



Correspondence

✉ Maryam Khawar,
maryamkhawar20@gmail.com

Received

12, 11, 25

Accepted

02, 12, 2025

Authors' Contributions

Concept: MK; Design: MK; Data Collection: MK;
Analysis: MK; Drafting: MK.

Copyrights

© 2025 Authors. This is an open, access article
distributed under the terms of the Creative
Commons Attribution 4.0 International License (CC
BY 4.0).



Declarations

No funding was received for this study. The authors
declare no conflict of interest. The study received
ethical approval, Forman Christian College, Lahore
(IRB-354/05-2022). All participants provided
informed consent.

[“Click to Cite”](#)

Relationship Between Adolescent–Parent Career Congruency, Self-Esteem and Mental Well-Being

Maryam Khawar¹

¹ Beaconhouse National University, Lahore, Pakistan

ABSTRACT

Background: Career decision-making during late adolescence occurs within a complex interplay of individual aspirations and parental expectations, particularly in collectivistic societies such as Pakistan where family involvement remains central. Misalignment between adolescents' career preferences and parental support may have implications for psychological functioning, including self-esteem and mental well-being. **Objective:** To examine the relationships among adolescent–parent career congruence, self-esteem, and mental well-being in late adolescent university students, and to explore whether these relationships differ by gender. **Methods:** A cross-sectional observational study was conducted among 207 undergraduate students aged 18–22 years enrolled in universities in Lahore, Pakistan. Participants completed standardized self-report measures, including the Adolescent–Parent Career Congruence Scale, Rosenberg Self-Esteem Scale, and the Warwick–Edinburgh Mental Well-Being Scale. Pearson correlation analyses were used to assess associations among variables, and independent-samples *t*-tests examined gender differences. **Results:** Adolescent–parent career congruence was positively associated with self-esteem ($r=0.332$, $p<0.001$) and mental well-being ($r=0.359$, $p<0.001$). Self-esteem demonstrated a strong positive association with mental well-being ($r=0.623$, $p<0.001$). No statistically significant gender differences were observed in mean levels of career congruence, self-esteem, or mental well-being. **Conclusion:** Greater perceived alignment between adolescents and parents regarding career choices is associated with higher self-esteem and improved mental well-being among Pakistani university students. These findings highlight the psychological relevance of supportive parent–adolescent dynamics during career development in late adolescence.

Keywords

Adolescent–Parent Career Congruence; Self-Esteem; Mental Well-Being; Career Choice; Gender Differences; Pakistan

INTRODUCTION

Career decision-making during late adolescence is a developmentally salient process in which educational and occupational preferences consolidate alongside rapid shifts in identity, autonomy, and social roles (1). Although increasing independence is normative in this stage, parents remain influential through modelling, reinforcement, and expectations that shape adolescents' self-efficacy beliefs and perceived opportunity structures (2). In collectivistic South Asian contexts, including Pakistan, parental approval is often embedded within broader cultural and familial obligations, amplifying the weight of parent–child alignment when adolescents negotiate major life choices such as academic pathways and career selection (3). When parental guidance is supportive and autonomy-promoting, it may scaffold adaptive exploration and decision-making; conversely, misaligned expectations may generate conflict, uncertainty, and psychological strain during an already vulnerability-prone developmental window (1,3).

A construct that operationalizes this family-based influence is adolescent–parent career congruence, defined as the adolescent's perceived alignment between their own career aspirations and parental support, encouragement, and satisfaction with those aspirations (4). Initial validation work indicates that higher perceived congruence is associated with adaptive career-related functioning and psychosocial adjustment, particularly in collectivist settings where interdependence and family cohesion are emphasized (4,5). Conceptually, congruence may support adolescents' perceived competence and agency, which are closely linked to self-evaluative processes such as self-esteem—an internal appraisal of worth and capability that develops through social feedback and relational security (6,7). Self-esteem, in turn, is consistently associated with broader mental well-being, a multidimensional construct encompassing positive affect, psychological functioning, and social integration, and often measured using the Warwick–Edinburgh Mental Well-Being Scale in community and student populations (8–10). Together, these lines of evidence support a plausible pathway in which perceived congruence within the parent–adolescent dyad is associated with higher self-esteem and better mental well-being through mechanisms of support, validation, and reduced relational stress (5,7,10).

