Applied & Educational Psychology (2026)
Clausius Scientific Press, Canada

DOI: 10.23977/appep.2026.070212
ISSN 2523-5842 Vol. 7 Num. 2

A Contextual Extension of the Multidimensional Scale of Perceived Social Support for the School-to-Work Transition: Psychometric Evidence From Employed Chinese University Graduates

Chunze Song[1,2,a], Xinpeng Xu[3,b], Hairong Ling[4,c,*]

[1]*School of Culture and Communication, Guangdong University of Business and Technology, Zhaoqing, 526020, China*
[2]*School of Educational Studies, Universiti Sains Malaysia, Penang, 11800, Malaysia*
[3]*School of Public Health, Nanjing Medical University, Nanjing, 211166, China*
[4]*School of Marxism, Communication University of China, Nanjing, Nanjing, 211172, China*
[a] *songcz666@gmail.com*, [b] *xuxinpeng@njmu.edu.cn*, [c] *781846587@qq.com*
**Corresponding author*

Keywords: Perceived social support; MSPSS; School support; Career satisfaction; School-to-work transition

Abstract: The school-to-work transition (STWT) reorganizes social roles and support relationships. This study examined whether the source structure of the Multidimensional Scale of Perceived Social Support (MSPSS) requires contextual refinement for employed Chinese university graduates. Literature review, focus groups, expert review, and pilot testing produced a 16-item measure of family, peer, colleague, and school support. Data from 798 graduates were randomly split for item analysis and exploratory factor analysis (n = 399) and confirmatory factor analysis (n = 399). The Kaiser criterion, parallel analysis, and Velicer's MAP test supported four factors. With WLSMV estimation, both the correlated four-factor model (CFI = .972, TLI = .965, RMSEA = .084, SRMR = .036) and second-order model (CFI = .974, TLI = .969, RMSEA = .079, SRMR = .037) showed acceptable fit. The four subscales demonstrated good internal consistency and convergent and discriminant validity. School support explained an additional 5.0% of variance in career satisfaction after demographics and the other support sources were controlled; this contribution remained 3.9% with expanded covariates. The findings support a limited contextual extension of the MSPSS: its source-based measurement logic remains applicable during STWT, although specific sources may be reorganized as graduates' relational environments change.

1. Introduction

The school-to-work transition (STWT) is not a one-time status change completed at graduation, but a prolonged process through which individuals leave the educational environment, enter the

labour market, and gradually develop a worker role. Blokker et al. (2023) noted that this transition involves simultaneous changes in physical contexts and psychological roles, with individual and contextual resources continuing to interact over time [1]. Longitudinal research likewise shows that career adaptability continues to develop during the early post-entry period and may follow distinct developmental trajectories [2]. Social support is a salient psychosocial resource in this process: support from different sources has been linked to career adaptability among young people leaving school [3], and longitudinal evidence further indicates that social support may shape career adaptability through career decision-making self-efficacy [4]. Among Chinese university graduates in early careers, perceived social support has also been associated with career satisfaction [5]. Taken together, these findings indicate that graduation reshapes the relational context in which support is embedded, but does not remove social support from the career-development process.

Perceived social support refers not to the volume of objective resources one holds, but to the belief that support will be available from important relationships when needed. The Multidimensional Scale of Perceived Social Support (MSPSS) distinguishes support from family, friends, and a significant other [6] and has been widely used across age groups and cultural settings. Its original three-factor structure has received support in Chinese-language populations, including Chinese adolescents [7], Malaysian university students using a simplified Chinese version [8], and Chinese Hong Kong adolescents across ethnic groups [9]. The present study does not question whether the MSPSS works; rather, it asks a more context-specific question: when people move through a developmental period in which their relational environments are rapidly reorganized, are the original support-source categories still sufficiently granular?

This question is particularly salient during the STWT. After leaving university, some support relationships continue from student life, others emerge only after organizational entry, and others span both contexts; whether the conventional family–friends–significant-other structure still captures the principal support sources in employed graduates' everyday lives is therefore an empirical matter rather than something to be assumed. Friend support provides one case. In the focus-group discussions, participants repeatedly mentioned former classmates, dormitory peers, alumni from earlier cohorts, and other young adults at similar job-search or organizational-entry stages, with whom they exchanged recruitment information, job opportunities, employer insights, and early workplace experiences. Some of these ties were close friendships; others were peer relationships grounded in shared educational experiences or similar developmental positions. Accordingly, the present study broadens the friend-support label to peer support, defined in the survey instructions to include friends, classmates, and romantic partners of a similar life stage. This broadening does not reject the MSPSS's friend dimension; it captures the same-age, same-stage relational networks on which Chinese graduates continue to rely after graduation.

