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Psychometric Properties of the Persian Version of the Parenting Competence Scale

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A B S T R A C T

Objective: This study aimed to investigate the psychometric properties of the Parenting Competence Scale.

Methods: This research was a descriptive survey. The statistical population included all male and female students in the first grade of high school in District 11 of Tehran during the 2022-2023 academic year. Participants were selected using a convenience sampling method. In this study, to examine the psychometric properties of the Parenting Competence Scale, confirmatory factor analysis was used for construct validity, correlation coefficients for convergent validity, and internal consistency coefficients for reliability. For this purpose, 350 adolescents aged 13 to 15 responded to the Parenting Competence Scale, the Strength-based Parenting Scale (Jach et al., 2018), and the Engagement, Perseverance, Optimism, Connectedness, and Happiness Instrument for Adolescent Well-being (Kern et al., 2016).

Findings: The results of confirmatory factor analysis indicated that the Parenting Competence Scale, with a structure comprising four factors—parental warmth, parental demand, social value of patience, and social value of respect for privacy—had good construct validity. Additionally, the results related to the correlation between the dimensions of parenting competence with strength-based parenting and adolescent well-being supported the convergent validity of the Persian version of the Parenting Competence Scale. Furthermore, the internal consistency coefficients of the subscales of privacy, patience, parental warmth, and parental demand were 0.86, 0.79, 0.80, and 0.78, respectively, defending the reliability of the Persian version of the aforementioned scale.

Conclusion: Overall, the results of this study, while defending the conceptual positions derived from a positive and non-deficit approach to the field of parenting studies on which the conceptual foundation of the idea of parenting competence is based, also provided substantial evidence in support of the technical characteristics of the validity and reliability of the Persian version of the Parenting Competence Scale.

Keywords: *Parenting Competence, Factor Analysis, Psychometric Properties.*

1. Introduction

The effort to understand the impacts of parenting on the development of children and adolescents is considered a fundamental goal in the realm of developmental psychology. One of the predominant and empirically supported developmental frameworks in pursuing this goal is the ecological systems theory (Darling, 2007). The ecological systems theory emphasizes understanding the complex interactions between individuals, processes, and contexts and their impacts on child and adolescent development (Bi et al., 2018). Additionally, Bronfenbrenner (1999) highlights two key propositions in the ecological systems theory. First, the development of children and adolescents is inevitably influenced by proximal interactions that shape their surrounding environment. Second, Bronfenbrenner (1999) notes that the impacts of these processes are systematically dependent on the characteristics of the developing individual, the environment in which the processes emerge, the nature of the developmental outcomes under examination, and, finally, the social continuities or changes occurring over time (Darling, 2007; Darling & Toyokawa, 1997).

Darling and Steinberg (1997), referring to the teachings of the ecological systems theory in the realm of parenting behaviors, provided a framework for analyzing contextual and processual variables of parenting. Specifically, these researchers emphasized the impacts of two aspects of parent-child and parent-adolescent relationships: parenting practices and parenting styles. In this conceptual framework, parenting practices refer to behaviors that parents engage in within the context of interactions with their child and adolescent. In other words, parenting practices are defined as behaviors that possess specific content and distinct social goals (Darling & Toyokawa, 1997). In contrast, parenting styles refer to the emotional climate of the parent-child and parent-adolescent relationship. In other words, parenting style represents a set of attitudes towards the child and adolescent that, by evoking specific behaviors in the parent, shape the emotional climate governing parent-child and parent-adolescent behavior (Kuppens & Ceulemans, 2019). Numerous empirical evidences support the causal link between parenting practices and parenting styles with developmental outcomes in children and adolescents (Yee, 2021). Although various researchers have attempted to study the developmental outcomes attributed to each of the two conceptual categories of parenting practices and parenting styles, including both positive and negative aspects, in children and adolescents (Baumrind, 2005), another group of researchers, moving beyond the deficit-based approach to the context of parent-child and parent-adolescent interactions and referring to the teachings of a positive approach, have studied the developmental outcomes of parenting behaviors in children and adolescents (Reparaz et al., 2021).

The development of the concept of parenting competence, which focuses on parents' practical abilities to raise, care for, and educate children and adolescents, as well as ensure their healthy development, is considered one of the conceptual contributions derived from an active and positive approach to parenting functioning (Martínez-González & Iglesias-García, 2018; Martínez-González et al., 2016). In other words, the concept of parenting competence is regarded as one of the correlates of positive parenting (Rodrigo et al., 2018). Parenting competence has been studied at different stages of the life cycle, including childhood, adolescence, and even early adulthood (Lindhiem et al., 2021). A review of the evidence in this section shows that the idea of parenting competence has been studied from various perspectives, including parents' perceptions of their performance (Hsieh et al., 2019), children's perspectives on their experience of parenting adequacy (De Los Reyes & Ohannessian, 2016), and simultaneously, both children's and parents' perspectives (Coleman & Karraker, 2000; Jach et al., 2018; Sağkal, 2019).

