The Italian Adaptation of Interpersonal Communication Competences Questionnaire

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Abstract. There has been a growing interest in assessing interpersonal communication competences, to understand how to empower them in specific domains. The aim of this study was to create an Italian adaptation of the Interpersonal Communication Competence Scale (ICCS), by Rubin & Martin. The study was designed to assess the structure of the ICCS and to determine the number of components needed to adequately describe the psychological constructs of Interpersonal Communication Competence in the Italian sample. The questionnaire was administered to 137 subjects. Adopting an analytic process using an exploratory factor analysis, the steps yield a seven factor solution composed of 26 items. We discussed results and future directions concerning interpersonal communication competence scale.

Keywords: Interpersonal communication competences · Questionnaire
ICCS · Psychometrics · Italian adaptation · Communication

1 Introduction

Interpersonal communication skills can be conceived as the ability to (i) communicate intentions and information in an assertive way within a communication setting, (ii) to manage and control the surrounding environment, (iii) to disclose to others, and (iv) to stand up for own rights [1]. These competences are an essential part of people' daily life in several social and cultural contexts, e.g., work, family and significant interpersonal relationships [2], since they deserve to accomplish one's relevant goals, such as obtaining information, gaining support, and exchanging ideas and opinions [3]. Finally, these abilities can help people improve their relationship in terms of empathy, support, comprehension and control.

Given the relevance of these skills, there has been a growing interest in assessing interpersonal communication competences, to understand how to empower them in specific domains such as adult-infant relationship [4], work, and hospital setting [5].

However, there is still a need of a tool able to assess the general cross-domain dimensions of interpersonal communication skills. Moreover, a general communication competence scale in Italian has not been developed yet. We have reviewed different questionnaires in other languages [6], and at the end of the process the Interpersonal Communication Competence Scale of Rubin & Martin [7], has been selected in order to be adapted into Italian.

First, the ICCS is quick and easy to administer, counting 30 items (24 positive and 6 reverse code), with a high internal consistency (Global Cronbach Alpha = .86), and covering cross-domain interpersonal communication skills. Specifically, ICCS is based on 10 cross-domain dimensions of Interpersonal Communication concerning individuals' capability to manage communication in interpersonal settings [7]: (i) self-disclosure is the capability to open ourselves to others [8]; (ii) empathy concerns an affective component resounding with others and a cognitive one, which entails taking others' perspective [9]; (iii) social relaxation concerns feeling comfortable during a conversation [5]; (iv) assertiveness, is the capability of individuals to show their emotions, opinions and to stand up for their rights [7]; (v) interaction management, as the ability to manage everyday interactions [10]; (vi) altercentrism, the capability to put others – and not ourselves - under the spotlight [11]; (vii) expressiveness, regards to be frank during a conversation both verbally and verbally [12]; (viii) supportiveness, a way to communicate that is descriptive, provisional, spontaneous, oriented towards solving problem, empathic and egalitarian [1]; (ix) immediacy, the capability to show others that are willing for communication [13]; and (x) environmental control, is the ability to control the communication setting [14].

These 10 dimensions correspond to akin personal skills and social skills, which are inter-related in a complex way. Therefore, identifying specific cross-domain sub-factors can be crucial for future studies interested in how different cognitive, emotional and social skills contribute to an improvement in communication competences.

Starting from these premises, this study aimed at adapting the Interpersonal Communication Competence Scale in an Italian sample.

2 Methodology

2.1 Sample and Procedure

The Italian version of the ICCS questionnaire was administered to 137 adults (86 women) volunteers from Italy (males mean age = 29.71; S.D. = 7.209; females mean age = 25.96; S.D. = 5.675) recruited through a snowball sampling (online announcements and flyers). Mean schooling of Males was 18 years (S.D. = 5.185), mean schooling of females was 16.75 (S.D. = 2.588). Participants were required to complete the online version of the ICCS questionnaire along with socio-demographical questions using Qualtrics platform (https://www.qualtrics.com/it/).