The situation differs for significant other support. In the original MSPSS, significant other is intentionally broad—a strength for general-population research, but employed graduates may require a more explicit contextual referent. The present study does not equate significant other with colleague; it asks whether colleagues become a frequent, stable, and contextually bounded source of support after organizational entry. Takeuchi et al. (2021) showed that young newcomers' school-to-work adjustment is shaped by organizational guidance, training, mentoring, and career-development support, indicating that the workplace itself constitutes a new support context [10]. In our focus groups, this context was made concrete through references to help from coworkers during internships and formal employment. Treating colleague support separately therefore reflects an emerging workplace relationship network rather than a relabelling of significant other support.

Beyond family, peers, and workplace relationships, Chinese higher education institutions may continue to provide support after students formally leave campus. Academic teachers, student-affairs counsellors, career-service offices, alumni, internship bases, and institutional links with

recruiting employers may remain channels through which graduates obtain employment information, advice, or resources. We refer to these collectively as school support, defined as support associated with the higher education institution from which a participant graduated. Ecological systems theory holds that individual development is embedded in interconnected environmental systems [11], while social capital theory emphasizes how institutionally embedded networks supply information, trust, and mobilizable resources [12,13]. That teachers and institutions can serve as support sources is well established: Malecki and Elliott (1999) distinguished teacher support in their student social support measure [14]; Liang and Long (2024) showed that Chinese university students form stable perceptions of teacher support [15]; and Parola et al. (2025) linked career-related teacher support to career decision-making self-efficacy and career adaptability [16]. These constructs have, however, typically been examined separately, leaving open a measurement question: when school support is modelled alongside family, peer, and colleague support within a multisource framework, do graduates still experience it as a distinguishable source? If it merely duplicates broader relational support, there is little reason to retain it as a separate dimension; if it remains structurally distinguishable and supplies criterion-related information beyond other sources, a contextual extension of the MSPSS at this developmental stage would be justified.

Accordingly, the present study treats the MSPSS as a mature multisource measurement framework rather than an immutable template of relationship categories. This study developed and evaluated a four-source contextual extension comprising family, peer, colleague, and school support through literature review and a focus-group discussion. A random split-sample design was used to examine factor structure, reliability, and convergent and discriminant validity. Career satisfaction served as an external criterion for testing whether school support contributed information beyond the other sources. The proposed structure is intended for the STWT context rather than as a universal replacement for the original MSPSS.

2. Methods

2.1. Research Design and Scale Development

The study used a two-phase psychometric design. In Phase 1, the MSPSS source structure was contextualized through literature review, focus groups, expert review, and pilot testing. Family support was retained; friend support was broadened to peer support; colleague support represented the workplace network; and school support referred to support associated with the higher education institution from which the participant graduated.

Ten employed graduates (five men and five women from different disciplines) discussed the people and organizations that provided practical or emotional support around graduation in the focus groups. Their accounts consistently identified family, peers, university personnel and resources, alumni, and workplace colleagues. Sixteen candidate items, four per source, were reviewed by three psychology or higher-education experts for relevance, clarity, source specificity, and wording. Pilot testing with 80 graduates confirmed item comprehensibility and preliminary internal consistency.

2.2. Participants and Procedure

Participants were employed Chinese graduates with junior-college, bachelor's, or postgraduate qualifications. Convenience and snowball sampling were conducted through class and alumni WeChat groups, university and organizational contacts, and employer communication channels. The Wenjuanxing survey was distributed through WeChat and QQ; duplicate submissions, responses completed in less than two minutes, and clearly anomalous patterns were excluded. Data

were collected from January 20 to February 25, 2024.

The final sample comprised 798 participants (46.0% men; mean age = 24.84 years, SD = 3.71). Of these, 47.6% had urban (*hukou*); 34.8%, 54.0%, and 11.2% held junior-college, bachelor's, and postgraduate qualifications, respectively; and 63.7% graduated during 2021-2023. Participants represented diverse disciplines, industries, and organizations, although the nonprobability sample was not nationally representative. Ethics committees at two higher education institutions approved the protocol and waived written consent. The survey opening page explained the study, voluntary participation, and anonymous data use; continuation indicated consent.

