The Italian version of the "tool to measure parental self-efficacy-short form": psychometric properties of the measure and initial validation

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Abstract. *Background and aim:* Parental self-efficacy is recognized as a core element of the transition to parenthood process. It affects parental mental health, as well as children's psychosocial, neurodevelopmental and health outcomes since early infancy. Parents with higher parenting self-efficacy have a higher likelihood of engaging in quality parenting practices that support optimal self-regulation development in children. Our study evaluated the psychometric properties of the Italian TOPSE-Short Form (I-TOPSE-SF) questionnaire. *Methods:* 673 Italian mothers (Mage=37.5; SD=5.7) of children aging 0 to 6 years (Mage=3.9; SD=1.7) were involved in this study. *Results:* Initial results of Confirmatory Factor Analysis highlighted that the fit indices of the hypothesized 6-factor structure of the TOPSE weren't satisfactory. Acceptable internal consistencies for the total score and the six dimensions of the measure were observed. Evidence for convergent and divergent validity were provided. *Conclusions:* The I-TOPSE-SF could be a valuable tool to assess parental self-efficacy up to school age, but it is in need of further considerations about its measurement properties. (www.actabiomedica.it)

Key words: TOPSE, parental self-efficacy, parenting, confirmatory factor analysis, Italian validation

Introduction

Parental self-efficacy (PSE) is recognized as a core element of the transition to parenthood process (1). It's commonly recognized as PSE affects parental mental health, as well as children's psychosocial, neurodevelopmental and health outcomes since early infancy (2,3). Parents with higher parenting self-efficacy have a higher likelihood of engaging in quality parenting practices that support optimal self-regulation development in children (4).

The PSE definition stems from Bandura's (5) concept of self-efficacy, grounded in the social cognitive theory. According to Bandura (6-8), the "self-efficacy" can be defined as the individual self-perception of the ability to perform successfully in a particular setting.

Bandura defined self-efficacy as a fundamental factor to the understanding of individuals' transactions with their environments, mediating between individuals' knowledge and behaviour (6-8).

According to Bandura (9), self-efficacy can directly impact humans' cognitive, choice, and motivational processes, determining choices and behaviours.

Concerning in particular parental self-efficacy, it can be described as the maternal or paternal perceptions about their ability to care effectively for the offspring (5). It concerns the beliefs or judgements that parents hold regarding their own capabilities to organize and execute a set of tasks related to parenting a child. When facing challenging conditions related to parenting, the parental self-efficacy appears as a protective factor relating to parents' ability to

plan and control their behaviours (2). Higher levels of parental self-efficacy are related to a warmer and more sensitive relationships with the offspring, since infancy up to adolescence (10). Increased parental self-efficacy predicts supportive parenting behaviours and sensitiveness in setting limits and discipline, fostering a nurturing child-rearing environment (11). It is well described in literature, as the mentioned factors are associated to favourable developmental pathways since early childhood.

Parenting behavior is made of multiple and complex behaviours, dissimilar in different cultural and social contexts (12). No acknowledged, single and shared model of parental efficacy is described in literature, but several individual, social and environmental factors are commonly identified as deeply related to it (1). Parental variables, compared with the offspring's and socio-contextual ones, have the strongest impact on parenting behaviors (13). Among the parental characteristics can be counted the age, the developmental history, the socio-economic status and the emotional wellbeing. In particular, education level and ethnic background showed a strong effect on PSE (13). More in depth, it has been described as educated mothers usually exhibit more PSE toward their children than mothers with lower levels of education (14). In addition, a higher family income was also found to predict increased PSE (14, 15). Concerning parental psychological wellbeing, the inverse proportionality ratio between levels of depression, stress and PSE has been largely recognized (16-19).

The characteristics of the child associated to PSE include the age and developmental phase, the temperament, health status and behavior (20-22).

Furthermore, proximal environmental factors associated with PSE can be identified in the functioning of the family, marital satisfaction and socio-cultural upbringing (1).