2.2   Measures and Instruments

The Italian ICCS version was a translation of the original questionnaire, with exactly alike item numbering. First, two bilingual translators (one expert in the field of emotions and the other naïve) translated ICCS into the Italian, as suggested by [15]. Further, the goodness of translation was tested by a back version from Italian to English, done by two bilingual other translators, both fluent in Italian and English. The back-translation was checked by one of the authors of the original version. Afterwards, the original and back versions were compared to define the final Italian form by three expert judges.

Participants were required to complete the questionnaire following this response scale: "If you ALMOST ALWAYS interact in this way, select 5; "If you communicate this way OFTEN, select 4"; "If you communicate this way SOMETIMES, select 3"; "If you act this way only SELDOM, select 2"; "If you ALMOST NEVER behave in this way, select 1".

Table 1 reports item of the Italian version.

Table 1. The table reports items of the full Italian version of the ICCS.

Original	Italian
1. I allow friends to see who I really am	1. Lascio che gli amici vedano chi sono veramente
2. Other people know what I am thinking	2. Le altre persone capiscono ciò che sto pensando
3. I reveal how I feel to others	3. Mostro agli altri come mi sento
4. I can put myself in others' shoes	4. Riesco a mettermi nei panni degli altri
5. I don't know exactly what others are feeling (R)	5. Non riconosco accuratamente le emozioni altrui
6. Other people think that I understand them	6. Le altre persone pensano che io li capisca
7. I feel comfortable in social situations	7. Mi sento a mio agio nei contesti sociali
8. I feel relaxed in a small group gatherings	8. Mi sento rilassato in un gruppo di poche persone
9. I feel insecure in groups of strangers. (R)[a]	9. Mi sento insicuro in un gruppo di persone che non conosco
10. When I've been wronged, I confront the person who wronged me	10. Quando subisco un torto, affronto la persona che ne è l'artefice
11. I have troubles standing up for myself. (R)	11. Ho problemi a farmi valere
12. I stand up for my rights	12. Difendo i miei diritti
13. My conversations are pretty one-sided. (R)	13. Le mie conversazioni sono abbastanza unilaterali
14. I let other know that I understand what they say	14. Faccio capire agli altri che ho compreso cos'hanno detto
15. My mind wanders during conversations	15. La mia mente divaga durante le conversazioni

(continued)

Table 1. (*continued*)

| Original	Italian
16. My conversations are characterized by smooth shifts from one topic to the next	16. Durante una conversazione riesco a cambiare argomento in modo fluente
17. I take charge of conversations I'm in by negotiating what topics we talk about	17. Conduco la conversazione gestendo gli argomenti di cui trattare
18. In conversations with friends, I perceive not only what they say but what they don't say	18. Durante le conversazioni con gliamici, sono in grado di cogliere non solociò che dicono, ma anche ciò che nondicono
19. My friends can tell when I'm happy or sad	19. I miei amici capiscono quando sono felice o triste
20. It's difficult to find the right words to express myself. (R)	20. Ho difficoltà nel trovare le giuste parole per esprimermi
21. I express myself well verbally	21. Mi esprimo bene verbalmente
22. My communication is usually descriptive, not evaluative	22. La mia comunicazione è di solito descrittiva, non critica
23. I communicate with others as though they're equals	23. Comunico con gli altri senza sentirmi superiore o inferiore
24. Others would describe me as warm	24. Gli altri mi descriverebbero come una persona cordiale
25. My friends truly believe that I care about them	25. I miei amici credono sinceramente che io tenga a loro
26. I try to look others in the eye when I speak with them	26. Cerco di guardare gli altri negli occhi quando parlo con loro
27. I tell people when I feel close to them	27. Confido alle persone quando sono legato a loro
28. I accomplish my communication goals	28. Raggiungo i miei obiettivi comunicativi
29. I can persuade others to my position	29. Riesco a persuadere gli altri della mia opinione
30. I have trouble convincing others to do what I want them to do. (R)	30. Ho problemi a convincere gli altri a fare quello che vorrei loro facessero

[a]R = reverse item.

3   Data Analysis

This study was designed to assess the structure of the ICCS and to determine the number of components needed to adequately describe the psychological constructs of Interpersonal Communication Competence in the Italian sample.