2.3. Instruments

The contextualized support measure contained 16 items assessing family, peer, colleague, and school support (four items each). Items were randomized and rated from 1 (strongly disagree) to 5 (strongly agree). School referred specifically to the participant's former higher education institution. Career satisfaction was measured with the five-item Career Satisfaction Scale [17] on the same response scale (Cronbach's $\alpha = .888$).

Higher scores represented stronger perceived availability of support from the specified source. Peer support included friends, classmates, former classmates, romantic partners, and others at a similar life stage; colleague support referred to coworkers encountered in internships or formal employment. School support covered interpersonal, informational, and resource-based assistance associated with the former institution, including teachers, student-affairs personnel, career services, and alumni-related channels. These definitions were provided to keep the relational referent of each subscale explicit.

2.4. Analysis

Analyses used SPSS 26.0, R 4.6.1 (psych), and Mplus 8.3. Participants were randomly divided into Group 1 (n = 399) for item analysis and exploratory factor analysis (EFA) and Group 2 (n = 399) for confirmatory factor analysis (CFA); demographic distributions did not differ significantly. Item analysis combined upper-lower 27% Mann-Whitney tests, corrected item-subscale correlations, and α-if-deleted results. EFA used principal axis factoring with oblique rotation. Factor retention considered eigenvalues, scree plot, 1,000-replication parallel analysis, Velicer's MAP test, theory, and interpretability.

CFA treated the five-category items as ordered indicators and used WLSMV estimation. One-factor, correlated four-factor, and second-order models were compared using χ^2; CFI, TLI, RMSEA with 90% confidence intervals, and SRMR. Internal consistency was assessed with Cronbach's α and McDonald's ω. Group 2 loadings, composite reliability (CR), average variance extracted (AVE), the Fornell-Larcker criterion [18], and HTMT [19] evaluated convergent and discriminant validity. Hierarchical regression tested the incremental association of school support with career satisfaction after gender, education, graduation year, and the other three support sources were controlled. A sensitivity model additionally controlled age, hukou, major, working time since graduation, organization type, and job changes. Variance inflation factors (VIFs) were examined [20].

3. Results

3.1. Item Analysis and EFA

All items discriminated between high- and low-scoring groups ($p < .001$); corrected item-subscale correlations ranged from .536 to .778. Deleting Scho01 increased school-support alpha

only from .825 to .833, so all items were retained. In Group 1, KMO was .908 and Bartlett's test was significant, χ^2 (120) = 3731.896, $p < .001$. The first five eigenvalues were 7.462, 1.677, 1.167, 1.087, and .661. The Kaiser criterion, parallel analysis, and the MAP minimum (four factors; MAP = .0304) converged on an interpretable four-factor solution [21,22]. Fifteen items loaded clearly on their intended sources; Scho01 was retained for independent CFA evaluation.

The rotated solution showed the expected source-based clustering of family, peer, colleague, and school items. Scho01 had a comparatively low EFA pattern coefficient, but it showed acceptable discrimination and an acceptable corrected item-subscale correlation. Removing it produced only a very small reliability gain. Because item decisions were based on multiple indicators rather than one exploratory coefficient, the item was retained and evaluated in the independent confirmatory subsample.

3.2. Confirmatory Factor Analysis

The one-factor model fit poorly (Table 1). The correlated four-factor model showed acceptable overall fit, CFI = .972, TLI = .965, RMSEA = .084, 90% CI [.075, .093], and SRMR = .036. The second-order model was also supported, CFI = .974, TLI = .969, RMSEA = .079, 90% CI [.070, .088], and SRMR = .037. First-order loadings in the correlated model ranged from .753 to .870 (all $p < .001$); Scho01 loaded .848. Factor correlations ranged from .624 to .789. Higher-order loadings for family, peer, colleague, and school support were .765, .920, .843, and .809, respectively (all $p < .001$).

Within the correlated model, standardized loadings ranged from .779 to .870 for family support, .817 to .849 for peer support, .783 to .801 for colleague support, and .753 to .848 for school support. Scho01 loaded .848 in Group 2 and therefore showed no evidence of item failure in the confirmatory analysis. The strongest factor correlation was between peer and colleague support ($r = .789$). The correlated solution was retained as the principal measurement model because source differentiation was the main research question; the second-order solution provided complementary evidence for continuity of a general support construct.