Several existing programs aimed to sustain parenthood have been fostered in past decades, mainly based on skill acquisition, relational issues, behavior management, parent support by professionals or peers. As described by Wittkowski et al in their recent review (4), self-report measures are usually used to assess PSE. The appropriateness of self-report measures is described, considering that PSE reflects parental opinions and judgements about their own ability to effectively perform a given parenting task. The authors outline the need for extensive psychometric evaluations of PSE (4). The available measures of PSE appear to lack in several crucial aspects. Limited data concerning essential topics, as criterion validity, are provided in literature, related to the lack of a "gold standard" measure in the field.

In addition, the more recent review by Albanese and colleagues (23), states that a better definition and measurement of the construct are needed. According to the authors, incomplete and unvalidated measures are commonly used in literature or "ad-hoc" questionnaires created by the researchers for specific studies, less rigorously tested than formally validated measures.

Kendall and Bloomfield (12) underline the lack of a shared outcome measure able to frame parental perception of their own abilities to manage their children, based on their own views and experiences. In their contribution (12), Kendall and Bloomfield describe the development of the Tool to Measure Parenting Self-Efficacy (TOPSE), a self-report measure of parenting self-efficacy, grounded in the self-efficacy theoretical framework. The tool is based on views and experiences of parents of children from early months of life, up to 6 years of age. It has been often used in the evaluation of the effectiveness of different types of programs supporting parenthood, as well as pre- and post-measures of individual programs. The measure has been culturally internationally adapted (24) and used with typical (25), atypical development conditions (e.g., autism spectrum disorder in 26; ADHD in 27; developmental disabilities and complex health needs in 28) or risk conditions (29, 30).

The questionnaire is formed by eight subscales (Emotion and affection, Play and enjoyment, Empathy and understanding, Control, Discipline and setting boundaries, Pressure of parenting, Self-acceptance, and Learning and knowledge), formed by six items each on a Likert Scale ranging from 0 to 10 ("completely disagree" to "completely agree"). Moreover, the original tool, referring to a sample of 63 British parents, showed good internal consistencies. Indeed, Cronbach alphas of the subscales ranged from 0.80 to 0.89 (12). In Italy, some questionnaires investigating parental self-efficacy in different age range have been adapted

and validated (e.g. Parenting Self-Agency Measures (PSAM; 31); Perceived Maternal Parenting Self-Efficacy (PMP S-E; 32); Perceived parental self-efficacy (PPSE; 33).

Compared to other existing measures in the Italian context, the TOPSE is described as one of the few validated and standardized, self-administrable tools available to evaluate parental self-efficacy considering a wide age range, designed for healthy children (34).

According to existing literature, other scales evaluating parental self-efficacy have been proposed in the Italian context, mainly referring to parenting in infancy (from 0 to 12 months of age) and considering clinical conditions (see e.g. 32, 35), but validated screening tools are still lacking (35). In particular, our main interest focused on making available a measure able to frame the complexity construct of self-efficacy in a broad context, referring to typical developmental pathways and able to sustain researchers in monitoring interventions' efficacy supporting parenting.

Recently, Roncaglia et al. (34) conducted a preliminary evaluation of psychometric properties of the Italian translation of TOPSE, relying on data from a controlled before-after study conducted in 2015 which involved a sample of 260 parents of newborns of 0-12 months of age. Authors explored its internal reliability, intracluster correlation coefficient and responsiveness of the measure, showing interesting preliminary results.

In line with existing literature (12, 36), the elimination of some less representative subscales for early infancy could be considered in order to make the measure more suitable for parenting in early infancy.

As far as we know, while only one existing contribution evaluates the original tool in the Italian context (34), the statistical properties of a brief version of the measure have never been considered.

The possibility to explore a brief, ease of use version of the tool appears of great interest in order to provide a standardized, self-administered and shared measure that can be used to evaluate parental self-efficacy from early infancy up to pre-school age that could support clinical and empirical research.

The present paper aimed to explore and describe the statistical properties of a brief Italian translation of TOPSE (I-TOPSE Short Form) and provide the validation of the I-TOPSE SF, through investigating its factorial structure and exploring its psychometric properties.

