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Review



Research



Experiences & Tools



**GIUNTI**  
PSYCHOMETRICS

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# The Italian validation of the Session Impacts Scale: A pilot study

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● **ABSTRACT.** Questo lavoro ha come scopo la validazione della versione italiana della Session Impacts Scale (SIS; Elliott & Wexler, 1994), uno strumento di 16 item originariamente messo a punto per misurare l'impatto percepito durante una sessione di terapia o di consultazione. Dopo la procedura di back-translation, i dati necessari alla validazione sono stati raccolti presso il Dynamic Psychotherapy Service per gli studenti universitari dell'Università di Padova. L'analisi fattoriale esplorativa ha evidenziato una struttura a tre fattori che si sovrappongono a quelli emersi nel lavoro originale. L'attendibilità delle sottoscale è risultata più che discreta. Lo strumento tradotto mantiene così le sue caratteristiche e può essere utilizzato per rilevare dinamiche interpersonali patologiche tra utente e clinico.

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● **SUMMARY.** This article reports on an initial validation study of the Italian translation of the Session Impacts Scale (SIS), which is a brief measure of the perceived impacts of therapy sessions. Data were collected from a heterogeneous group of clients seen through the Dynamic Psychotherapy Service for university students. Exploratory factor analysis (EFA) clearly showed the emergence of a three-factor structure, overlapping with the original dimensions called Tasks Impacts, Relationship Impacts, and Hindering Impacts. A second-order EFA confirmed a division between the Helpful Impacts factor and the Hindering Impacts factor. Reliability as internal consistency was very good for Tasks Impacts, Relationship Impacts, and Helpful Impacts scales and discrete for the Hindering Impacts one. Correlations with both the Session Evaluation Questionnaire scales and with a measure of the patients' satisfaction about the consultation process highlighted a discrete convergent validity of the Italian SIS. Also in its Italian version, SIS presents the important feature to detect pathogenic interpersonal dynamics between patient and therapist and should help to avoid the risk of anti-therapeutic relational and technical movements. Further validation studies are needed to replicate the factor structure with a more homogenous sample.

**Keywords:** Session Impacts Scale (SIS), Pilot study, Italian validation, EFA, Psychotherapy

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## INTRODUCTION

The unfolding of therapeutic alliance, therapeutic realizations, and therapeutic openness /involvement in the single session can be considered as non-specific session outcomes, that play an important role in the impact of the psychological exchanges between therapist and patient. As a daily psychotherapeutic activity, each therapist performs, either explicitly or implicitly, an evaluation of the session's outcome. Sometimes the therapist has the sensation that good work was achieved, such as when the session was accompanied by a patient's insight or when there was something that, in the therapist's opinion or perception, was a good therapeutic intervention. These session outcomes can have a different impact on the patient. On one hand, the patient can have some feelings about the session that could be described by terms like good *vs* bad or difficult *vs* easy; on the other hand, the session outcomes can be related to a specific topic in a patient's life (e.g., "this is why I did that", "now I realize how this emotion hinders me", and so on). In any case, impact session is defined, according to Stiles et al. (1994), as the "immediate subjective effects, including clients' evaluation of the session, their assessment of session's specific character, and their post-session affective state" (p. 175). It is considered to be an important mediator between process and outcome (Stiles, 1980). To choose the single session as a unit for analysis of the impact seems, accordingly with Elliott and Wexler (1994) and Stiles (1980), to be appropriate, as a session is an intermediate state between the entire therapy and the single speaking turns, allowing for the connection between micro- and macro-analytic views of the therapeutic process. Standing these rationales, the evaluation of the impact aspects of the clinical practice is definitely important, especially when considered from the patient's point of view.

For the clinician, having tools to identify the impact session as perceived by patients is extremely useful for different reasons. For example: they could allow comparing therapist's perception concerning the session's trend with the one's of the patient, in order to understand if the two perceptions are convergent or divergent (this information could be related to the development of the therapeutic alliance); they could help to understand if the therapeutic process, as perceived by the patient, has a positive or negative impact on him/her (to anticipate negative therapeutic reaction); finally, during the training of young clinicians,

they introduce a further, and precious, information source to be used in individual trainee programs.

