
Item 13				0.503
Item 18				0.696
Eigenvalue	6.807	2.202	1.105	1.021
Variance explained	32.42%	10.47%	5.26%	4.86%

Ability subscale ($z = -2.405, p = .016$). An analysis of covariance (ANCOVA) showed that age had a significant effect as a covariate on the results obtained for only the Functional Personal Ability subscale, $F(2, 992) = 4.22, p = .04$. Descriptive scores are shown in Table 5.

A positive significant but low correlation was found between age and results from the Affective Personal Ability subscale (Spearman $r = .075, p = .017$). Age-related issues were addressed, considering that school year reflected different age distributions. Significant differences were found when comparing different school years on results for the Functional Personal Ability subscale, $F(2, 993) = 8.77, p = .000$, and the total scale of the AISQ, $F(2, 993) = 3.21, p = .041$. Post hoc tests showed that 12th graders scored significantly higher than 10th graders ($p = .000$) and 11th graders ($p = .005$) on the Functional Personal Ability subscale and higher than 10th graders ($p = .037$) on the total scale. Descriptive scores are presented in Table 5.

Convergent validity. Considering the constructs that are proposed to underlie results from the AISQ and the SIB, we expected to find negative significant correlations between results from the AISQ and the SIB Distress scale and positive significant correla-

tions between results from the AISQ and the SIB Performance scale. Results are shown in Table 4. Results confirmed the expected correlations for the AISQ total scale and subscales.

Discussion

Developing standardized tools for assessing cognition in assertiveness can improve the understanding of and interventions for assertiveness skills (Robinson & Calhoun, 1984; Thompson et al., 1996). Other realms of assertiveness, like behavior and affection, have been widely addressed both theoretically and empirically, leaving cognition as the facet still in need of further consideration. The instrument presented here, the Assertive Interpersonal Schema Questionnaire (AISQ), aspires to fulfill this need. It assesses the cognitive filter active in social events that guides the interpretation of social clues and the consequent assignment of an assertive or nonassertive response to social events. It was conceptualized as an interpersonal schema, which includes representations of or core beliefs about interpersonal events. After evaluating validity on the basis of internal structure, we produced a final version of the

Table 3
Descriptive Statistics and Reliability Analysis for the Assertive Interpersonal Schema Questionnaire

Variable	<i>M</i>	<i>SD</i>	<i>SEM</i>	α	Range	Skew	Kurtosis
Outer Emotional Support	21.27	3.71	0.12	.81	5–25	–1.26	1.52
Practical Personal Ability	15.84	3.16	0.10	.82	5–20	–0.53	–0.24
Interpersonal Management	31.66	4.75	0.15	.76	10–40	–0.74	1.02
Affective Personal Ability	17.15	2.93	0.09	.75	4–20	–1.21	1.28
Total scale	85.92	11.61	0.37	.89	38–105	–0.92	0.94

Note. $N = 996$ for all scales.

Table 4
Spearman Correlations for the AISQ Total Scale and Subscales and the SIB Scales

Scale	1	2	3	4	5
1. Outer Emotional Support	—				
2. Practical Personal Ability	.29**	—			
3. Interpersonal Management	.55**	.51**	—		
4. Affective Personal Ability	.54**	.41**	.54**	—	
5. AISQ total scale	.74**	.69**	.87**	.76**	—
6. SIB Distress	-.20**	-.23**	-.32**	-.16**	-.32**
7. SIB Performance	.24**	.24**	.33**	.27**	.35**

Note. Correlations between the SIB Distress and SIB Performance measures are not shown because the SIB was used only to provide evidence on construct validity for the AISQ. AISQ = Assertive Interpersonal Schema Questionnaire; SIB = Scale for Interpersonal Behavior.

** $p < .001$.

instrument comprising 21 items. Their content represents social perceptions of the self, others, and relationships.

Development of the AISQ followed a rational method outlined by T. Kline (2005). For this purpose, items were both empirically and theoretically substantiated: On the one hand, their content related to schemas that in the studies conducted by Vagos and Pereira (2007a, 2007b) had been able to distinguish individuals with different levels of assertiveness; on the other hand, items concurred with the conceptual framework proposed by Vagos and Pereira (2009).