Methods

Participants and procedure

Participants enrolled in this study were Italian mothers of children aged from 0 to 6 years. Specifically, the following inclusion criteria were adopted: a) to be the mother of a child aged from 0 to 6 years (the age range within which the TOPSE measure is applicable); b) to be born and live in Italy. Parents from other countries were excluded from the sample, to promote as much as possible homogeneity in the educational styles and procedures, shared in the national context. Were not considered other exclusion criteria. We focus on mothers and on maternal roles, practices, and experiences, not including fathers, because in Italy mothers have a leading role in caring for children during infancy. Despite the progressive reduction of the gender imbalance in ordinary childcare along infancy described in literature during the last decades, indeed, Italian mothers continue to carry the main responsibilities in everyday care (37, 38).

The participants were recruited in local kindergartens, pediatricians, health-care centers and social media from the North, the Center and South of Italy.

The participation in the study was voluntary and anonymous. A brief description of nature and aims of the study was provided and participants were asked to give their informed consent to take part to the study, through a dedicated online platform. Assessment included some self-report questionnaires that mothers could fill online, namely: the Tool to measure Parental Self-Efficacy (TOPSE; 12), the Parenting Stress Index - Short Form (PSI-SF; 39) to test the divergent validity and the Parental Self-Agency Measure (PSAM; 31, 40) to test the convergent validity of the measures.

The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board of LUMSA University (protocol code CERS07052020 approved on 14 May 2020).

Measures

Tool to measure Parental Self-Efficacy - TOPSE

The Tool to measure Parental Self-Efficacy (TOPSE; 12) is a multidimensional, validated self-report measure assessing parental self-efficacy in ordinary, daily care. It has been already used to monitor parenting interventions, in national and international contexts (12, 25, 36).

Originally, the measure consisted in 48 items, rated on a 11-points Likert Scale (from 0 "completely disagree" to 10 "completely agree") assessing parents' agreement concerning eight dimensions related to parenthood along childhood: Emotion and affection (e.g. "I know when my child is happy or sad"), Play and enjoyment (e.g., "I am able to have fun with my baby"), Empathy and understanding (e.g., "I understand my baby's needs", Pressures of parenting (e.g., "It is difficult to cope with the expectations others have of me as a parent"), Self-acceptance (e.g., "My baby feels safe with me nearby"), Learning and knowledge (e.g., "I am able to recognize the changes of my baby's growth", Control (e.g., "My child will respond to the boundaries I put in place"), and Discipline and setting boundaries (e.g., "I am able to stick to the rules I set for my child").

Each domain is summarized in a score ranging from 0 to 60. Higher scores indicate higher perceptions of parental self-efficacy (12).

In order to provide a single and shared, brief self-administered tool, and to evaluate self-efficacy in a wide age range, from early infancy to school age, we explored the statistical properties of a brief Italian translation of TOPSE (I-TOPSE-SF). The shortened version of the TOPSE consists of 36 items (compared to 48) and does not include "Control" and "Discipline and setting boundaries" domains (34, 36). The mentioned domains are described in previous literature as not relevant in early infancy (12), and removable within the first year of life (36).

Parental Self-Agency Measures – Short Form – PSAM-SF

To test the divergent validity of TOPSE, the Italian version of the Parental Self-Agency Measures Short Form (31, 40) was used. The measure consists of 5 items rated on a 8-points Likert Scale (from 0 seldom to 7 always) evaluating parents' belief to successfully manage daily parental demands (e.g. "I feel sure of myself as a mother/father", "I can solve most problems between my child and me"). The Italian translation of the measures showed good validity and reliability (31). Satisfactory internal consistency had been established in the Italian sample (Cronbach's alpha = 0.75). The total score ranges from 0 to 35. A high score is indicative of higher parental self-efficacy (31).