In the literature, there are two tools devoted to helping the clinician gather this information. The first is the *Session Evaluation Questionnaire* (SEQ; Stiles, 1980; Stiles et al., 1994), a self-report tool that asks both patients and therapists about their experiences after a clinical session has just ended. It consists of 27 adjectives in semantic differential scales, divided into three thematic parts: evaluation of the session itself, feelings after the session, and evaluation of the therapist. The second is the *Session Impacts Scale* (SIS; Elliott & Wexler, 1994), a 16-item questionnaire that describes the impact experienced by the patient after the session, considering different aspects such as the patient's problems, the patient's progress, etc. The SIS was used to evaluate the processing features of cognitive-behavioral *vs* psychodynamic interpersonal time-limited therapies for depressed patients (Reynolds et al., 1996); it was utilized with other tools to validate the Helping Skills measure (Hill & Kellems, 2002). The SIS was also used to evaluate the evolution of the therapeutic relationship when a critical incident appeared during the session (Janzen, Fitzpatrick & Drapeau, 2008).

Within a research project that is developing in the Psychological Service Assistance–Dynamic Psychotherapy Service (SAP-DPS) of Padua University, a validation of the first tool, the SEQ, was completed (Rocco, Salcuni & Antonelli, 2017). The present work has the aim to start the validation process of the second tool, the SIS, on an Italian population of outpatients.

## SESSION IMPACTS SCALE

### Instrument structure

The *Session Impacts Scale* (Elliott & Wexler, 1994) is composed of 16 items aimed to describe the impact experienced by the patient after the session. Each item is characterized by a label (for example, item 8 is labeled: "Feel relieved, more comfortable") and a short paragraph description (the description for the same item is: "As a result of this session, I now I feel relief from uncomfortable or painful feelings; I feel less nervous, depressed or guilty, or angry in general about therapy").

The items are organized in three subscales. Two of these, the *Task Impact* scale and the *Relationship Impact* scale, are

each composed of five items and refer to helpful impacts; these two scales are then combined to create the 10-item *Helpful Impact* scale. The third scale, *Hindering Impact*, is composed of six items. Finally, a further item, number 17, gives the patient the option to indicate any other perceived important impact. Each item is rated on a five-point adjective anchored scale ranging from 1 (not at all) to 5 (very much).

The respondent was asked to rate the items on the basis of the descriptor that best fit his/her experience.

## Factor structure

Factor analysis (Elliott & Wexler, 1994) has shown three main factors overlapping with the ones predicted by the authors based on their previous cluster analytic research (Elliott, 1985): the *Task Impacts* factor (items 1-5), the *Relationship Impacts* factor (items 6-10; these two factors combined produce the *Helpful Impact* factor), and the *Hindering Impacts* factor (items 11-16). It is necessary to underline that items 4 and 5, which belong to the *Task Impact* dimension, cross-loaded on the *Relationship Impact* dimension at a level greater than .40. This is true also for item 9, which belongs to the *Relationship Impact* dimension and cross-loaded on the task dimension. Moreover, item number 11, which concerns Unwanted Thoughts, did not load on the *Hindering Impact* factor at the minimum criterion of .40.

## AIM OF THE PRESENT STUDY

The main aim of the authors was to report the first psychometric qualities of the Italian SIS, using data from a pilot study of a clinical group of students recruited at the SAP-DPS. Validity, as well as reliability, is not an immutable property of a given measure. Particularly, a measure may be valid for some populations and for some purposes, but it is never valid in absolute (Boncori, 1993; Thompson, Diamond, McWilliam, Snyder & Snyder, 2005). In fact, at step 10 of their guidelines to the validation process of adapted tests, Hambleton and Patsula (1999) affirm that "...regardless of the interest in cross-cultural comparisons of scores from the two language versions of the test... there is also a need to ensure that the test scores of the newly adapted test are valid and reliable... This may be compiled from factor analytic, experimental, or other correlational information (e.g. predictive or concurrent

validity studies)" (p. 8). From this perspective, our main research questions were related to the structure of the Italian SIS, that is, its underlying dimensions – to analyze its construct validity – and to its reliability. We hypothesized its structure to be consistent with the hierarchical model found in previous research (Elliott, 1985; Elliott & Wexler, 1994).