Table 1. Fit of Alternative CFA Models

Model	χ^2	df	CFI	TLI	RMSEA (90% CI)	SRMR
One-factor	1301.422	104	.876	.857	.170 [.162, .178]	.079
Correlated four-factor	370.847	98	.972	.965	.084 [.075, .093]	.036
Second-order four-factor	351.315	100	.974	.969	.079 [.070, .088]	.037

3.3. Reliability, Convergent Validity, and Discriminant Validity

In the full sample of 798 participants, Cronbach's α for the four subscales ranged from .831 to .878 and McDonald's ω ranged from .834 to .880, indicating good internal consistency (Table 2, Panel A).

Convergent and discriminant validity were evaluated in the independent CFA subsample (Group 2, n = 399). All first-order standardized loadings were significant. CR values ranged from .866 to .905 and AVE values from .618 to .704 (Table 2, Panel B). For each construct, the square root of AVE exceeded its correlations with the other constructs, and all six HTMT values were below .85 (Table 3). Although family, peer, colleague, and school support were moderately to strongly related, the available evidence supported their empirical distinctiveness.

Table 2. Reliability and convergent validity

Panel A. Internal consistency, full sample (N = 798)

Construct	α	ω
Family	.875	.877
Peer	.878	.880
Colleague	.838	.839
School	.831	.834

Panel B. CFA-based reliability and convergent validity, Group 2 (n = 399)

Construct	Loading Range	CR	AVE	√AVE	2nd-order Loading
Family	.779–.870	.905	.704	.839	.765
Peer	.817–.849	.903	.699	.836	.920
Colleague	.783–.801	.872	.630	.794	.843
School	.753–.848	.866	.618	.786	.809

Table 3. Overview of discriminant validity

Construct	1	2	3	4
1. Family	**.839**	.703	.624	.640
2. Peer	.703	**.836**	.789	.728
3. Colleague	.644	.802	**.794**	.681
4. School	.654	.721	.684	**.786**

Diagonal = √AVE; upper triangle = latent correlations; lower triangle = HTMT.

3.4. Incremental Validity of School Support

Background variables explained 7.2% of career-satisfaction variance (Table 4). Family, peer, and colleague support increased R^2 to .342 (ΔR^2 = .270, $p < .001$). Adding school support increased R^2 to .392 (ΔR^2 = .050, β = .295, $p < .001$). Family (β = .146) and colleague support (β = .187) remained significant, whereas peer support did not (β = .073, p = .078). VIFs ranged from 1.754 to 2.211. With expanded covariates, school support still added 3.9% of variance (final R^2 = .421, β = .271, $p < .001$). These cross-sectional increments indicate concurrent criterion-related information, not temporal prediction.

In the sensitivity analysis, the expanded covariate block explained 18.9% of career-satisfaction variance. Adding family, peer, and colleague support increased R^2 to .382 (ΔR^2 = .193, $p < .001$), and entering school support increased final R^2 to .421. Although the incremental contribution of school support was smaller than in the parsimonious model, its direction, statistical significance, and substantive interpretation were stable across covariate specifications.

Table 4. Incremental validity of school support for career satisfaction.

Step	Variables Added	R^2	ΔR^2	Key β	p
1	Gender, education, graduation year	.072	—	—	—
2	Family + Peer + Colleague	.342	.270	—	<.001
3	School	.392	.050	.295	<.001

4. Discussion, Implications and Limitations

This study examined whether the MSPSS's original family, friend, and significant-other sources still adequately represent the main support relationships experienced by employed Chinese graduates during the STWT. The findings do not challenge the MSPSS's basic measurement logic: family, peer, colleague, and school support all loaded meaningfully on a higher-order perceived-social-support factor, confirming Zimet et al.'s (1988) principle of distinguishing support by source

[6] and remaining consistent with prior three-factor evidence in Chinese-language populations [7,8,9]. The contribution here is narrower: when graduates' relational networks are reorganized after entry into employment, the source categories require more context-specific definition. The results should therefore be read as a limited contextual extension of the MSPSS structure, not as a replacement for its classic three-source framework.

Support for both the correlated four-factor and second-order models reveals a pattern of differentiation and continuity. The one-factor model fit poorly, indicating that a single undifferentiated support score would obscure meaningful source-level variation; at the same time, the four factors were moderately to strongly correlated and loaded on a common higher-order factor, reflecting a shared sense of support availability. This duality aligns with Hlad'o et al. (2020), who showed that different sources relate differently to career adaptation and that source-level information should be retained during transitions [3], and with Yılmaz Koğar and Koğar (2025), whose bifactor-ESEM analysis likewise found a general support factor coexisting with source-specific factors [23]. In practice, the four subscales should therefore be prioritized; an overall support score would be defensible only after the second-order structure is replicated in independent samples.