Parenting Stress Index–Short Form (PSI-SF)

The Italian version of the Parenting Stress Index-Short Form (PSI-SF) (39) was also used to test the divergent validity. The PSI-SF is a self-administered questionnaire, formed by 36-item. Parents are asked to rate their agreement on a 5-point scale, ranging from 1 to 5 (from 1 strongly disagree to 5 strongly agree). Three subscales can be distinguished, namely: Parental Distress (PD), Parent–Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC). Each subscale consists of 12 items. The PD subscale reflects the distress that parents may experience due to personal factors associated with parental role (e.g. "Since having a child, I fell that I am almost never able to do things that I like to do"). The P-CDI subscale measures a parent's perception that the child does not meet expectations and that parent–child interactions are not strengthening (e.g. "My child smiles at me much less than I expected"). The DC subscale assesses a parent's view of the child's behavioral characteristics that make him/her either easy or difficult to manage (e.g. "My child seems to cry or fuss more often than most children"). Higher scores underlie more considerable levels of stress. The subscale scores range from 12 to 60, and the total score from 36 to 180. High scores on the subscales and high PSI-SF total score indicate greater levels of stress. Responses higher than the 85th percentile are considered clinically significant.

PSI-SF global scale and subscales showed high internal consistency in the Italian validation. Cronbach's alphas were: 0.80 for Parental Distress, 0.81 for Parent–child Dysfunctional Interaction, 0.72 for Difficult Child and 0.89 for Total Stress (39).

Data analysis

Firstly, we run a Confirmatory Factor Analysis (CFA), using the Mplus v. 8.3 (41), to test and replicate the hypothesized structure of the TOPSE (6 subscales).

To verify the goodness‐of‐fit of the model, the following fit indices were used: Chi‐squared test (p‐value > 0.05 indicates a good fit), the Comparative Fit Index (CFI), and the Non-normed Fit Index (TLI) (values > 0.90 indicate a good fit; values > 0.95 indicate a very good fit), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Means Square Residual (SRMR) (values < 0.08 indicate a good fit, values < 0.05 indicate a very good fit) (42).

Then, we calculated the Cronbach's alpha coefficient to verify the internal consistency reliability of both the 6 subscales. Generally, the acceptable cut‐offs for Cronbach's alpha coefficient are the following: α ≥ 0.9 = excellent, α ≥ 0.8 = good, α ≥ 0.7 = acceptable, α ≥ 0.6 = questionable, α ≥ 0.5 = poor, and α < 0.5 = unacceptable (43).

Finally, the construct validity was assessed through discriminant and convergent validity to explore the association between TOPSE and its dimensions with other convergent (i.e., Parental Self-Agency Measures Short Form; 31, 40) and divergent (i.e., 39) measures.

Results

Participants

Our sample comprised Italian mothers (N=673) of children aging 0 to 6 years, from several regions of Italy, namely: 56% from the Center of Italy (Tuscany, Umbria, Marche, Lazio and Abruzzo), 30% from the North (Liguria, Piemonte, Lombardia, Emilia-Romagna, Trentino Alto-Adige, Veneto and Friuli Venezia Giulia) and 13% from the South (Basilicata, Calabria, Campania, Molise, Puglia, Sardinia and Sicily), in capital cities and provinces. Mothers' age ranged from 25 to 45 years (M_{age}=37.5; SD=5.7). Concerning educational status, 92% of mothers have diploma, while the 89% of them are graduated.

For 91% of the families involved, parents themselves take ordinary care of their children, while just a small percentage (9%) is supported by persons other than the family (kindergarten). The 43% of mothers have an only-child, the 1% is adopted. Children age ranged from 17 months to 5.6 years (M_{age} = 3.9; SD=1.8 years), 52.6% male. The 85% of children were born at term of pregnancy and their development was described as typical for the 89% of the sample.

Confirmatory factor analysis

Results of CFA highlighted that the fit indices of the hypothesized structure of the TOPSE were not satisfactory. Specifically, $\chi2$ (580) = 1927.896, p < 0.001; CFI = 0.82; TLI = 0.81; RMSEA = 0.062; SRMR = 0.056. Moreover, the R2 estimate related to three items (i.e., item 32: "I can exchange ideas with other parents", item 35: "I can overcome most problems with a few tips", item 36: "Knowing that other parents have similar difficulties with their children makes things easier for me") was not significant (≥ 0.05). Finally, the modification indices suggested to correlate some item's errors in order to improve the fit indices.