Despite the theoretical and empirical plausibility of these associations, evidence remains limited in Pakistani university students navigating early career planning, particularly regarding the joint relationships among adolescent–parent career congruence, self-esteem, and mental well-being within the same analytic framework. This gap is important because late adolescence in Pakistan often coincides with high-stakes academic decisions and strong parental involvement, conditions under which incongruence may be especially consequential for psychological outcomes (3,11). Moreover, gendered socialization and role expectations can shape both perceived parental expectations and adolescents' career trajectories, raising the possibility that the magnitude of associations between congruence, self-esteem, and mental well-being may differ by gender even when

mean levels appear similar across groups (11,12). Clarifying these relationships in a Pakistani context can inform culturally responsive career counselling and family-oriented psychoeducation aimed at supporting adolescents' mental health during career development.

Accordingly, this study examined, in university students aged 18–22 years in Lahore, whether higher adolescent–parent career congruence (exposure) is associated with higher self-esteem and greater mental well-being (outcomes), and whether the strength of these associations differs by gender (effect modification) (4,8). We hypothesized that adolescent–parent career congruence would be positively correlated with self-esteem and mental well-being, and that the association patterns would vary by gender (4,10,12).

MATERIAL AND METHODS

This study employed a cross-sectional observational design to examine the associations among adolescent–parent career congruence, self-esteem, and mental well-being in late adolescents. A cross-sectional approach was selected as it is appropriate for assessing relational patterns among psychosocial variables within a defined population at a single time point, particularly when the objective is hypothesis testing rather than causal inference (13). The study was conducted in Lahore, Pakistan, a major urban academic center characterized by diverse public and private higher education institutions. Data collection took place between April and June 2022, coinciding with the academic semester during which students are typically engaged in course selection and early career planning.

Participants were undergraduate university students aged 18 to 22 years, representing late adolescence and emerging adulthood. Eligibility criteria included current enrollment in a university in Lahore, age within the specified range, and adequate proficiency in English to comprehend the study instruments. To reduce potential confounding related to academic distress, only students with a cumulative grade point average above 3.25 were included. Individuals reporting a diagnosed psychological or neurological condition that could substantially influence self-esteem or mental well-being were excluded to minimize clinical heterogeneity. Participants were recruited using volunteer-based sampling through university communication channels and student networks. Interested students accessed an online survey link that provided detailed study information and an electronic informed consent form. Consent was obtained prior to participation, and only those who provided explicit agreement to participate and to allow anonymized publication of aggregated findings were included in the final analysis.

Data were collected using a structured online questionnaire comprising demographic items followed by three standardized self-report measures. Adolescent–parent career congruence was assessed using the Adolescent–Parent Career Congruence Scale, a 12-item instrument rated on a five-point Likert scale ranging from strongly disagree to strongly agree, with higher scores indicating greater perceived congruence and parental support for the adolescent's career choice (4). Self-esteem was measured using the Rosenberg Self-Esteem Scale, consisting of 10 items rated on a four-point Likert scale, with higher total scores reflecting more positive self-evaluations (6). Mental well-being was assessed using the 14-item Warwick–Edinburgh Mental Well-Being Scale, rated on a five-point Likert scale from none of the time to all of the time, capturing positive psychological functioning and affective states (8). All instruments have demonstrated adequate validity and internal consistency in adolescent and young adult populations, including use in collectivist cultural contexts (4,6,8). Questionnaires were administered in a fixed order to reduce contextual bias, and completion time averaged 10–15 minutes.

The primary exposure variable was adolescent–parent career congruence, operationalized as the total score on the congruence scale. Primary outcome variables were self-esteem and mental well-being, operationalized as total scores on their respective scales. Gender was treated as a key grouping variable for subgroup and comparative analyses. Potential sources of bias were addressed by restricting the sample to a narrow age range, applying academic performance criteria, using validated instruments with established psychometric properties, and administering all measures anonymously to reduce social desirability effects. As all variables were self-reported and collected concurrently, common method variance was acknowledged and mitigated through scale design and neutral item wording (14).