In line with the results of studies by Rodrigo et al. (2018) and Reparaz et al. (2021), alongside parenting styles, one of the selected conceptual pathways to clarify the semantic boundaries of parenting competence is based on teaching social values to adolescents through parents (Reparaz et al., 2021; Rodrigo et al., 2018). In this section, the fundamental assumption is that social values represent common standards among the majority of society's individuals that their pursuit is necessary for ensuring societal well-being (Calandri et al., 2019). Despite the broad inclusion of social values, in Reparaz et al.'s (2021) research, the social values of patience and respect for privacy were emphasized (Reparaz et al., 2021).

Among the tools developed to measure parenting styles, some like the Perceived Psychological Control Scale (Fernández de Ortega, 2005) and the Perceived Parental Control Scale (Betancourt Ocampo & Palos, 2007) focus on various aspects of parental control. Other tools, like the Parental Acceptance/Rejection Questionnaire (Rohner, 2005), only measure the dimension of parental warmth. Of

course, in a proposed framework like that of Maccoby (1983), both parental control and warmth are simultaneously measured (McCoby, 1983). A review of the evidence shows that while the dimension of parental warmth is similarly measured in various assessment tools, the measurement of parental control in different tools has varied (González-Cámara et al., 2019). In some assessment tools, like the Parenting Styles Index (Steinberg et al., 1992), the Parenting Style Inventory (Darling & Toyokawa, 1997), and the Parental Support Inventory (Barber & Thomas, 1986), both behavioral and psychological control dimensions are measured. In contrast, in tools like the Parental Socialization Scale (Musitu & García, 2004), only the behavioral control dimension and in other tools, only the psychological control dimension are emphasized. Additionally, in some tools, parenting competence is measured through the analysis of family functioning or adaptability. For example, in the Family Assessment Device, overall functioning, problem-solving, interactions, roles, emotional responsiveness, emotional involvement, and behavioral control are measured. In the Family Cohesion and Adaptability Evaluation Scale (Olson, 2000), family adaptability and cohesion are also measured. Additionally, in tools like the Parental Assessment Scale (Farkas-Klein, 2008), the Self-Efficacy Index for Parenting Tasks (Coleman & Karraker, 2000), and the Family Satisfaction Scale (Barraca & López-Yarto, 1999), by including self-efficacy and satisfaction in parents and other family members, the level of parenting competence is measured.

A review of the tools in this section showed that efforts to measure parenting competence have overlooked the inclusion of teaching and promoting social values in children and adolescents. However, in some tools like the Preschool Social Values Acquisition Scale, the Multidimensional Gratitude Instrument, the Moral Values Internalization Questionnaire, and the French Moral Values Scales, values are measured in children. However, these tools do not specify how parents can cultivate such values in their children. Therefore, Reparaz et al. (2021), acknowledging the inadequacy of the semantic range of parenting competence and aiming to measure the construct of parenting competence more realistically, insisted on the simultaneous inclusion of parenting styles and teaching social values to adolescents in the development of the Parenting Competence Scale (Reparaz et al., 2021). In Reparaz et al.'s (2021) study, the results of the factorial validity of the Parenting Competence Scale, including four components of parental warmth, parental demand, social value of patience, and social value of respect for privacy, provided substantial evidence in defense of the underlying theoretical foundation of the scale. Additionally, in this study, the results of regression analysis, emphasizing the predictability of developmental outcomes in adolescents through various aspects of parenting competence, provided additional evidence in defense of the criterion validity of the Parenting Competence Scale (Reparaz et al., 2021).

Although the systematic observation of functional characteristics of parenting has long been the focus of various researchers, analyzing the functions of parenting by referring to a positive and active approach does not have a long history (L. Waters, 2015; Waters, 2020; Waters et al., 2022; Waters & Sun, 2016; L. E. Waters, 2015). Accordingly, various researchers, referring to the teachings derived from the positive movement, have increasingly emphasized the role of functional characteristics of the parenting context in explaining differentiation in adolescent functioning (Candan & Doğan, 2023). One of the conceptual offshoots attributed to this emerging and positive approach is the construct of parenting competence (Reparaz et al., 2021). Undoubtedly, being informed about the functional characteristics of these emerging offshoots in the parenting context and their undeniable developmental outcomes for children and adolescents necessitates access to tools that not only are inspired by this approach but also provide a valuable opportunity to measure the constructs derived from this approach. Accordingly, this study aimed to analyze the psychometric properties of the Parenting Competence Scale among a group of Iranian adolescents. Therefore, the present research is guided by the following question: Does the Parenting Competence Scale possess desirable psychometric properties?