We also explored the evidence for the convergent validity of the SIS, correlating ratings on its dimensions with scores obtained in the Italian validation of the fourth version of the SEQ (Rocco et al., 2017; Stiles et al., 1994). This is a widely used semantic differential instrument designed to measure two session evaluation dimensions, *Depth* and *Smoothness*, two dimensions of patients' post-session mood, *Positivity* and *Arousal*, and one dimension relating to the therapist named *Good Therapist*. We expected the presence of positive and significant correlations among factors that, in both questionnaires, are positive. On the other hand, we expected a negative correlation between SIS's *Hindering Impact* factor and SEQ's factors. Another tool we utilized to assess the Italian SIS convergent validity was a patients' satisfaction rating concerning perception of both consultation process and clinician's ability to understand and help. We expected discrete to good correlations between the SIS's scores and the patients' satisfaction score indicating that the more the patient feels comfortable and satisfied with the therapist, the more he/she collaborates in the therapeutic work, and the perceived session impact is positive (Elliott & Wexler, 1994; Stiles et al., 1994).

## METHOD

Padua University's Psychological Ethical Committee approved this research (Number 1550/2015), and the questionnaire administration took place from September 2015 to July 2016.

The patients considered in this study were students self-referred to the SAP-DPS, in which, within a psychodynamic framework, they received free clinical consultation sessions. SAP-DPS helps students in facing general psychological disease (for instance, difficult problem-solving without cognitive difficulties or fears about entering the job market), relational problems (i.e., conflicts in family life, problems with partners), or more specific ones (such as eating disorders, complicated grieving, anxiety disorders, depression, self-esteem problems, difficulty in managing affects like anger and sadness).

## Participants

All patients, aside from 10 cases who refused to participate in the research for personal reasons, reacted positively to the research we proposed. There were 233 students who participated ( $N = 163$  females, 57 males, and 13 who did not declare their gender), they were enrolled in Padua University pursuing various disciplines (about 50% of the students were studying Psychology, 9% Law, and 5% Political Sciences and Engineering). Their average age was 22.88 ( $range = 19-66$ ;  $SD = 3.66$ ). These patients participated in a number of consultation sessions, ranging from 3 to 13.

## Instruments

– *Session Impacts Scale*. The SIS (Elliott & Wexler, 1994) was translated into Italian by two translators independently and was then completed through a reconciliation of the two translations. Subsequently, the Italian version was sent to a native English-speaking proofreader with an excellent knowledge of Italian language for the backward translation. The authors, therefore, reviewed the translations and reached a consensus on any discrepancy in language or content of the items to achieve equivalence between the original and SIS Italian version. Following Beaton et al.'s (2000) suggestion, we adopted a “cross-cultural adaptation” guideline to encompass a process that looks at both language (back-translation) and cultural adaptation (meanings) in preparing the SIS in Italian. When measures are used across cultures, the items should be not only translated linguistically but, if necessary (to maintain both the content and tool's conceptual validity; Beaton, Bombardier, Guillemin & Bosi Ferraz, 2000), they have to be culturally adjusted. This process led to a largely satisfactory coincidence with the SIS original version. The obtained result, which was considered the basis for our study, was comprised, as was the original version, of 16 items organized into three sections. The first section, *Task Impact*, included the first five items, the second section, *Relationship Impact*, contained five items (items 6 to 10), and the third section, *Hindering Impact*, was comprised of items 11 to 16. As for the original version, the Italian version also contains item 17, which gives the patient the option to indicate any another perceived important impact.