Thus, we run another CFA model without the above-mentioned three items (i.e., item 32, item 35, item 36) and correlating the following items: item 1 ("I can show love towards my child") with item 6 ("I find it difficult to cuddle my baby"); item 13 ("I am able to explain things to my child with patience") with item 14 ("I am able to make my child listen to me"); item 2 ("I can recognize when my baby is happy or sad") with item 18 ("I understand my child's needs"); item 14 ("I am able to make my baby listen to me") with item 18 ("I understand my child's needs"); item 22 ("I am able to say 'NO' to others if I do not agree with them") with item 23 ("I am able to ignore pressure from others to do things in their way"); item 28 ("As a parent I can deal with most things") with item 29 ("I can be strong for my baby"). The results showed acceptable fit indices: $\chi2$ (474)= 1196.075, p < 0.001; CFI = 0.90; TLI = 0.89; RMSEA = 0.049; SRMR = 0.054. Thus, this model fit data better than the previous one (Figure 1).
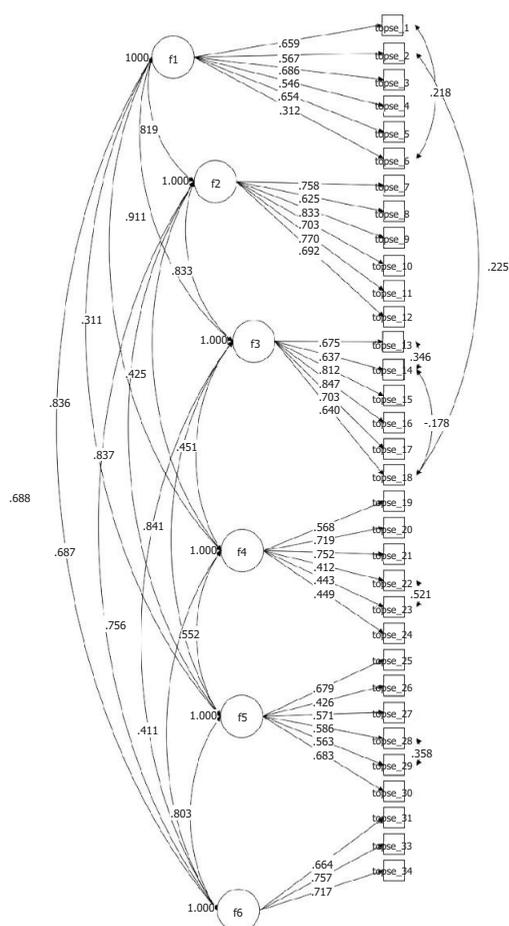
Figure 1. The Confirmatory Factor Analysis (CFA)
results of the six-factor model of the TOPSE.

*Descriptive statistics, reliability, convergent
and divergent validity*

The reliability, assessed by Cronbach's alpha, showed a good or acceptable internal consistency for both the total score and the six dimensions. Specifically, TOPSE total (33 item, α=0.92), Emotions and affects (α=0.69), Play and fun (α=0.87), Empathy and understanding (α=0.88), Pressure of parenting (α=0.88), Self-acceptance (α=0.74), and Learning and knowledge (α=0.77).

In Table 1 range, mean, standard deviation, skewness and kurtosis, and correlation matrix among the study variables the study variables are reported.

The results showed that the total score of TOPSE, as well as all the TOPSE dimensions, positively correlated with self-efficacy score and parental distress, measured with the Parental Self-Agency Measure (PSAM; 31, 40) and Parenting Stress Index - Short Form (PSI-SF; 39), respectively.

Discussions and conclusions

Our study aims to validate the short version of the TOPSE to Italian context in a group of parents of children aging from 0 to 6 years, investigating its psychometric properties, in terms of its dimensionality, reliability, convergent and discriminant validity. The present measure is aimed to assess parental self-efficacy. According to the existing literature, several scales are available to measure parenting self-efficacy in various

Table 1. Descriptive statistics and correlation among the study variables (N=673).