Evidence gathered for the validity and reliability of the AISQ's results was adequate. Results indicated high internal consistency and good validity evidence based on internal structure and relations to other variables. Considering internal structure, the scales' composition is in accordance with the three main aspects that were proposed as being associated with cognition in assertiveness: representations about the self, others, and the relationships among them. The second and fourth subscales relate to positive representations of different dimensions of the self, namely, as being capable and lovable; the first subscale encompasses a representation of others as providers of secure affection; and the third subscale represents relationships as sources of gratification and manageable frustration. Also, these composite scores seem to be sufficiently distinct to sustain separate interpretation of subscores and yet still be part of a homogenous global construct, because they strongly associate with a total score.

For validity evidence on the relation to other variables, we considered information from convergent validity and demographic variables. Concerning the first, we found significant but low correlations between the two instruments used, which aimed to measure different realms of assertiveness. This may explain the low correlations, as we are addressing related yet distinct aspects of

psychological functioning, which are postulated by cognitive models (Beck, 1996): cognition, emotion, and behavior. The AISQ and the SIB seem to address nonoverlapping yet complementary realms of the same interaction style, assertiveness.

Regarding demographic variables, our gender difference findings concur with previous findings with measures of assertiveness, indicating that the AISQ may assess the same content. Male and female respondents scored differently on distinct cognitive assertive dimensions, with women usually obtaining higher scores. This is in accordance with previous findings relating to assertive behavior, because women seem to present a higher frequency of assertive behavioral responses, especially when expressing and dealing with personal limitations (Arrindell et al., 2001; Bridges et al., 1991; Vagos & Pereira, 2010). Male students scored higher only on the Functional Personal Ability subscale. This evidence may be connected to gender roles constructed beginning in childhood. The feminine role is associated with being emotional, helpful, understanding, dependent on others, and needing security, whereas the masculine role is associated with autonomy and task orientation (Arrindell et al., 1997). Hence, it seems plausible that female respondents scored higher on dimensions related to getting and deserving emotional support from others and males scored higher on dimensions related to personal achievement and ability.

Age did not correlate strongly with cognition in assertiveness. However, in what concerns school year, younger students showed the lowest levels of assertive cognitions, especially relating to functional personal ability. These results are consistent with findings of younger American students experiencing higher discomfort or tension when being assertive (Arrindell et al., 2001; Bridges et al., 1991) and of younger Portuguese students demonstrating a

Table 5
Descriptive Results of the Assertive Interpersonal Schema Questionnaire by Gender and School Year

Variable	Outer Emotional Support		Practical Personal Ability		Interpersonal Management		Affective Personal Ability		Total scale	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male	20.36	3.94	16.13	3.08	31.49	4.83	16.65	3.11	84.61	12.15
Female	21.86	3.44	15.64	3.21	31.76	4.71	17.48	2.76	86.76	11.19
10th grade	21.07	3.92	15.44	3.09	31.25	4.9	16.91	2.93	84.68	11.81
11th grade	21.53	3.71	15.63	3.24	31.80	4.89	17.14	2.96	86.11	11.84
12th grade	21.22	3.5	16.39	3.08	31.91	4.46	17.39	2.89	86.92	11.61

lower frequency of assertive behaviors (Vagos & Pereira, 2007c, 2010). However, younger Portuguese students also experience lower levels of discomfort or tension when being assertive (Vagos & Pereira, 2010), which is inconsistent with the present findings. The associations between the three domains of assertiveness—behavior, affection, and cognition—should be carefully considered in future work with samples of Portuguese adolescents.

The increase found in assertive cognition as the adolescent progresses through social groups and experiences seems to indicate that the interpersonal schemas for assertiveness may still be developing through adolescence. This confirms that this life stage places particular emphasis on social demands and learning (Tarrant et al., 2006). On the other hand, this malleability of schemas may sustain an optimistic perspective for those preparing and implementing intervention programs to promote social skills or prevent social anxiety in adolescence. Symbolic and cognitive aspects of assertiveness skills have proven to be a necessary complement of behavioral components when training assertiveness in adolescence (Thompson et al., 1996; Wise, Bundy, Bundy, & Wise, 1991).

Although the present findings represent a promising initial evaluation of the AISQ, additional studies are needed to fully determine the reliability and validity of the conclusions and the interpretations drawn based on it. We still need to ascertain that the construct of cognition in assertiveness has criterion-evidenced validity. Only after we determine that it is related to some important external criterion, like, for instance, social support, can we comprehend how it may be useful in understanding and predicting interpersonal functioning and adjustment. Similarly, it would be important to examine validity evidence based on the response process. Because we are dealing with a positive and desirable ability, participants may endorse what they think is socially expected and not what they personally feel or believe. This may sustain the slight deviation to the right of the normal distribution shown in the results of the subscales and the total scale of the instrument. Moreover, studies are needed to analyze whether the AISQ's results are sensitive to assertiveness training outcomes. Finally, older and distinct samples should be considered to obtain sustained reliability and validity results as well as to determine norms for male and female respondents, because our results suggest scores will need to be interpreted differently depending on subject gender.