– *Session Evaluation Questionnaire*. The previously described SEQ consists of a list of bipolar adjective scales presented in a seven-point (from 1 to 7) semantic differential format (Osgood, Suci & Tannenbaum, 1957), and respondents are instructed to, “circle the appropriate number to show how you feel about this session”. The number of items comprising the SEQ has been changed along the line; the number changed from 27 in the fourth version (Stiles et al., 1994) to 21 in the current fifth version (Stiles, Gordon & Lani, 2002). The items are divided into three sections. The first section concerns the session evaluation; it counts 12 items and is prefaced by the stem “This session was ...”, while the second section, which concerns the post-session mood, counts 12 items and is preceded by the stem “Right now I feel ...”. Finally, the third section, which examines a patient's evaluation of a therapist, includes three items and is prefaced by the stem “Today I feel my therapist was ...” (this section was present only in the patient's SEQ version). Items belonging to the first section of the SEQ fourth version are: bad-good, safe-dangerous, difficult-easy, valuable-worthless, shallow-deep, relaxed-tense, unpleasant-pleasant, full-empty, weak-powerful, special-ordinary, rough-smooth and comfortable-uncomfortable. Items belonging to the second section of SEQ are: happy-sad, angry-pleased, moving-still, uncertain-definite, calm-excited, confident-afraid, wakeful-sleepy, friendly-unfriendly, slow-fast, energetic-peaceful, involved-detached and quiet-aroused. Finally, the items present in the third section of SEQ are: skillful-unskillful, cold-warm and trustworthy-untrustworthy.

For the Italian version of the SEQ fourth form (Rocco et al., 2017), the results essentially confirmed the original factorial structure for the *Depth*, *Smoothness*, *Positivity* and *Arousal* dimensions; the *Good Therapist* dimension overlapped perfectly with the original one. The Italian SEQ showed adequate internal consistency and convergent validity (Rocco et al., 2017).

– *Perceived Satisfaction*. At the very end of the consultation process, a questionnaire about perceived satisfaction in the counseling process was also administered. Using a scale ranging from 0 (nothing) to 100 (very much), patients had to evaluate their perceptions about seven areas: the experience of being listened to and comprehended, the experience of being emotionally engaged, the experience of having a clearer definition of the clinical problem, the experience of having new perspectives on the problem, the experience of having greater self-comprehension,

the experience of general utility, and global satisfaction about the consultation process. At the SAP-DPS, this questionnaire is routinely used to gather an early indication of the global outcome as perceived by patients. Another utilization concerns the qualitative (positive vs negative) analysis of the patient's attitude toward the clinician's ability to both understand and help.

## PROCEDURE

When patients have their first contact with the SAP-DPS secretary service, an initial screening battery is administered by a psychotherapist, including *Symptom Checklist-90-R* (Derogatis, 1983), the *Beck Depression Inventory-II* (Beck, Steer, Ball & Ranieri, 1996), and the *Millon Clinical Multiaxial Inventory III* (Zennaro, Ferracuti, Lang & Sanavio, 2008). Written informed consent asking for students participating in the research was requested by the clinician at the end of first consultation sessions before test administration. All the members of SAP-DPS team, including psychotherapists, psychotherapy trainees, and psychiatrists, received group supervision and had a collegial meeting once a week. The SAP-DPS team monitors incoming patients and provides counselling, both on the basis of single patient clinical characteristics and after consideration of the clinician's competence and availability.

Patients received their clinical interviews from 28 professionals (age  $M = 35.54$ ,  $SD = 7.22$ ): 24 psychologists in professional training to become psychotherapists (all females attending psychodynamic training institutes) and 4 experienced dynamic psychotherapists. Counsellors had from 1 to 16 patients each, and all of them met with their clients for at least three sessions. Their clinical experience ranged from one to three years for psychologists in training and from 7 to 21 years for the psychotherapists ( $M = 5.35$ ;  $SD = 4.58$ ).

Patient participation in the research was on a free basis, and they knew that if they didn't participate in the research, they would receive exactly the same treatment. Patients were informed that their psychologists or therapists did not have access to the filled SIS (and SEQ as well) questionnaires. For patients who agreed to participate to the research, his or her counselor gave him/her the questionnaires to be filled out after each consultation session. Completed questionnaires were treated as confidential (code/name) and were left in a specific box.