2. Methods

2.1. Study design and Participant

This research is categorized as applied research in terms of its goal and as a descriptive-survey in terms of its data collection method. The statistical population of this study included female first-grade high school students in District 11 of Tehran during the 2022-2023 academic year. In this study, 350 female adolescents, selected through convenience sampling, participated. To enhance the accuracy of participants' responses to the assessment tools, researchers insisted on voluntary participation. In the selected sample, 125 adolescents were from the seventh grade, 125 from the eighth grade, and 100 from the ninth grade. In this study, in

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line with Kline's (2015) proposed logic, emphasizing the 10:1 rule, 350 participants were selected for the 35-item Parenting Competence Scale. No participants were excluded during the data screening stage. To ensure the qualitative content validity of the Parenting Competence Scale, two experts in family psychology were asked to evaluate the adequacy of the scale items. The evaluators emphasized the content adequacy of the tool for measuring the characteristic of parenting competence.

In this study, to prepare the Persian version of the Parenting Competence Scale for an Iranian sample, the back-translation method was used. Therefore, to use the Persian version of the Parenting Competence Scale, the English version was translated into Persian for the Iranian adolescent sample. To maintain linguistic and conceptual equivalence, the Persian version was back-translated into English by another bilingual individual. Subsequently, the two translators discussed the existing differences between the English versions, and through a "process of iterative review," these differences were minimized. Accordingly, the semantic equivalence of the translated version with the original version was carefully examined.

2.2. Measures

2.2.1. Strength-Based Parenting

Strength-Based Parenting Scale (Jach et al., 2018). Jack et al. (2018), referring to Waters' (2015) stance on the idea of strength-based parenting, developed the Strength-based Parenting Scale. This scale includes 14 items, with participants responding to each item on a seven-point scale from strongly disagree (1) to strongly agree (7). The scale consists of two subscales: knowledge of strengths and use of strengths, each with seven items. Results from various studies have supported the technical validity and reliability of the Strength-based Parenting Scale. In Jack et al.'s (2018) study, the factorial validity results of the Strength-based Parenting Scale empirically supported its two-factor structure. In the study by Jach et al. (2018), the internal consistency coefficients for the subscales of knowledge and use of strengths were 0.95 and 0.95, respectively (Jach et al., 2018). In the study by Ardeshir, Shokri, and Sharifi (2021), the internal consistency coefficients for the subscales of knowledge and use of strengths were also 0.94 and 0.94, respectively (Arslan et al., 2022).

2.2.2. Engagement, Perseverance, Optimism, Connectedness, and Happiness

Engagement, Perseverance, Optimism, Connectedness, and Happiness Instrument for Adolescent Well-being (Kern et al., 2016). This tool was designed by Kern et al. (2016) referring to the teachings of the positive psychology movement, aiming to measure adolescent well-being and positive functioning. This tool measures five dimensions of adolescent developmental assets that impact their well-being, physical health, and other emotional-social outcomes (Kern et al., 2016; Kern et al., 2018). Therefore, this tool measures five dimensions: engagement, perseverance, optimism, connectedness, and happiness. It includes 20 items, with participants responding to each item on a four-point scale from 1 (strongly agree) to 4 (strongly disagree). Each dimension is measured by five items. Results from various studies in American, Australian, Chinese, Iranian, and Indonesian samples have empirically supported the validity and reliability of different versions of EPOCH (Choi et al., 2021; Taheri et al., 2021). In Kern et al.'s (2016) study, the internal consistency coefficients for the multiple subscales ranged from 0.76 to 0.92. Additionally, in Kern et al.'s (2016) study, the test-retest reliability coefficients for the subscales ranged from 0.37 to 0.49. Furthermore, in Kern et al.'s (2016) study, the confirmatory factor analysis results empirically supported the five-dimensional structure of EPOCH (Kern et al., 2016). The confirmatory factor analysis results in Taheri et al.'s (2020) study also provided additional evidence in defense of the five-factor structure of EPOCH (Taheri et al., 2021).

2.2.3. Parenting Competence

Parenting Competence Scale (Reparaz et al., 2021). Reparaz et al. (2021), after a critical review of assessment tools in the field of parenting styles and recognizing the theoretical inadequacies of these tools, developed the Parenting Competence Scale using a positive and active approach to parenting. This scale includes 35 items, with adolescents indicating their perception of parenting competence for each item on a five-point scale from never (1) to always (5). In Reparaz et al.'s (2021) study, the factorial validity results of the Parenting Competence Scale empirically supported its four-factor structure, including parental warmth, parental demand, social value of patience, and social value of respect for privacy. Additionally, the regression analysis results, emphasizing the prediction of behaviors such as alcohol abuse, pornography, internet

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addiction, academic achievement scores, and life satisfaction in adolescents through multiple aspects of parenting competence, supported the criterion validity of the Parenting Competence Scale. In Reparaz et al.'s (2021) study, the internal consistency coefficients for all aspects of parenting competence were greater than 0.70 (Reparaz et al., 2021).