Although preliminary, these results prove that the AISQ is a simple and reliable way of assessing the cognitive schemas that may underlie assertiveness. This was the least considered realm of assertiveness, for lack of adequate measurement instruments; the AISQ may now help fill this gap. This questionnaire may be helpful in alerting assertiveness trainers when an individual persists in demonstrating inadequate use of assertiveness skills after having adequately learnt them, because it focuses on core beliefs that may underlie the interpersonal functioning of the individual. Thus, the AISQ may provide a potential tool for the diagnosis of, understanding of, and development of a treatment plan for specific interpersonal difficulties.

References

- Alberti, R., & Emmons, M. (1990). *Your perfect right: A guide to assertive living* (6th ed.). Atascadero, CA: Impact.
- Arrindell, W. A., Bridges, K. R., van der Ende, J., St. Lawrence, J. S., Gray-Shellberg, L., Harnish, R., . . . Sanderman, R. (2001). Normative studies with the Scale for Interpersonal Behaviour (SIB): II. US Students. A cross-cultural comparison with Dutch data. *Behaviour Research and Therapy*, *39*, 1461–1479.
- Arrindell, W. A., & van der Ende, J. (1985). Cross-sample invariance of the structure of self-reported distress and difficulty in assertiveness. *Advances in Behaviour Research and Therapy*, *7*, 205–243.
- Arrindell, W. A., Vergara, A., Torres, B., Caballo, V., Sanderman, R., Calvo, M., . . . Simón, M. (1997). Gender roles in relation to assertiveness and Eysenckian personality dimensions: Replication with a Spanish population sample. *Sex Roles*, *36*, 71–92.
- Baldwin, M. (1997). Relational schemas as a source of if-then self-inference procedures. *Review of General Psychology*, *1*, 326–335.
- Beck, A. (1996). Beyond belief: A theory of modes, personality and psychopathology. In P. Salkovskis (Ed.), *Frontiers of cognitive therapy* (pp. 1–25). New York, NY: Guilford Press.
- Bridges, K. R., Sanderman, R., Breukers, P., Ranchor, A., & Arrindell, W. A. (1991). Sex differences in assertiveness on the U.S. version of the Scale for Interpersonal Behavior (SIB). *Personality and Individual Differences*, *12*, 1239–1243.
- Bruch, M. A., Kafflowitz, N. G., & Berger, P. (1988). Self-schema for assertiveness: Extending the validity of the self-schema construct. *Journal of Research in Personality*, *22*, 424–444.
- Castanyer, O. (2005). *Assertividade: Expressão de uma auto-estima saudável* [Assertiveness: Expression of a healthy self-esteem]. Coimbra, Portugal: Edições Tenacitas.
- Del Prette, Z., & Del Prette, A. (1999). *Psicologia das habilidades sociais: Terapia e educação* [Social ability psychology: Therapy and education]. Rio de Janeiro, Brazil: Vozes Editores.
- Elliot, C., & Lissen, M. (1997). A schema polarity model for case conceptualization, intervention, and research. *Clinical Psychology: Science and Practice*, *4*, 12–28.
- Engels, R., Dekovic, M., & Meeus, W. (2002). Parenting practices, social skills and peer relationships in adolescence. *Social Behavior and Personality*, *30*, 3–18.
- Fredriksen, K., & Rhodes, J. (2004). The role of teacher relationships in the lives of students. *New Directions for Youth Development*, *103*, 45–54.
- Golden, M. (1981). A measure of cognition within the context of assertion. *Journal of Clinical Psychology*, *37*, 253–262.
- Heimberg, R., & Becker, R. (1981). Cognitive and behavioral models of assertive behavior: Review, analysis and integration. *Clinical Psychology Review*, *1*, 353–373.
- Jardim, J., & Pereira, A. (2006). *Competências pessoais e sociais: Guia prático para a mudança positiva* [Personal and social abilities: A practical guide for positive change]. Porto, Portugal: Asa Editores.
- Kline, P. (2000). *The handbook of psychological testing* (2nd ed.). London, England: Routledge.
- Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*. London, England: Sage.
- Lorr, M., & More, W. (1980). Four dimensions of assertiveness. *Multivariate Behavioral Research*, *2*, 127–138.
- Martins, V. (2005). *Seja assertivo—Como ser directo, objectivo e fazer o que tem de ser feito: Como construir relacionamentos saudáveis usando a assertividade* [Be assertive—How to be direct, objective and do what needs to be done: How to build healthy relationships using assertiveness]. Rio de Janeiro, Brazil: Elsevier.
- Rakus, R. (1991). *Assertive behavior: Theory, research and training*. London, England: Routledge.
- Robinson, W., & Calhoun, K. (1984). Assertiveness and cognitive processing in interpersonal situations. *Journal of Behavior Assessment*, *6*, 81–96.
- Safran, J. (1990). Towards a refinement of cognitive therapy in light of interpersonal theory: I. Theory. *Clinical Psychology Review*, *10*, 107–121.
- Tarrant, M., MacKenzie, L., & Hewitt, L. A. (2006). Friendship group