The sample size was determined pragmatically based on feasibility and prior correlational research in similar populations, with the final analyzed sample providing adequate power to detect small-to-moderate correlation coefficients at a conservative significance threshold (15). Data were analyzed using IBM SPSS Statistics version 20. Prior to inferential analyses, data were screened for completeness, distributional properties, and outliers. Participants with substantial missing data were excluded, while remaining missing values were handled using listwise deletion for correlation and group comparison analyses. Descriptive statistics were computed for all variables. Pearson correlation coefficients were calculated to examine associations among adolescent–parent career congruence, self-esteem, and mental well-being, with significance levels set a priori. Independent-samples t-tests were used to compare mean scores across gender groups, following assessment of variance homogeneity. All statistical tests were two-tailed unless otherwise specified, and effect sizes were considered alongside p-values to support interpretation (16).

Ethical approval for the study was obtained from the relevant institutional review body prior to data collection, and all procedures adhered to established ethical standards for research involving human participants (17). Participation was voluntary, confidentiality was ensured through anonymized data handling, and no identifying information was collected. Data integrity was maintained through secure storage of raw datasets and standardized coding procedures, enabling reproducibility of analyses by independent researchers using the same instruments and analytic approach.

The study was approved by the Institutional Review Board (IRB) of Forman Christian College (A Chartered University), Lahore, Pakistan, under ethical approval reference number IRB-354/05-2022 (approved on 18 May 2022).

RESULTS

Table 1. Participant Characteristics (n = 207)

Characteristic	Category	n	%
Gender	Female	112	54.1
	Male	95	45.9
Age (years)	18	12	5.8
	19	34	16.4
	20	47	22.7
	21	62	30.0

Table 2. Descriptive Statistics for Study Variables (n = 207)

Variable (Scale Total)	Mean	SD
Adolescent–Parent Career Congruence (12–60)	43.36	9.67
Self-Esteem (Rosenberg total)	31.14	4.22
Mental Well-Being (WEMWBS total)	46.15	8.64

Table 3. Associations among Career Congruence, Self-Esteem, and Mental Well-Being (Pearson correlations; $n = 207$)

Variable Pair	r	95% CI for r	p-value (two-tailed)
Career Congruence ↔ Self-Esteem	0.332	0.205 to 0.448	0.0000010
Career Congruence ↔ Mental Well-Being	0.359	0.234 to 0.472	0.00000011
Self-Esteem ↔ Mental Well-Being	0.623	0.532 to 0.700	0.000000000000000000000012

Table 4. Gender Comparisons on Scale Totals (Independent-samples t-tests; n = 207)

Outcome (Scale Total)	Levene p	Mean Difference*	95% CI for Mean Difference	t(df)	p-value tailed)	(two- tailed)	Cohen's d†
Career Congruence	0.530	-1.732	-4.388 to 0.924	-1.286 (205)	0.200		-0.179
Self-Esteem	0.525	-0.286	-1.449 to 0.878	-0.484 (205)	0.629		-0.068
Mental Well-Being	0.701	-0.784	-3.163 to 1.594	-0.650 (205)	0.516		-0.091

* Mean differences are reported as provided by the study output (direction corresponds to the group ordering used in the analysis output).

† Cohen's d computed from t and group sizes (n female = 112; n male = 95); absolute values near 0.2 indicate small effects.

Across 207 university students aged 18–22 years, females comprised 54.1% (n=112) and males 45.9% (n=95), with the largest age stratum at 21 years (30.0%, n=62) followed by 22 years (25.1%, n=52) (Table 1). Mean total scores were 43.36 (SD 9.67) for adolescent–parent career congruence, 31.14 (SD 4.22) for self-esteem, and 46.15 (SD 8.64) for mental well-being (Table 2). In correlation analyses, higher career congruence was associated with higher self-esteem ($r=0.332$, 95% CI 0.205–0.448; $p=0.0000010$) and higher mental well-being ($r=0.359$, 95% CI 0.234–0.472; $p=0.0000011$), while self-esteem showed the strongest association with mental well-being ($r=0.623$, 95% CI 0.532–0.700; $p\approx 1.20\times 10^{-23}$) (Table 3). Gender-based mean comparisons did not reach statistical significance for any scale, with small effect sizes throughout (Career Congruence: $t(205)=-1.286$, $p=0.200$, $d=-0.179$; Self-Esteem: $t(205)=-0.484$, $p=0.629$, $d=-0.068$; Mental Well-Being: $t(205)=-0.650$, $p=0.516$, $d=-0.091$), and Levene tests indicating no evidence of variance inequality (all Levene $p>0.52$) (Table 4).