## Statistical analyses

Before carrying out the factor analysis of the Italian SIS, we conducted an item analysis to study the item distribution. In fact, although using factor analysis to summarize the relations of a group of variables does not require particular assumptions concerning the distributions' form, this solution is better if they are normal, because the correlation coefficients are more reliable (Barbaranelli, 2003).

We examined the SIS dimensional structure, mainly basing our examination on Elliott and Wexler (1994). Therefore, in this first pilot study of the Italian translation, we opted for an exploratory factor analysis (EFA), rather than a confirmatory factor analysis (CFA). In fact, as Tinsley and Tinsley (1987) pointed out, hypothesis testing using CFA constitutes a less stringent test of the hypothesized structure than it does performing EFA. On the other hand, Gerbing and Hamilton (1996) and Barbaranelli (2003) stated that EFA can be used prior to analysis techniques to confirm hypotheses on the data structure.

Like Elliott and Wexler (1994), we used principal-axis extraction with Varimax rotation.

To interpret the rotated factor loadings, we followed the rules proposed by Hafkenscheid (1993, 2009): (a) only items with factor loadings of at least  $+0.40$  were considered (as in the Elliott and Wexler study), provided that (b) the next largest loading on the other factor(s) was at least  $.20$  lower, and under the condition that (c) there were at least four items fulfilling both inclusion criteria (a) and (b).

We agree with Elliott and Wexler (1994) that the SIS is primarily conceived as a session-by-session measure, thus the session was used as a unit of analysis for the factor analysis instead of the patient. Besides this, EFA is a descriptive rather than an inferential statistical method; for this reason, we considered that the nonindependence of sessions within cases was not a problem (Elliott & Wexler, 1994). Consequently, we carried out a factor analysis of the patients' raw ratings for all the sessions in which they participated.

Reliability analysis was performed by calculating internal consistency coefficients (Cronbach's  $\alpha$ ).

We tried to ascertain the convergent validity of the Italian SIS, by correlating the scores on the identified dimensions with ratings on *Depth*, *Smoothness*, *Positivity*, *Arousal*, and *Good Therapist* dimensions of the Italian SEQ (Rocco et al., 2017), and with a score of perceived satisfaction with the consultation process obtained by a sub-sample of patients.

## RESULTS

### Item analysis

We calculated the descriptive statistics of the sixteen items of the SIS, excluding item 17; they are presented in Table 1.

Table 1 shows that the distribution of items 12-16, shown in bold, were strongly positively skewed (they exceeded the

value + 1, meaning that for these items, low values of the response scale were the most frequent; the high kurtosis indexes indicate that distributions were narrower compared to the normal curve). To normalize the distributions, we applied a log transformation and then we recomputed these items' distribution's skewness and kurtosis. Findings indicated that asymmetry indexes exceeded the value |1| again, but they were a little lower than the ones in bold in Table 1, especially the kurtosis coefficients.

**Table 1** – Item descriptive statistics of the Italian version of the Session Impacts Scale

Item	M	SD	Skewness	Kurtosis
1	2.30	1.05	.41	-.50
2	1.96	.96	.70	-.15
3	2.77	1.01	.07	-.57
4	2.54	1.03	.22	-.59
5	2.12	.93	.60	-.08
6	3.27	.84	-.09	-.005
7	2.96	1.02	-.08	-.44
8	2.72	1.10	.12	-.76
9	3.28	1.04	-.30	-.38
10	2.96	.87	-.08	-.14
11	1.95	.90	.78	.35
12	1.27	.62	<b>2.72</b>	<b>8.49</b>
13	1.23	.53	<b>2.55</b>	<b>6.97</b>
14	1.15	.49	<b>3.67</b>	<b>14.27</b>
15	1.54	.83	<b>1.74</b>	<b>3.01</b>
16	1.44	.75	<b>1.95</b>	<b>4.27</b>

Note.  $n = 507$  valid sessions; the score range is 1–5.



## Dimensional structure

We performed a principal axis analysis, followed by an orthogonal Varimax rotation for patients' scores for the first sixteen items of the SIS, considering their responses in all the sessions in which they took part in.