- identification, multidimensional self-concept, and experience of developmental tasks in adolescence. *Journal of Adolescence*, 29, 627–640.
- Thompson, K. L., Bundy, K. A., & Wolfe, W. R. (1996). Social skills training for young adolescents: Cognitive and performance components. *Adolescence*, 31, 506–521.
- Vagos, P., & Pereira, A. (2007a). Assertiveness and temperament: The assertive interpersonal schema [Abstract]. In *Proceedings of the 13th European Conference on Developmental Psychology*. Loughborough, England: European Society for Developmental Psychology.
- Vagos, P., & Pereira, A. (2007b). Assertive interpersonal schema: Evaluation proposal [Abstract]. *Proceedings of the Division of Clinical Psychology Annual Conference* (p. 47). Available from http://www.dcpconference.co.uk/dcp-conference/2007-conference/2007-conference_home.cfm
- Vagos, P., & Pereira, A. (2007c). Transição para o ensino superior e nível de competências assertivas [Transition to higher education and level of assertive abilities]. In A. Barca et al. (Eds.), *Libro de Actas do IX Congreso Internacional Galeo-Portugués de Psicopedagogía: Revista Galego-Portuguesa de Psicología e Educación* (pp. 383–389). Coruña, Spain: Universidade da Coruña.
- Vagos, P., & Pereira, A. (2008). A cognitive model for assertiveness [Abstract]. *Proceedings of the Division of Clinical Psychology Annual Conference, London* (pp. 58–59). Available from http://www.dcpconference.co.uk/dcp-conference/2008-conference/2008-conference_home.cfm
- Vagos, P., & Pereira, A. (2009). Qualitative analysis on the concept of assertiveness. In K. A. Fanti (Eds.), *Applying psychological research to understand and promote the well-being of clinical and non-clinical populations* (pp. 99–112). Athens, Greece: Atiner.
- Vagos, P., & Pereira, A. (2010). Escala de Comportamento Interpessoal: Adaptação para a língua portuguesa [The Scale for Interpersonal Behavior: Adaptation for the Portuguese language]. *Laboratório de Psicologia*, 8, 37–49.
- Vagos, P., Pereira, A., & Vieira, A. L. (2008). Escala de Comportamento Interpessoal: Adaptação de uma escala de medida de assertividade para a língua portuguesa [The Scale for Interpersonal Behavior: Adaption of a scale to measure assertiveness for the Portuguese language]. In A. P. Noronha et al. (Eds.), *Actas da XIII Conferencia Internacional de Avaliação Psicológica: Formas e contextos* [CD]. Braga, Portugal: Psiquilibrios.
- Wise, K. L., Bundy, K. A., Bundy, E. A., & Wise, L. A. (1991). Social skills training for young adolescents. *Adolescence*, 26, 233–241.
- Wolpe, J. (1973). Assertive training. In J. Wolpe (Ed.), *The practice of behavior therapy* (2nd ed., pp. 80–94). Oxford, England: Pergamon Press.
- Young, J., Klosko, J., & Weishaar, M. (2003). *Schema therapy: A practitioner's guide*. New York, NY: Guilford Press.
- Zwick, R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, 99, 432–442.