The relatively high peer–colleague correlation reflects the reorganization of graduates' relational networks, yet the two factors remained empirically distinguishable in the CFA and HTMT analyses. University ties continue beyond graduation as same-stage peers exchange recruitment and workplace information, while organizational entry introduces colleagues who address immediate task demands, workplace rules, and work-related difficulties [10]. That colleague support forms a separate factor rather than emerging as a renamed significant-other factor indicates a new relational boundary salience after organizational entry. This interpretation, however, should not be generalized to other populations: replacing significant-other support with colleague support remains contingent on developmental stage and social context.

The school-support findings indicate that higher education institutions do not disappear from graduates' support networks at graduation. Even after family, peer, and colleague support are considered simultaneously, school support showed clear factor loadings, remained related to but nonredundant with the other sources, and could be integrated into the higher-order perceived-support structure. In the Chinese higher-education context, employment support is distributed across teachers, counsellors, employment-service staff, alumni, internship partners, and university-linked employers; graduates may continue to access information and assistance through these channels for a period after graduation. School support should not be read as satisfaction with institutional service quality; it reflects graduates' subjective sense that interpersonal, informational, and resource-based support associated with their former institution remains accessible.

School support also explained unique variance in career satisfaction beyond family, peer, colleague support, and basic background variables, and the association remained significant after controlling for age, hukou, disciplinary field, time employed since graduation, organizational type, and job-change history. This should not be interpreted as evidence that school support predicts career satisfaction; rather, perceived access to former-university support carries concurrent criterion-related information not fully captured by other support sources or demographic and employment backgrounds. The contribution of this study to the educational-support literature therefore lies in the structural position and measurement value of school support, not in yet another demonstration that educational resources relate to career development. Building on prior evidence linking teacher and career-related educational support to young adults' career processes [14,15,16], the findings show that, within a multisource model, school support retains a distinguishable position and supplies nonredundant criterion information during the STWT.

Together, these findings carry a broader theoretical implication for social-support measurement

across developmental transitions. What appears stable across studies is not the literal set of source labels but the underlying principle that individuals differentiate among support providers. As life stage and relational environment change substantially, the specific sources through which support is experienced require contextual redefinition; the second-order structure observed here shows that a general sense of support availability can remain continuous while the source structure reorganizes around the relational ecology of a particular period. Contextualized scale adaptation thus involves specifying the relational sources through which a familiar construct is experienced at a given life stage, rather than merely adding items to an existing template. Whether this pattern extends to other transition periods or cultural settings awaits replication.

For career guidance and graduate support, source-level profiling is likely more informative than a single overall score: two graduates with similar total scores can differ markedly in where their support comes from, and identifying specific gaps can help university employment services and counsellors target interventions. The findings also suggest a time-limited extension of graduate support beyond pre-graduation job-search services into the early post-entry period, through maintained alumni networks, short-term employment consultation, and follow-up channels tied to internship and employer resources. This does not imply that universities should assume indefinite responsibility for graduates' careers; it indicates that transitional support bridges may be worth maintaining. Because the present design is cross-sectional, these implications should be examined in longitudinal or intervention research before being scaled.

Several limitations qualify these conclusions. First, the cross-sectional design cannot establish temporal ordering or causality: graduates evaluating their career development more positively may also interpret past university support more favourably; longitudinal studies beginning before graduation and continuing through early organizational entry could test predictive value for career adaptability, satisfaction, or retention. Second, convenience and snowball sampling limit representativeness despite heterogeneity in education, discipline, industry, and organization type. Third, the EFA and CFA were conducted on a random split of one dataset rather than two independent samples; external cross-validation remains necessary. Fourth, item Scho01 should be reassessed, given its comparatively low EFA pattern coefficient despite a strong CFA loading. Finally, this study evaluated internal consistency, factor structure, convergent and discriminant validity, and concurrent incremental validity; future research should examine test-retest reliability, measurement invariance across demographic and educational groups, regional and cross-system generalizability, and changes in source relevance over time since graduation.

5. Conclusions

Among Chinese university graduates navigating the STWT, family, peer, colleague, and school support emerged as four distinguishable but related sources of perceived social support. All four sources loaded on a higher-order general perceived-social-support factor, suggesting that contextual revision did not move the measure away from the core MSPSS construct. School support also showed an independent concurrent association with career satisfaction beyond other support sources and a broader set of background variables, providing additional criterion-related evidence for retaining it as a distinct source. More precisely, the present study does not propose a new universal four-source model. Rather, it offers preliminary psychometric evidence that the concrete sources of perceived social support may be reorganized as developmental stage and relational environment change.