Tests regarding whether the correlation matrix could be factor analyzed were all satisfactory; the determinant was higher than 0 (.001, meaning that the variables were not linear dependent), the Kayser-Mejer-Olkin (KMO) test was .89 (that is, the sample was adequate), and the Bartlett sphericity test was statistically significant ( $p < .001$ , signifying that the correlation matrix was different from the identity matrix).

Cattel's scree-test showed a three-factor solution; the three factors accounted for 50% of the total variance, at 19%, 17%, and 14%, respectively.

Table 2 presents factor loadings and communalities for factors extracted from the Italian SIS. The factor solution is very similar to Elliott and Wexler's (1994) solution. The first factor included the SIS items concerning cognitive benefits deriving from the sessions and corresponds to the factor called *Tasks Impacts*. The second factor comprised four of the five items of the dimension that Elliott and Wexler named *Relationship Impacts*; item 8, "relieved", loaded on both these positive factors, thus it was excluded from further analysis. The third factor included five items concerning negative effects of the sessions and may be referred to the dimension called *Hindering Impacts*; as in Elliott and Wexler's (1994) study, item 11, "unwanted thoughts", did not load on this factor at the minimum criterion of .40, so we did not consider it in future analysis.

Following Elliott and Wexler (1994), we forced the data into a two-factor solution to check if items referring to beneficial effects of the sessions aggregated in a single factor. The analysis yielded the predicted higher-order clustering of task and relationship items into a single *Helpful Impacts* factor; once again, as in Elliott and Wexler's study, the unwanted thoughts item did not reach a loading of .40 on the *Hindering Impacts* factor.

## SIS scores and reliability

Scores on the dimensions measured by the Italian SIS were constructed on the basis of the factor analysis results. Each score was calculated as the mean of the items in bold in Table

2, thus excluding items 8 and 11. The scale range was 1-5, with 3 as midpoint; high scores corresponded respectively to a high perception of *Task Impacts* and *Relationship Impacts (Helpful Impacts)* and to a high perception of *Hindering Impact* by patients. Descriptive statistics and internal consistency are presented in Table 3.

Table 3 shows that the *Relationship Impact* scale received the highest ratings, and the *Hindering Impact* scale received the lowest. Not surprisingly, this latter dimension was positively skewed as the items that constituted it; consequently, we normalized the distribution with a reverse transformation (Barbaranelli & D'Olimpio, 2007). The alphas for the *Task Impact*, *Relationship Impact*, and *Helpful Impact* scales were very good and discrete for the *Hindering Impact* scale.

## Convergent validity

We calculated Pearson's linear correlation coefficients between the SIS first-order dimensions and the *Depth*, *Smoothness*, *Positivity*, *Arousal*, and *Good Therapist* scales of the Italian SEQ. Results are shown in Table 4. Correlations were also computed with a score of perceived satisfaction with the consultation process given by a subsample of 80 patients (see Table 5).

Table 4 shows that the SIS positive impact scores (*Task Impacts* and *Relationship Impacts*) were strongly correlated with the SEQ *Depth* and *Good Therapist* scores, with the correlation between *Relationship Impacts* and *Good Therapist* the strongest. These SIS scores were only weakly and moderately correlated with the SEQ *Smoothness* dimension, suggesting a modest relation to the session's comfort aspect. SIS positive impacts correlations with the SEQ's post-session *Positivity* were at an intermediate level between correlations with *Depth* and *Good Therapist* on the one hand, and with *Smoothness* on the other. Correlations with SEQ's *Arousal* score were modest. As we hypothesized, the SIS's *Hindering Impacts* score was negatively correlated with four SEQ scores, which indicated that sessions higher in *Hindering Impacts* were experienced as rougher and more emotionally negative. The negative relation was strong with *Good Therapist* and moderate with *Depth*, *Smoothness* and *Positivity*, while it was null with *Arousal*. On the whole, the correlations between the SIS and the SEQ dimensions confirm our expectations.