Appendix

Portuguese and English Versions of the Assertive Interpersonal Schema Questionnaire

Questionário de Esquema Interpessoal Assertivo

A seguir, estão algumas afirmações que podem ser utilizadas para descrever as pessoas. Por favor, lê cada uma delas e decide o quanto te descrevem a ti, utilizando a seguinte escala.

1	2	3	4	5
Totalmente falso para mim		Não é verdadeiro nem falso para mim		Totalmente verdadeiro para mim

Se tiveres alguma duvida, responde baseando-te no que sentes, e não no que pensas ser verdade.

- ___ Sempre tive alguém com quem falar e que se preocupasse realmente com o que me acontece.
- ___ Um homem/mulher de quem eu goste pode gostar de mim, mesmo com os meus defeitos e fraquezas.
- ___ Sou capaz de realizar tarefas no trabalho (na escola) tão bem como a maioria das pessoas.
- ___ Sinto que normalmente posso fazer o que quero, mas não posso fazer tudo.
- ___ Quando estou triste, zangado/a ou aborrecido/a, tenho quem me apoie e ajude a sentir melhor.
- ___ As pessoas de quem eu gosto gostam de mim como eu sou de verdade.

(Appendix continues)

7. ___ Normalmente sou capaz de atingir os objectivos que se me colocam.
8. ___ Posso contrariar a vontade dos outros, sem que eles me rejeitem ou maltratem por isso.
9. ___ Sinto que sou especial para algumas pessoas.
10. ___ Mereço tanto o amor, atenção, e respeito dos outros como qualquer outra pessoa, nem mais nem menos.
11. ___ Tenho tantas capacidades como a maioria das pessoas.
12. ___ Nas minhas relações com outros não deixo que me dominem, e também não tento dominar os outros.
13. ___ Quando alguém de quem gosto se afasta de mim, tento perceber porquê e resolver a situação.
14. ___ Tenho quem me compreenda e a quem expressar os meus verdadeiros sentimentos e pensamentos.
15. ___ É perfeitamente possível eu ser amado/a por alguém.
16. ___ Tenho tanto talento no trabalho (na escola) como a maioria das pessoas, não mais nem menos.
17. ___ Normalmente sei aquilo que quero e sou capaz de fazer as minhas próprias escolhas.
18. ___ Normalmente sou capaz de tomar as minhas próprias decisões, mas quando não sei o que fazer tenho a quem recorrer para me aconselhar e guiar.
19. ___ Sinto-me confortável em mostrar-me tal como sou e deixar que as outras pessoas me conheçam.
20. ___ Sou tão inteligente como a maioria das pessoas.
21. ___ Normalmente consigo que os meus sentimentos sejam tidos em consideração e os meus direitos respeitados sem grande dificuldade.

Assertive Interpersonal Schema Questionnaire

Below you will find some statements that may be used to describe different people. Please read each one of them and decide how much they describe you, using the following scale.

1	2	3	4	5
Completely false about me		Neither true nor false about me		Completely true about me

If you have any doubts, answer based on what you feel and not on what you think should be true.

1. ___ I have always had someone to talk to and who really cares about what happens to me.
2. ___ A man/woman I like may like me, even with my faults and weaknesses.
3. ___ I am capable of performing tasks at work (or school) as well as most people.
4. ___ I feel I normally can do what I want, but I can't do everything.
5. ___ When I am sad, angry, or upset, I have someone to support me and help me feel better.
6. ___ People that I like, like me for who I truly am.

(Appendix continues)

7. ___ I am usually capable of achieving the goals that are set to me.
8. ___ I may go against the will of others, without having them reject or mistreat me for it.
9. ___ I feel I am special to some people.
10. ___ I deserve as much love, attention, and respect from others as any other person, not more and not less.
11. ___ I possess as many skills as most people.
12. ___ In my relationships with others I don't let them dominate me and also don't try to dominate them.
13. ___ When someone I like pulls away from me, I try to understand why and solve the situation.
14. ___ I have someone who understands me and to whom I can express my true feelings and thoughts.
15. ___ It is perfectly possible for me to be loved by someone.
16. ___ I have as much talent at work (or school) as most people, not more and not less.
17. ___ I usually know what I want and am able to make my own choices.
18. ___ I am usually capable of making my own decisions, but when I don't know what to do I have someone to go to for counsel and guidance.
19. ___ I feel comfortable in showing myself just as I am and letting other people get to know me.
20. ___ I am as intelligent as most people.
21. ___ I can usually get my feelings to be taken into consideration and my rights to be easily respected.

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