To this aim, a parallel Monte Carlo simulation analysis was run on the 30 items, to determine the number of factors to retain in EFA using IBM SPSS Statistics software (Version 21, release 21.0.0.0 64 bit edition). More, an EFA analysis on the original set of items was carried out. Data were analyzed by IBM SPSS Statistics software (Version 21, release 21.0.0.0 64 bit edition). No missing values were found.

4 Results

Preliminary correlations among items showed that items were from moderately to highly correlated. Results of parallel Monte Carlo simulation analysis suggested a border seven-factor solution. Given the 10 factors original structure of the scale, initially, we opted for the 7 factors solution. Both the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.802) and Bartlett's test of Sphericity [$\chi 2$ (703) = 1807.91; $p < .01$] indicated the factoriability of the correlation matrix [16]. We carried out an exploratory factorial analysis. Principal axis factoring (PFA) and a Varimax rotation forcing a seven factor solution were used. The seven factor solution accounted for 51.886% of global variance, with each factor correlating low with other factors. Only item 10 loaded on the fourth factor, therefore, we chose to delete it, and run again PFA with Varimax rotation. This solution explained a higher proportion of variance (51.65%). However, item 15 showed the lowest level of communality (.177) and loaded low in each factor. We chose to delete it. The proportion of explained variance increased (53.169%). Item 22 showed the lowest level of communality (.261), therefore, we deleted it and run again a PFA with varimax rotation. The proportion of explained variance increased (54.271%). We retained this as the final solution (Fig. 1).
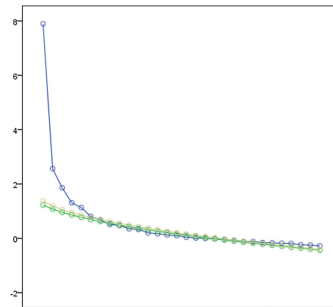
Fig. 1. Scree plot comparing PAF eigenvalues with PA eigenvalues. Dotted green line represents the random 95th percentile of PA eigenvalues and the dotted blue line represents eigenvalues from the research data. PAF = principal axis factoring analysis; PA = parallel analysis. (Color figure online)

The Scale revealed a high internal consistency (Cronbach alpha = .90) (Table 2).

Factor 1 showed a good internal consistency (.80); Factor 2 (.82); Factor 3 (.28); Factor 4 (.80); Factor 5 (.70); Factor 6 (.70); Factor 7 (.41). However, if we removed item 30 from factor 3, internal consistency increased (.66). Therefore, we computed again Cronbach alpha analysis on all items, excluding item 30, and we found that internal consistency did not change (.90). In sum, the final scale excluded items: 10;15;22;30 of the original scale.

Table 2. Factor loadings from the rotated solution of the exploratory factor analysis with varimax rotation in the final version of the scale (30 items, N = 137). Items loading for each factor were reported in bold.

Item	Factors						
	Conversation management	Social-disclosure	Social-confidence	Assertiveness	Social-closeness	Social Reax	Conversation inability
1.	.168	**.579**	.170	.033	.249	.258	−.133
2.	−.029	**.702**	.105	.018	.165	.071	.077
3.	.095	**.805**	.012	−.019	−.008	.077	−.001
4.	**.551**	.220	−.055	.058	.053	−.033	−.482
5.	−.212	−.116	−.120	−.042	.011	.076	**.559**
6.	**.619**	−.001	.094	−.001	.210	.012	−.087
7.	.285	.279	.307	.104	.135	**.707**	−.047
8.	.355	.178	−.068	−.006	.293	**.459**	−.077
9.	.091	−.118	−**.339**	−.271	.083	−.532	.042
11.	−.095	−.069	−**.763**	−.104	−.013	−.175	.238
12.	.320	.187	**.380**	−.099	.059	.100	−.113
13.	.064	.066	−.073	−.033	−.130	−.165	**.488**
14.	**.620**	.139	−.131	.088	.169	.169	−.071
16.	**.586**	−.001	.406	.223	.124	.129	.198
17.	.438	.234	**.434**	.205	−.039	.174	.315
18.	**.664**	−.010	.300	.041	−.033	−.013	−.118
19.	.004	**.648**	.027	.019	.170	.069	.022
20.	.016	.009	−.213	−**.842**	−.006	−.141	.121
21.	.427	.107	.101	**.754**	.137	.057	.006
23	.149	.314	−.073	.212	**.379**	.239	−.312
24.	.111	.321	−.193	−.027	**.556**	.100	−.132
25.	.270	.316	.194	.081	**.709**	−.028	−.017
26.	**.317**	.203	.207	.194	.316	.181	−.093
27.	.146	**.604**	.088	.087	.101	.021	−.178
28.	.453	.332	**.422**	.187	.050	.151	−.075
29.	**.456**	.040	.451	.270	.128	.148	.064
30.	−.057	−.038	−**.709**	−.118	.036	−.018	.011