	Min	Max	M	SD	SK	KU	1	2	3	4	5	6	7	8
1. TOPSE-Emotions and affects	4.33	10.00	8.78	0.99	-1.21	1.64	-	0.65**	0.70**	0.35**	0.57**	0.50**	-0.46**	0.53**
2. TOPSE-Play and fun	4.17	10.00	8.26	1.28	-0.74	0.01		-	0.75**	0.38**	0.66**	0.58**	-0.57**	0.56**
3. TOPSE-Empathy and understanding	3.50	10.00	8.16	1.17	-0.69	0.27			-	0.39**	0.66**	0.64**	-0.56**	0.63**
4. TOPSE-Pressure	0.00	10.00	7.07	1.92	-0.50	-0.04				-	0.45**	0.34**	-0.47**	0.39**
5. TOPSE-Self-acceptance	4.33	10.00	8.22	1.18	-0.59	-0.05					-	0.59**	-0.54**	0.67**
6. TOPSE - Learning and knowledge	4.00	10.00	8.48	1.17	-0.70	0.36						-	-0.41**	0.56**
7. PSI-Total score	37.00	152.00	79.49	20.25	0.59	0.29							-	-0.47**
8. PSAM-Total score	1.80	7.00	5.48	0.88	-0.88	1.17								-

Note. **. $p < 0.01$ (2-tails).

stages of development (4, 44, 43). Most interest has been focused in literature on the development of scale for parents of infants. Relatively limited scales and studies considered the experiences of parents in toddlerhood, up to the school age (44).

However, in their contribution, Kendall and Bloomfield (12) pointed out the lack of a shared outcome measure able to frame parental perception of their own abilities to manage their children, based on parental own views and experiences, suggesting TOPSE as a potential valuable alternative.

The initial evaluation of the Italian translation of the long version of TOPSE showed interesting preliminary data (34).

The possibility to use a single and self-administered tool, able to evaluate parental self-efficacy from early infancy to pre-school age appears of main interest in the Italian context as well. Consistently, a brief, six-factors structure of the measure has been hypothesized. The choice to not include "Control" and "Discipline and setting boundaries" domains may make the measure more appropriate to administer even during the first year of life, when these dimensions have not yet

gained central importance (12, 36). Compared to the British long version of the tool, the Italian sample did not include parents from a wide range of cultural backgrounds but focused specifically in the Italian context, with a wide range of socio-educational backgrounds.

Despite these considerations and the potential merits of such a measure, our findings suggested the necessity to further theoretical and psychometric evaluations. Details about the results were discussed in the section below.

Factorial structure of the model

We investigated the latent structure of the scale by adopting the factorial model initially proposed by Kendall and Bloomfield (12). Indeed, the fit indices of the hypothesized structure of the TOPSE were not satisfactory, and the R^2 estimate related to items 32, 35, and 36 was not significant, leading us to delete them. Interestingly, these items are the only three related to the Learning and Knowledge dimension whose content does not start with the sentence "I am able to...". Moreover, contrary to the other items of the dimension,

the content of these items refers to the ability of parents to learn from the experience of others and the observation of situations experienced by other parents. Given these results, it is possible to speculate that the Learning and Knowledge dimension related to parental self-efficacy is more related to a private dimension, which leads parents to interiorize their efficacy to keep learning and knowing about their child and the relationship with him/her. As a matter of fact, after the elimination of these items, the fit indices improved significantly, even if some other items were correlated. According to Brown (45), sometimes there are legitimate reasons for the correlation between indicator error terms. Among these reasons, one of them is again related to the content of the items, namely the reversed or similarly worded items. Indeed, in one case, the correlated items appear in opposite positions (i.e., item 1 and item 6). In the other cases, items appear to have highly similar words (i.e., item 13 and item 14). However, despite this evidence, it is well known that correlating indicator error terms does not represent good practice. Moreover, the need to correlate items to increase the model fit indices paves the way to reconsider some of the item contents, even from a theoretical point of view.