2.3. Data Analysis

In this study, data analysis was based on classical test theory. The retention or elimination of items in the Persian version of the Parenting Competence Scale for the Iranian adolescent sample was based on the statistical characteristics of factor analysis. For confirmatory factor analysis, the maximum likelihood method was used to estimate the model, and in line with the suggestions of Meyers, Gamst, and Garino (2016), to provide a comprehensive evaluation of model fit, the chi-square index (χ^2), chi-square to degrees of freedom ratio (χ^2/df), comparative fit index (CFI), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), and root mean square error of approximation (RMSEA) were used. In line with the results of Reparaz et al. (2021), in this study, the four-factor measurement model for the Parenting Competence Scale was selected and tested as the preferred hypothesized model. In this study, data were analyzed using SPSS-18 and AMOS-18 statistical packages.

3. Findings and Results

After data collection and before confirmatory analysis, assumptions of normality and multicollinearity were tested. For this purpose, univariate outliers were checked using Z-scores in SPSS, in line with Tabachnick and Fidell's (2007) recommendations. Additionally, multivariate normality was tested using Mardia's coefficient, and outliers were examined using Mahalanobis distance. According to Byrne (2010), as the Mardia coefficient was 4.01 and less than 5, the assumption of multivariate normality was upheld. Mahalanobis distance was calculated for each participant to check for multivariate outliers. Mahalanobis distance indicates the multivariate distance between each participant and the group centroid. Each participant is evaluated using the chi-square distribution and a precise alpha level of 0.001. Observations reaching this level of significance are multivariate outliers and potential candidates for deletion. No participant had a statistical significance level less than or equal to 0.001. The results showed no outliers within the predicted data range.

Table 1 shows the descriptive statistics, including mean, standard deviation, skewness, and kurtosis for the items of the Persian version of the Parenting Competence Scale. The standard deviations of the items ranged from 1.10 to 1.53. The skewness (|1.08|>) and kurtosis (|1.39|>) statistics indicated that none of the items exceeded the suggested cut-off values of |3| for skewness and |8| for kurtosis. Thus, in line with Kline's (2015) recommendations, the univariate normality assumption was maintained for each item of the Persian version of the Parenting Competence Scale. Additionally, to test for multicollinearity, tolerance and variance inflation factor (VIF) statistics were used. As per Hair, Black, Babin, and Anderson (2010), since all tolerance values were greater than 0.10 and all VIF values were less than 3, the assumption of no multicollinearity was met.

Table 1

Descriptive Statistics for the Items of the Parenting Competence Scale

Item	Mean	SD	Skewness	Kurtosis
1	2.95	1.40	0.17	-1.26
2	3.01	1.45	-0.02	-1.38
3	2.57	1.47	0.50	-1.17
4	2.68	1.43	0.35	-1.20
5	2.87	1.49	0.16	-1.39
6	2.44	1.32	0.51	-0.87
7	2.75	1.41	0.23	-1.23
8	3.05	1.42	0.02	-1.32
9	2.57	1.53	0.43	-1.31
10	2.73	1.36	0.24	-1.14
11	2.40	1.19	0.74	-0.28
12	3.22	1.42	-0.18	-1.28
13	3.10	1.44	-0.03	-1.33
14	3.21	1.37	-0.17	-1.23

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15	2.57	1.44	0.42	-1.20
16	2.24	1.20	0.85	-0.10
17	1.98	1.21	1.08	-0.09
18	3.29	1.42	-0.21	-1.31
19	3.24	1.21	-0.10	-0.96
20	3.23	1.24	-0.20	-0.88
21	3.17	1.13	0.05	-0.76
22	3.41	1.21	-0.35	-0.73
23	3.02	1.23	0.06	-0.89
24	3.68	1.12	-0.49	-0.64
25	3.22	1.33	-0.18	-1.12
26	3.78	1.29	-0.81	-0.51
27	3.53	1.33	-0.42	-1.07
28	3.76	1.11	-0.70	-0.27
29	3.28	1.32	-0.16	-1.11
30	3.07	1.40	-0.13	-1.26
31	3.50	1.26	-0.52	-0.72
32	3.33	1.38	-0.30	-1.18
33	3.22	1.38	-0.30	-1.18
34	3.18	1.45	-0.19	-1.32
35	3.11	1.37	-0.11	-1.20

In this section, confirmatory factor analysis (CFA) was used to determine the factorial validity of the Parenting Competence Scale. Specifically, to confirm the multidimensional nature of the assessment tool, structural equation modeling with CFA was used. To test the hypothesis regarding factor loadings and inter-factor correlations, the maximum likelihood estimation method was employed. To evaluate model fit, the independence model was compared with the hypothesized model. The results indicated that the goodness-of-fit indices for the independence model, assuming all variables are uncorrelated, showed poor fit with the data ($\chi^2(350) = 4026.62$, $\chi^2/df = 6.77$, $p < 0.001$, GFI = 0.38, AGFI = 0.34, CFI = 0.00, RMSEA = 0.13). Statisticians emphasize that the preferred value for χ^2 should be small, and the associated p-value should be larger than the significance level. However, this statistic is highly sensitive to sample size, often leading to the rejection of any acceptable model due to excessive statistical power. Therefore, in line with statisticians' recommendations, an alternative ratio of $\chi^2/df < 5$ or < 3 (Meyers et al., 2016) was used to assess acceptable model fit.