As shown in Table 5, SIS's correlations with the rating of

**Table 2** – First order factor analysis of the Italian SIS

	Factors			Communality
	1	2	3	
1. <i>Ho compreso qualcosa di nuovo su me stesso</i> (Insight into self)	<b>.79</b>	.22	-.021	.68
3. <i>Maggiore consapevolezza. oppure maggiore chiarezza. riguardo sentimenti. esperienze</i> (Awareness)	<b>.74</b>	.23	-.078	.61
5. <i>Progressi verso la conoscenza di cosa fare riguardo ai miei problemi</i> (Progress on problems)	<b>.65</b>	.30	.030	.52
2. <i>Ho compreso qualcosa di nuovo su qualcun'altro</i> (Insight into others)	<b>.64</b>	.20	-.013	.45
4. <i>Definizione di problemi sui quali lavorare</i> (Definition of problems)	<b>.61</b>	.26	-.003	.44
7. <i>Mi sento sostenuto o incoraggiato</i> (Supported)	.40	<b>.75</b>	-.093	.73
10. <i>Mi sento vicino al mio psicologo</i> (Closer to the therapist)	.32	<b>.70</b>	-.20	.64
6. <i>Sento che il mio psicologo mi capisce</i> (Understood)	.39	<b>.67</b>	-.20	.63
9. <i>Mi sento coinvolto nella consultazione psicologica o incline a lavorare più duramente</i> (More involved)	.32	<b>.64</b>	-.15	.53
8. <i>Mi sento sollevato. più a mio agio</i> (Relieved)	.41	.52	-.19	.48
12. <i>Troppa pressione o non abbastanza indicazione dallo psicologo</i> (Unwanted responsibility)	.00	-.16	<b>.71</b>	.53
14. <i>Mi sento attaccato o che il mio psicologo non è interessato</i> (Attacked-rejected)	-.017	-.215	<b>.63</b>	.44
16. <i>Impaziente o in dubbio circa il valore della terapia</i> (Impatient-doubting)	-.158	-.208	<b>.62</b>	.46
13. <i>Sento che il mio psicologo non mi comprende</i> (Misunderstood)	-.042	-.259	<b>.59</b>	.42
15. <i>Confuso o distratto</i> (Confused-distracted)	-.044	-.026	<b>.58</b>	.33
11. <i>Più disturbato da pensieri spiacevoli o propenso a scacciarli via</i> (Unwanted thoughts)	.051	.102	.34	.13

Note. The factor loading in bold was significant.

**Table 3** – Means, Standard Deviations, Skewness, Kurtosis, Internal Consistency Reliability (Cronbach's  $\alpha$ ), and Confidence Intervals (CI) of the Italian SIS

	N items	M	SD	Skewness	Kurtosis	Reliability	95% C.I.	
							Lower Bound	Upper Bound
Task Impacts	5	2.38	.789	.353	-.293	.85	.83	.89
Relationship Impacts	4	3.12	.802	-.067	-.310	.87	.85	.88
Helpful Impacts*	9	2.71	.717	.143	-.417	.89	.88	.91
Hindering Impacts	5	1.33	.471	<b>1.96</b>	<b>.415</b>	.76	.73	.79

Note.  $n = 510$  valid sessions; \*second order dimension.

**Table 4** – Pearson's  $r$  correlations of the SIS with the SEQ scales

SEQ scales	SIS Dimensions		
	Task Impacts	Relationship Impacts	Hindering Impacts <sup>+</sup>
Depth	.53***	.62***	-.38***
Smoothness	.12**	.33***	-.36***
Positivity	.29**	.41***	-.39***
Arousal	.15**	.18***	-.01
Good Therapist	.42***	.66***	-.52***

Note.  $n = 510$  valid sessions; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; + reverse transformation.

**Table 5** – Pearson's  $r$  correlations of the SIS Scores with the patients' score of perceived satisfaction with the consultation process

	Task Impacts	Relationship Impacts	Hindering Impacts <sup>+</sup>
Perceived satisfaction	.40***	.46***	-.27*

Note.  $n = 111$  sessions; \*  $p < .05$ ; \*\*\*  $p < .001$ ; + reverse transformation.

satisfaction with the consultation process were in the expected direction: positive and discrete between the beneficial impacts scores and the satisfaction rating and negative and lower between this rating and the *Hindering Impacts* score.