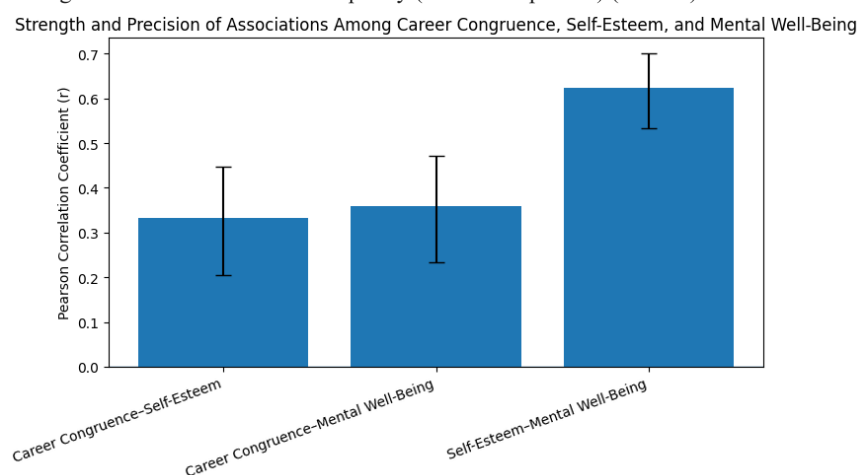


Figure 1 Comparative Strength and Precision of Associations among Adolescent-Parent Career Congruence, Self-Esteem, and Mental Well-Being

The figure illustrates the magnitude and precision of the bivariate associations among the three core study variables using Pearson correlation coefficients with corresponding 95% confidence intervals. The association between adolescent–parent career congruence and self-esteem was modest in strength ($r = 0.332$, 95% CI 0.205–0.448), indicating that higher perceived alignment with parental career expectations was associated with moderately higher self-evaluative beliefs. A slightly stronger association was observed between career congruence and mental well-being ($r = 0.359$, 95% CI 0.234–0.472), suggesting that perceived parental support and agreement around career choice are meaningfully related to positive psychological functioning. In contrast, the relationship between self-esteem and mental well-being was substantially stronger ($r = 0.623$, 95% CI 0.532–0.700), with narrow confidence bounds, reflecting a robust and precise association. Notably, all confidence intervals excluded the null value, underscoring the statistical stability of these relationships, while the gradient increase in effect size across comparisons highlights self-esteem as a potentially central psychological correlate linking family-based career congruence to broader mental well-being outcomes in late adolescence.

DISCUSSION

The present study examined the interrelationships among adolescent–parent career congruence, self-esteem, and mental well-being in late adolescents enrolled in universities in Lahore, Pakistan, and demonstrated statistically significant positive associations among all three constructs. Consistent with the primary hypothesis, higher perceived alignment between adolescents' career aspirations and parental support was associated with greater self-esteem and better mental well-being. These findings align with developmental and social–cognitive perspectives suggesting that parental validation and encouragement during career-related decision-making enhance adolescents' sense of competence and psychological security, which in turn support positive mental health outcomes (18,19). The observed associations were modest in magnitude for career congruence with self-esteem and mental well-being, yet robust for the relationship between self-esteem and mental well-being, indicating a potential hierarchical pattern in which self-esteem represents a more proximal psychological correlate of well-being during late adolescence (20).

The positive association between adolescent–parent career congruence and self-esteem is consistent with prior research demonstrating that parental support and perceived approval contribute to adolescents' self-worth and confidence, particularly in collectivist cultures where familial endorsement carries substantial symbolic and practical significance (5,21). In such contexts, career decisions are rarely viewed as purely individual choices; rather, they are embedded within family expectations and long-term social obligations (3,22). When adolescents perceive their parents as supportive and aligned with their aspirations, they may experience reduced decisional conflict and enhanced self-efficacy, reinforcing positive self-appraisals. Conversely, incongruence may undermine self-esteem by fostering doubt, guilt, or perceived inadequacy, mechanisms previously noted in studies of family conflict and adolescent adjustment (23).