Based on the significance of the χ^2 test, examined other goodness-of-fit indices to assess the fit of the hypothesized model with the data. Given the lack of consensus among statisticians regarding preferred goodness-of-fit indices, this study followed Arbuckle and Wothke's (1999) approach, emphasizing multiple goodness-of-fit indices, residual error terms, and modification indices (Arbuckle & Wothke, 1999).

Recognizing the multidimensional conceptual structure of the Parenting Competence Scale as a preferred conceptual model, comparing it with competing models provides a more reliable opportunity to defend the assumed multidimensional structure of the Parenting Competence Scale. Therefore, the one-factor structure of the Parenting Competence Scale was also examined to test competing measurement models. The fit indices for the one-factor model, as per Myers et al.'s (2016) recommended indices, including χ^2, χ^2/df, CFI, GFI, AGFI, and RMSEA, were $\chi^2(2054) = 2054.43$, $\chi^2/df = 3.66$, CFI = 0.57, GFI = 0.66, AGFI = 0.62, and RMSEA = 0.09, indicating poor model fit with the data.

Finally, the first-order four-factor structure, including four dimensions of parental warmth, parental demand, social value of patience, and social value of respect for privacy, was selected and tested. The fit indices for the four-factor model, including χ^2, χ^2/df, CFI, GFI, AGFI, and RMSEA, were $\chi^2(1079) = 1079.27$, $\chi^2/df = 1.95$, CFI = 0.93, GFI = 0.94, AGFI = 0.90, and RMSEA = 0.052, indicating good model fit with the data.

Table 2 shows the regression weights for the first-order four-factor measurement model of the Parenting Competence Scale. The results indicate that for all four subscales, all regression weights were statistically significant ($p < 0.001$). Regression coefficients for the subscale of social value of respect for privacy ranged from 0.50 to 0.74, for the subscale of social value of patience ranged from 0.40 to 0.69, for the subscale of parental warmth ranged from 0.40 to 0.66, and for the subscale of parental demand ranged from 0.52 to 0.69. Additionally, Table 2

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shows the Cronbach's alpha values, item-total correlations, and Cronbach's alpha if item deleted for the first-order four-factor model of the Parenting Competence Scale.

Table 2

Factor Loadings, Cronbach's Alpha, Item-Total Correlations, and Cronbach's Alpha if Item Deleted for the First-Order Four-Factor Model of the Parenting Competence Scale

Item	Factor Loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Subscale: Social Value of Respect for Privacy (α = 0.86)			
1	0.74	0.691	0.834
2	0.71	0.665	0.838
3	0.61	0.593	0.844
4	0.67	0.625	0.842
5	0.70	0.647	0.840
6	0.61	0.539	0.849
7	0.54	0.475	0.854
8	0.58	0.530	0.850
9	0.53	0.500	0.853
10	0.50	0.499	0.853
Subscale: Social Value of Patience (α = 0.79)			
11	0.56	0.528	0.747
12	0.63	0.546	0.742
13	0.57	0.490	0.752
14	0.63	0.549	0.742
15	0.69	0.587	0.735
16	0.48	0.418	0.764
17	0.51	0.415	0.764
18	0.40	0.528	0.781
Subscale: Parental Warmth (α = 0.80)			
19	0.66	0.585	0.768
20	0.54	0.460	0.782
21	0.53	0.479	0.780
22	0.59	0.509	0.776
23	0.46	0.426	0.785
24	0.47	0.403	0.787
25	0.51	0.452	0.783
26	0.50	0.457	0.782
27	0.40	0.409	0.794
28	0.55	0.479	0.780
29	0.51	0.432	0.785
Subscale: Parental Demand (α = 0.78)			
30	0.65	0.536	0.726
31	0.69	0.586	0.715
32	0.59	0.524	0.729
33	0.53	0.455	0.747
34	0.61	0.515	0.731
35	0.52	0.452	0.747

To determine the convergent validity of the Parenting Competence Scale, correlations between various dimensions of parenting competence, strength-based parenting, and adolescent well-being were calculated, in line with theoretical and empirical literature.

Table 3

Correlation of Parenting Competence with Strength-based Parenting and Adolescent Well-being

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Dimensions	Respect for Privacy	Patience	Parental Warmth	Parental Demand
Strength-based Parenting	0.35	0.56	0.45	0.41
Adolescent Well-being	0.33	0.52	0.51	0.49

For all correlations: $p<0.01$

The results in Table 3 supported the convergent validity of the Parenting Competence Scale.

4. Discussion and Conclusion

This study aimed to analyze the psychometric properties of the Persian version of the Parenting Competence Scale. The findings supported the factorial validity of the Parenting Competence Scale, consisting of four dimensions: parental warmth, parental demand, social value of patience, and social value of respect for privacy. The study also found that the correlations between adolescents' perceptions of parenting competence, strength-based parenting, and adolescent well-being provided additional evidence for the convergent validity of the Persian version of the Parenting Competence Scale. The results regarding the internal consistency coefficients indicated that the scale also has acceptable reliability.