## DISCUSSION

The aim of this pilot study was to assess the validity and reliability of the Italian SIS. The data presented demonstrated the satisfactory psychometric qualities of the SIS in a number of ways.

First of all, construct validity of this instrument was supported in its Italian version; in fact, exploratory factor analysis revealed a structure substantially overlapping with the one found by Elliott and Wexler (1994). In the first-order EFA, they obtained a three-factor solution (*Task Impacts*, *Relationship Impacts*, and *Hindering Impacts*). Due to cross-loading of three items, they performed a second-order EFA, which showed that items split between *Task Impacts* and *Relationship Impacts* factors loaded on one single factor called *Helpful Impacts*. In the EFA we performed, three factors emerged more clearly; they corresponded with the dimensions called *Tasks Impacts*, *Relationship Impacts*, and *Hindering Impacts*. We also carried out a second-order EFA, which supported the division between a *Helpful Impacts* factor and a *Hindering Impacts* factor. From these dimensions, two items remained excluded: number 8, “relieved”, which cross-loaded on the *Task Impacts* and *Relationship Impacts* factors; and number 11, “unwanted thoughts” that, as in Elliott and Wexler’s (1999) study, did not reach the minimum loading of .40.

In addition, we can also argue that the pattern of SIS ratings is in line with the process-experiential treatment model. In fact, the highest scores were obtained for the *Relationship Impacts* scale, particularly on the items “supported” and “closer to the therapist”, which correspond to the main treatment principle of promoting a genuine and emphatic relationship. This finding further gives support to the construct validity of the SIS (Elliott & Wexler, 1994).

Reliability as internal consistency was good for the *Task Impacts*, *Relationship Impacts*, and *Helpful Impacts* scales and was discrete for the *Hindering Impacts* scale. The corresponding mean scores were below the scale midpoint, except for the *Relationship Impacts* scale. The *Hindering Impacts* score was especially low and was positively skewed, like the scores of every item constituting this dimension. This

result indicates that most of the subjects used the lower points of the response scale when responding to negative statements (items 12-16) about session impacts. Many explanations can be tentatively found for this finding. For example, the subjects might have used the low points of the response scale due to a response bias, or it might be a cultural effect that causes the individual to not utilize negative sentences to make evaluations. It could also be an interaction between the two causes. Another possible explanation could be that patients genuinely evaluated the negative effects of the sessions as very low or of little importance. More deeply, they tended to deny these negative impacts in the very first moments of the counselling process, due to their higher need of help.

We assessed the convergent validity of the Italian SIS by correlating the scores in the obtained dimensions with the Italian adaptation of the SEQ (Rocco et al., 2017) and with an index of the perceived satisfaction in the counselling process given by a subsample of patients. The validity of the first version of the Italian SIS was substantially supported: significant, discrete-to-strong correlations emerged with *Good Therapist* and *Depth SEQ*’s scales; correlations were moderate with *Smoothness* and *Positivity*, while they were quite low or null with *Arousal*. This latter result confirms findings by Stiles et al. (1994) and Elliott and Wexler (1994) and, according to these authors, may be considered evidence of the discriminant validity of the SIS scales. From a clinical viewpoint, it is easy to understand that the more the patient feels a deep and positive bond with the therapist and is open-minded and comfortable in the therapeutic relationship, the more the patient abandons defensive processes and lets the therapeutic contact and work unfold, and the more the session impact is perceived as high.

Convergent validity of the Italian SIS was also supported by correlations with an index of perceived satisfaction with the consultation, which was satisfactory, being discrete for both the SIS positive scales and acceptable for the *Hindering Impacts* scale. Following the previous point, the higher the patient’s satisfaction and feeling of being understood, the more he/she will let the therapist work, and the session impact increases.

Nonetheless, despite the satisfactory psychometric qualities of the Italian SIS resulting from this pilot study, further validation studies are needed to overcome the main limit of this one, specifically the uneven number of male and female participants, and to reply the factor structure of the instrument.



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