Reliability, convergent and divergent validity

In order to evaluate construct validity, the TOPSE subscales were correlated with PSAM score and PSI-SF, considering respectively convergent and divergent validity of the measures.

Considering the association between TOPSE dimensions and PSAM, we hypothesized that higher parental self-efficacy scores in TOPSE would be associated with higher levels of parental self-agency, reported by PSAM. As expected, the correlation matrix showed significantly and positively related correlations in the predicted direction. More in depth, PSAM-Total score was positively correlated all I-TOPSE-SF subscales. This data is not surprising, considering that both measure aim to evaluate the same construct, both using a self-report Likert Scale and both considering the concept of parenting self-efficacy based on Bandura's theory (46).

When evaluating the divergent validity, our findings show an inversely related relation between TOPSE and PSI, clearly supporting the discriminant

validity of the scale. Our data appear in line with existing literature. It is well recognized in literature as parental psychological factors are reported to impact parenting (47). In particular, referring to levels of parental distress, higher distress appears related to lower parental self-efficacy (18, 48, 49). Parents who experience elevated levels of parenting stress may find ordinary infant/child care more demanding and may perceive engaging in daily child-rearing activities to meet a child's needs as more challenging (48, 50).

Limits and conclusion

The present study represents a contribution to the validation of the Italian brief version of the Tool to Measure Parental Self-Efficacy (12) in a sample of Italian mothers of children aging from 0 to 6 years.

The possibility to explore a brief version of the tool appears of great interest in order to provide a standardized, self-administered measure that can be used to evaluate parental self-efficacy from early infancy up to pre-school age. The instrument focus, its ease of use and use described in literature show interesting initial conditions, supporting the tool for both clinical and research purposes (46). However, according to our findings, the considered structure appears globally not completely satisfactory but still promising, especially considering the internal reliability of I-TOPSE-SF subscales and for their correlations with other scales.

It would be advisable to further consider and evaluate I-TOPSE-SF structure and theoretical assumptions in which the tool is grounded, in order to gain a better comprehension of the factors that may support better statistical properties of the measure.

Moreover, considering the important effects of variables such as range of cultural, educational and social backgrounds on parental self-efficacy (13; 48), it would be of interest to consider and explore more deeply how the mentioned variables could affect parental self-efficacy in the Italian context, evaluating families with diverse educational and social backgrounds.

Implication for practice

In the Italian scientific context, validated tools measuring parental self-efficacy are still lacking. As far

as we know, while only one existing contribution evaluates the original tool in the Italian context, the statistical properties of a brief version of the Tool to Measure Parental Self-Efficacy (12) have never been considered.

Considering the relevance of parental self-efficacy to parenting behaviour, the possibility to use a validated and standardized, self-administrable tool available to evaluate parental self-efficacy in a wide age range, designed for healthy children, appears as a considerable resource.

The I-TOPSE-SF could be a valuable tool that could support ordinary practice for both research and clinical purposes. The tool has been already internationally used in pre/post assessment in public health services and family support centers and as a follow-up measure in longer-term programs (12). Considering in particular Italian scientific context, this could represent a valuable progression concerning parenting interventions, to better plan and directly evaluate programs in the community setting. This measure could be used in interventions sustaining parenthood, being a clearly and well-focused tool to evaluate the extent to which parents may perceive themselves as more effective in ordinary parental practices.

Ethic Committee: LUMSA University; protocol code CERS07052020 approved on 14 May 2020.

Conflict of Interest: Each author declares that he or she has no commercial associations that might pose a conflict of interest in connection with the submitted article.

Authors Contribution: SDS, DB, and FB designed and carried out the study, contributed to the analysis of the results and to the writing of the manuscript. FB, CR, and BR collected the data, and contributed to the analysis of the results and to the writing of the manuscript. SDS and DB supervised the study design and the manuscript draft.

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Received: 16 March 2023
Accepted: 1 May 2023
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