The researchers aimed to examine the functional characteristics of parenting from a positive and non-deficit perspective, in line with Waters' studies (L. Waters, 2015; Waters, 2020; Waters et al., 2022; Waters & Sun, 2016; L. E. Waters, 2015). Consistent with Reparaz et al. (2021), this study prioritized the psychometric evaluation of the Parenting Competence Scale as one of the conceptual offshoots of the positive parenting idea. The findings supported the factorial structure of the Parenting Competence Scale, consisting of four components: parental warmth, parental demand, social value of patience, and social value of respect for privacy. By replicating the factorial structure of the Parenting Competence Scale found in Reparaz et al.'s (2021) study, this research provided compelling evidence supporting the theoretical foundation of the Parenting Competence Scale. These findings indicate that understanding the construct of parenting competence from adolescents' perspectives is possible by referring to the conceptual teachings derived from a positive and non-deficit approach in parenting studies (Reparaz et al., 2021).

Additionally, the positive correlation between adolescents' perceptions of parenting competence and their well-being provided further evidence for the convergent validity of the Parenting Competence Scale. The results aligned with Reparaz et al. (2021), indicating that parenting competence plays a role in explaining and predicting adolescent well-being (Reparaz et al., 2021). Studies have shown that a positive approach to parenting and conceptual offshoots such as parenting competence are effective in predicting adolescent well-being (Amani et al., 2020; Arslan et al., 2022). Studies have demonstrated that the components of parenting competence enhance parents' coping resources and psychological capital, leading them to effectively care for themselves and their children through cooperative and compassionate conflict resolution strategies. Additionally, parenting competence helps adolescents experience parents as secure figures, who manage the parent-adolescent relationship and motivating experiences through principles such as challenge, reflection, and positivity (Calandri et al., 2019; Martínez-González & Iglesias-García, 2018; Martínez-González et al., 2016). Consistent with the teachings of ecological systems theory (Darling, 2007), experiencing a secure and compassionate parent within the mesosystem—an influential contextual level on child and adolescent development—positively impacts adolescent well-being.

5. Suggestions and Limitations

While this study provided strong evidence supporting the technical characteristics of the Persian version of the Parenting Competence Scale among Iranian adolescents, it should be interpreted within the context of its limitations. First, participants were selected only from first-grade high school students in District 11 of Tehran. Therefore, caution is advised when generalizing these results to other adolescents. Second, this study did not prioritize gender invariance testing of the factorial structure of the Parenting Competence Scale. Future research should test the gender invariance of the measurement model to explore potential differences. Third, the psychometric analysis focused on several methods of establishing validity. Other forms of psychometric evaluation, such as criterion-related validity, divergent validity, and additional reliability assessments, should be considered in future studies.

Overall, the results of the psychometric evaluation of the Persian version of the Parenting Competence Scale, including evidence for factorial validity and its relationship with other conceptual constructs and criteria, indicated that

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this scale is a valid and reliable tool for assessing parenting competence among Iranian adolescents.

Authors' Contributions

Ali Khodaei: Writing introduction, discussion, and conclusion, designing research, writing methodology, data analysis, editing and revising (50%) / Reza Rahimi: Research design, editing and revising (50%).

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

References

Amani, M., Nazifi, M., & Sorkhabi, N. (2020). Parenting styles and academic achievement of early adolescent girls in Iran: mediating roles of parent involvement and self-regulated learning. *European Journal of Psychology of Education*, *35*(1), 49-72. https://doi.org/10.1007/s10212-019-00422-y

Arbuckle, J. L., & Wothke, W. (1999). *Amos 4.0 user's guide*. Citeseer. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=404b177cd926745db0115621d57d74cab236a684

Arslan, G., Allen, K.-A., & Waters, L. (2022). Strength-Based Parenting and Academic Motivation in Adolescents Returning to School After COVID-19 School Closure: Exploring the Effect of School Belonging and Strength Use. *Psychological Reports*, *126*(6), 2940-2962. https://doi.org/10.1177/00332941221087915

Barber, B. K., & Thomas, D. L. (1986). Dimensions of fathers' and mothers' supportive behavior: The case for physical affection. *Journal of Marriage and the Family*, 783-794. https://www.jstor.org/stable/352571

Barraca, J., & López-Yarto, L. (1999). *ESFA: Escala de satisfacción familiar por adjetivos*. Tea. https://pseaconsultores.com/wp-content/uploads/2020/12/ESFA-Escala-de-Satisfaccio%CC%81n-Familiar-por.pdf

Baumrind, D. (2005). Patterns of parental authority and adolescent autonomy. *New directions for child and adolescent development*, *2005*(108), 61-69. https://doi.org/10.1002/cd.128

Betancourt Ocampo, D., & Palos, P. A. (2007). Escala de percepción del control parental de niños. *Investigación Universitaria Multidisciplinaria: Revista de Investigación de la Universidad Simón Bolívar*(6), 9. https://dialnet.unirioja.es/descarga/articulo/2695339.pdf

Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W., & Deater-Deckard, K. (2018). Parenting Styles and Parent–Adolescent Relationships: The Mediating Roles of Behavioral Autonomy and Parental Authority [Original Research]. *Frontiers in psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.02187

Calandri, E., Graziano, F., Testa, S., Cattelino, E., & Begotti, T. (2019). Empathy and Depression Among Early Adolescents: The Moderating Role of Parental Support [Original Research]. *Frontiers in psychology*, *10*. https://doi.org/10.3389/fpsyg.2019.01447

Candan, H. D., & Doğan, S. (2023). Effectiveness of the positive discipline program applied to parents of preschool children: A randomized-controlled trial. *Journal of Pediatric Nursing*, *72*, e87-e97. https://www.sciencedirect.com/science/article/pii/S0882596323001458

Choi, J.-K., Ryu, J.-H., & Yang, Z. (2021). Validation of the Engagement, Perseverance, Optimism, Connectedness, and Happiness Measure in Adolescents from Multistressed Families: Using First- and Second-Order Confirmatory Factor Analysis Models. *Journal of Psychoeducational Assessment*, *39*(4), 494-507. https://doi.org/10.1177/0734282920986395

Coleman, P. K., & Karraker, K. H. (2000). Parenting Self-Efficacy Among Mothers of School-Age Children: Conceptualization, Measurement, and Correlates*. *Family Relations*, *49*(1), 13-24. https://doi.org/10.1111/j.1741-3729.2000.00013.x

Darling, N. (2007). Ecological Systems Theory: The Person in the Center of the Circles. *Research in Human Development*, *4*(3-4), 203-217. https://doi.org/10.1080/15427600701663023

Darling, N., & Toyokawa, T. (1997). Construction and validation of the parenting style inventory II (PSI-II). *Unpublished manuscript*, *89*. https://www2.oberlin.edu/faculty/ndarling/lab/parentingstyle.pdf

De Los Reyes, A., & Ohannessian, C. M. (2016). Introduction to the Special Issue: Discrepancies in Adolescent–Parent Perceptions of the Family and Adolescent Adjustment. *Journal of youth and adolescence*, *45*(10), 1957-1972. https://doi.org/10.1007/s10964-016-0533-z

Farkas-Klein, C. (2008). Escala de evaluación parental (EEP): desarrollo, propiedades psicométricas y aplicaciones. *Universitas Psychologica*, *7*(2), 457-467.

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http://www.scielo.org.co/scielo.php?pid=S1657-92672008000200012&script=sci_arttext

Fernández de Ortega, B. (2005). *La vergüenza en los niños: su conceptualización psicológica, medición y sus correlatos conductuales* tesis de doctorado no publicada, Facultad de Psicología, Universidad …]. https://psycnet.apa.org/record/2021-42245-001

González-Cámara, M., Osorio, A., & Reparaz, C. (2019). Measurement and Function of the Control Dimension in Parenting Styles: A Systematic Review. *International journal of environmental research and public health*, *16*(17), 3157. https://www.mdpi.com/1660-4601/16/17/3157

Hsieh, Y.-P., Yen, C.-F., & Chou, W.-J. (2019). Development and Validation of the Parental Smartphone Use Management Scale (PSUMS): Parents' Perceived Self-Efficacy with Adolescents with Attention Deficit Hyperactivity Disorder. *International journal of environmental research and public health*, *16*(8), 1423. https://www.mdpi.com/1660-4601/16/8/1423

Jach, H. K., Sun, J., Loton, D., Chin, T.-C., & Waters, L. E. (2018). Strengths and Subjective Wellbeing in Adolescence: Strength-Based Parenting and the Moderating Effect of Mindset. *Journal of Happiness Studies*, *19*(2), 567-586. https://doi.org/10.1007/s10902-016-9841-y

Kern, M. L., Benson, L., Steinberg, E. A., & Steinberg, L. (2016). The EPOCH measure of adolescent well-being. *Psychological assessment*, *28*(5), 586. https://psycnet.apa.org/journals/pas/28/5/586/

Kern, M. L., Zeng, G., Hou, H., & Peng, K. (2018). The Chinese Version of the EPOCH Measure of Adolescent Well-Being: Testing Cross-Cultural Measurement Invariance. *Journal of Psychoeducational Assessment*, *37*(6), 757-769. https://doi.org/10.1177/0734282918789561

Kuppens, S., & Ceulemans, E. (2019). Parenting Styles: A Closer Look at a Well-Known Concept. *Journal of Child and Family Studies*, *28*(1), 168-181. https://doi.org/10.1007/s10826-018-1242-x

Lindhiem, O., Vaughn-Coaxum, R. A., Higa, J., Harris, J. L., Kolko, D. J., & Pilkonis, P. A. (2021). Development and Validation of the Parenting Skill Use Diary (PSUD) in a Nationally Representative Sample. *Journal of Clinical Child & Adolescent Psychology*, *50*(3), 400-410. https://doi.org/10.1080/15374416.2020.1716366