References

[1] Blokker, R., Akkermans, J., Marciniak, J., Jansen, P. G. W., & Khapova, S. N. (2023). Organizing school-to-work

transition research from a sustainable career perspective: A review and research agenda. Work, Aging and Retirement, 9(3), 239–261. https://doi.org/10.1093/workar/waad012
[2] Fu, C., Cai, Y., Yang, Q., Pan, G., Xu, D., & Shi, W. (2023). Career adaptability development in the school-to-work transition. Journal of Career Assessment, 31(3), 476–492. https://doi.org/10.1177/10690727221120366
[3] Hlad'o, P., Kvaskova, L., Jezek, S., Hirschi, A., & Macek, P. (2020). Career adaptability and social support of vocational students leaving upper secondary school. Journal of Career Assessment, 28(3), 478–495. https://doi.org/10.1177/1069072719884299
[4] Hou, C., Wu, Y., & Liu, Z. (2019). Career decision-making self-efficacy mediates the effect of social support on career adaptability: A longitudinal study. Social Behavior and Personality: An International Journal, 47(5), 1–13. https://doi.org/10.2224/sbp.8157
[5] Song, C., Xu, X., & Hashim, S. B. (2025). How does perceived social support affect the career satisfaction of Chinese college graduates in their early careers? A chain mediation model. International Journal for Educational and Vocational Guidance, 25(3), 1101–1127. https://doi.org/10.1007/s10775-024-09667-6
[6] Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. Journal of Personality Assessment, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2
[7] Chou, K.-L. (2000). Assessing Chinese adolescents' social support: The multidimensional scale of perceived social support. Personality and Individual Differences, 28(2), 299–307. https://doi.org/10.1016/S0191-8869(99)00098-7
[8] Guan, N. C., Seng, L. H., Hway Ann, A. Y., & Hui, K. O. (2015). Factorial validity and reliability of the Malaysian simplified Chinese version of multidimensional scale of perceived social support (MSPSS-SCV) among a group of university students. Asia Pacific Journal of Public Health, 27(2), 225–231. https://doi.org/10.1177/1010539513477684
[9] Ma, C. M. S. (2020). Measurement Invariance of the Multidimensional Scale of Perceived Social Support Among Chinese and South Asian Ethnic Minority Adolescents in Hong Kong. Frontiers in Psychology, 11, 596737. https://doi.org/10.3389/fpsyg.2020.596737
[10] Takeuchi, N., Takeuchi, T., & Jung, Y. (2021). Making a successful transition to work: A fresh look at organizational support for young newcomers from an individual-driven career adjustment perspective. Journal of Vocational Behavior, 128, 103587. https://doi.org/10.1016/j.jvb.2021.103587
[11] Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.
[12] Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94, S95–S120.
[13] Lin, N. (2002). Social capital: A theory of social structure and action. Cambridge University Press.
[14] Malecki, C. K., & Elliott, S. N. (1999). Adolescents' ratings of perceived social support and its importance: Validation of the student social support scale. Psychology in the Schools, 36(6), 473–483. https://doi.org/10.1002/(SICI)1520-6807(199911)36:6%253C473::AID-PITS3%253E3.0.CO;2-0
[15] Liang, J., & Long, Z. (2024). Construction and validation of a scale to measure college EFL students' perceived teacher support. SAGE Open, 14(4), 21582440241276983. https://doi.org/10.1177/21582440241276983
[16] Parola, A., Marcionetti, J., & Wong, L. P. W. (2025). Career-related teacher support scale: Validation among Italian adolescents and assessment of the effect on career decision self-efficacy through career adaptability. Journal of Career Assessment, 33(1). https://doi.org/10.1177/10690727241256285
[17] Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. Academy of Management Journal, 33(1), 64–86. https://doi.org/10.5465/256352
[18] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104
[19] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
[20] Hair Jr, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Prentice Hall. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1074274
[21] Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. Psychometrika, 30(2), 179–185. https://doi.org/10.1007/BF02289447
[22] Velicer, W. F. (1976). Determining the number of components from the matrix of partial correlations. Psychometrika, 41(3), 321–327. https://doi.org/10.1007/BF02293557
[23] Yılmaz Koğar, E., & Koğar, H. (2023). A bifactor-ESEM representation of the multidimensional scale of perceived social support. Psychological Reports. https://doi.org/10.1177/00332941231206992