5 Discussion and Conclusion

Interpersonal communication competences are the ability to express ourselves in the process of exchanging information, in a dual or group conversation, thus managing the surrounding environment, and understanding and interpreting the Other, both verbally and non-verbally [7].

Despite the relevance of considering these competences jointly in a cross-domain perspective, only few instruments have been developed, in order to investigate them [2]. After having reviewed the literature on this topic, we selected the ICCS [7] to be adapted into Italian.

We administered the questionnaire to 137 subjects. Adopting an analytic process using an exploratory factor analysis, the steps yield a seven factor solution composed of 26 items.

Factor 1: **Conversation Management,** is the capability to understand the explicit and the implicit level of a conversation, thus orienting it according to our communicative intentions (items: 4; 6; 14; 16; 18; 26; 29).

Factor 2: **Social – disclosure,** is the ability to let others access ourselves transparently, when we feel enough close to them (items: 1; 2; 3; 19; 27).

Factor 3: **Social – confidence,** is the ability to manage topic inside a conversation setting, standing up for our rights (items: 9; 11; 12; 17; 28).

Factor 4: **Assertiveness,** is the ability of a person to express himself and his thoughts, respecting others and not denying them (items: 20; 21).

Factor 5: **Social- closeness,** is the ability to recognize to other as present inside the conversation (items: 23; 24; 25).

Factor 6: **Social – relaxation,** feeling at ease during social interactions (items: 7; 8).

Factor 7: **Egocentrism,** to locate ourselves under the spotlight (items: 5; 13).

Internal consistency ranged between low (.41) to optimal alpha coefficients (.90). Results showed that ICCS can be considered as a strong potential tool measure interpersonal communication competences for two reasons. It is easy and quick to administer, and it is composed by several number of dimensions. Considering the α in each domain, we do not recommend the use of domains as subscales. However, future studies need to further investigate which of these skills could be the most effective driver for new interventions aimed at improving personal capabilities.

One of the main aspects that emerged from interpersonal communication was the dual dimension concerning self-expression, and others-understanding. This can be due to the fact that communication does not only consist in giving information, but it entails also understanding other's intentions [17]. This process includes a verbal and not verbal level. Communication management requires capabilities in terms of empathy, self-regulations, assertiveness in order to understand own and other emotions, and regulate them due to the circumstances [18]. Indeed, the ability to manage the conversation and the interaction inside the communication setting requires a good level of empathy and self-disclosure [19]. Therefore, future studies could deepen the role of the emotional dimension, at a social and individual level, in relation to communication skills. This could be a promising future step to investigate to what extent emotional self-regulation could impact on subsequent communication management abilities, to create evidence-based trainings promoting these skills.

Finally, despite the potential of this study for the Italian population, some limitations exist. First, we considered only a small sample. Therefore, other studies should enlarge it considering a wider sample size. Then, we focused on people with a high level of education. This aspect should be deepened by future studies to elucidate its impact on communication competences. Finally, evaluating cross-domain communication competences could be a key asset for schools, in order to detect early impairment or issues, or it could become a self-assessed tool to help people monitor their abilities, thus improving them, according to a self-empowerment perspective.

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