Martínez-González, R.-A., & Iglesias-García, M.-T. (2018). Validation of the parenting competence scale for parents with young children (PCS-YC). *Early Child Development and Care*, *188*(11), 1593-1605. https://doi.org/10.1080/03004430.2018.1490897

Martínez-González, R.-A., Rodríguez-Ruiz, B., Álvarez-Blanco, L., & Becedóniz-Vázquez, C. (2016). Evidence in promoting positive parenting through the Program-Guide to Develop Emotional Competences. *Psychosocial Intervention*, *25*(2), 111-117. https://www.sciencedirect.com/science/article/pii/S1132055916300047

McCoby, E. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of child psychology*, *4*, 1-101. https://cir.nii.ac.jp/crid/1572824499416286080

Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Sage publications. https://books.google.com/books/about/Applied_Multivariate_Research.html?id=7e4npyN3BasC

Musitu, G., & García, F. (2004). *Espa29: Escala de estilos de socialización parental en la adolescencia: manual*. Tea. https://www.researchgate.net/publication/242530506_ESPA29_Escala_de_Estilos_de_Socializacion_Parental_en_la_Adolescencia

Olson, D. H. (2000). Circumplex Model of Marital and Family Systems. *Journal of Family Therapy*, *22*(2), 144-167. https://doi.org/10.1111/1467-6427.00144

Reparaz, C., Rivas, S., Osorio, A., & Garcia-Zavala, G. (2021). A Parental Competence Scale: Dimensions and Their Association With Adolescent Outcomes [Original Research]. *Frontiers in psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.652884

Rodrigo, M. J., Máiquez, M. L., Hidalgo, V., Martín Quintana, J. C., Martínez-González, R.-A., Ochaita, E., Balsells Bailón, M. A., & Arranz Freijo, E. B. (2018). National agency–university partnership for a web-based positive parenting policy and evidence-based practices. *Early Child Development and Care*, *188*(11), 1620-1633. https://doi.org/10.1080/03004430.2018.1490898

Rohner, R. (2005). Parental Acceptance-Rejection/Control Questionnaire (PARQ/Control): Test manual. In RP Rohner & A. Khaleque (Eds.), Handbook for the study of parental acceptance and rejection (pp. 137-186). Storrs, CT: Rohner Research Publications. https://www.researchgate.net/publication/255729046_Parental_acceptance-rejection_theory_methods_and_implications

Sağkal, A. S. (2019). Direct and indirect effects of strength-based parenting on adolescents' school outcomes: Exploring the role of mental toughness. *Journal of adolescence*, *76*(1), 20-29. https://doi.org/10.1016/j.adolescence.2019.08.001

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of Parenting Practices on Adolescent Achievement: Authoritative Parenting, School Involvement, and Encouragement to Succeed. *Child development*, *63*(5), 1266-1281. http://www.jstor.org/stable/1131532

Taheri, A., Pourshahriari, M., Abdollahi, A., Hosseinian, S., & Allen, K. A. (2021). Psychometric assessment of the Persian translation of the Social and Emotional Health Survey-Secondary (SEHS-S) with female adolescents. *International Journal of Mental Health*, *50*(1), 16-32. https://doi.org/10.1080/00207411.2020.1843965

Waters, L. (2015). The relationship between strength-based parenting with children's stress levels and strength-based coping approaches. *Psychology*, *6*(06), 689. https://www.scirp.org/html/4-6901461_56129.htm

Waters, L. (2020). Using positive psychology interventions to strengthen family happiness: A family systems approach. *The Journal of Positive Psychology*, *15*(5), 645-652. https://doi.org/10.1080/17439760.2020.1789704

Waters, L., Algoe, S. B., Dutton, J., Emmons, R., Fredrickson, B. L., Heaphy, E., Moskowitz, J. T., Neff, K., Niemiec, R., Pury, C., & Steger, M. (2022). Positive psychology in a pandemic: buffering, bolstering, and building mental health. *The Journal of Positive Psychology*, *17*(3), 303-323. https://doi.org/10.1080/17439760.2021.1871945

Waters, L., & Sun, J. (2016). Can a Brief Strength-Based Parenting Intervention Boost Self-Efficacy and Positive Emotions in Parents? *International Journal of Applied Positive Psychology*, *1*(1), 41-56. https://doi.org/10.1007/s41042-017-0007-x

Waters, L. E. (2015). Strength-based parenting and life satisfaction in teenagers. *Advances in Social Sciences Research Journal*, *2*(11). https://cir.nii.ac.jp/crid/1361137044676461952

Yee, A. Z. H. (2021). Examining the Moderating Effect of Parenting Style and Parental Guidance on Children's Beliefs about Food: A Test of the Parenting Style-as-Context Model. *Journal of Health Communication*, *26*(8), 553-565. https://doi.org/10.1080/10810730.2021.1978593

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