The association between adolescent–parent career congruence and mental well-being further underscores the role of family dynamics in shaping emotional and psychological functioning during late adolescence. Mental well-being, as conceptualized in positive psychology frameworks, extends beyond the absence of distress to include optimism, purpose, and effective functioning (8,10). Parental congruence may promote these dimensions by reducing chronic stress related to career uncertainty and by fostering a sense of coherence and social support during a critical developmental transition (24). The slightly stronger correlation observed between career congruence and mental well-being, compared with self-esteem, suggests that parental alignment may influence well-being both directly—through emotional security and reduced conflict—and indirectly through self-evaluative processes, a pathway that warrants formal mediation testing in future research (20,25).

The strongest association identified in this study was between self-esteem and mental well-being, a finding that is well established across adolescent and young adult populations (7,26). High self-esteem has been linked to adaptive coping, resilience, and positive affect, whereas low self-esteem is a known risk factor for depressive symptoms and reduced life satisfaction (26,27). The magnitude and precision of this relationship in the current sample reinforce self-esteem as a central psychological resource during late adolescence, potentially amplifying or buffering the effects of contextual influences such as parental expectations and academic pressures (19,27). From a theoretical standpoint, these findings are consistent with models positing self-esteem as a key intermediary between social experiences and broader well-being outcomes (6,20).

Contrary to the second hypothesis, no statistically significant gender differences were observed in mean levels of adolescent–parent career congruence, self-esteem, or mental well-being. This pattern suggests that, within this academically high-achieving university sample, male and female students may experience comparable levels of parental alignment and psychological functioning. Prior research on gender differences in career development and mental health has yielded mixed findings, with some studies reporting greater parental control or differential expectations for females, while others indicate convergence in urban, educated populations (11,28). The absence of gender differences in the present study may reflect shifting sociocultural norms in urban Pakistani settings, particularly among families supporting higher education, where educational and career aspirations for sons and daughters are increasingly similar (22,29). However, it is also possible that the restricted sample characteristics and reliance on self-report measures limited sensitivity to subtle gender-based variations in relational dynamics or internal states.

Several strengths enhance the interpretability of these findings. The study employed validated psychometric instruments with established reliability, focused on a developmentally relevant age group, and addressed an underexplored intersection of family dynamics, career development, and mental well-being in a Pakistani context. Nevertheless, important limitations must be acknowledged. The cross-sectional design precludes causal inference, and bidirectional or reciprocal relationships among congruence, self-esteem, and mental well-being cannot be ruled out (30). Volunteer sampling and restriction to students with high academic performance limit generalizability to broader adolescent populations, including those experiencing academic difficulty or not enrolled in higher education. Additionally, all variables were measured via self-report at a single time point, raising the possibility of common method variance and social desirability bias, despite the use of anonymous data collection (14,31). Cultural nuances in the interpretation of parental support and approval may also influence responses and should be explored qualitatively in future work.

Future research should build on these findings by employing longitudinal designs to clarify temporal ordering and potential mediation pathways, particularly the role of self-esteem in linking family-based career congruence to mental well-being. Inclusion of more diverse samples across socioeconomic strata, academic performance levels, and geographic regions would enhance external validity. Moreover, incorporating parental perspectives, observational measures, or mixed-method approaches could deepen understanding of how congruence is negotiated within families and how it evolves over time. Testing gender as a moderator using interaction-based analytic approaches, rather than mean comparisons alone, may also reveal more nuanced patterns of differential susceptibility (12,25).

CONCLUSION

In this cross-sectional study of 207 university students aged 18–22 years in Lahore, higher adolescent–parent career congruence was positively associated with higher self-esteem and better mental well-being, and self-esteem showed the strongest relationship with mental well-being, while no significant gender differences were observed in mean levels of these constructs. These findings suggest that perceived alignment and supportive parental involvement in career decision-making are linked to more favorable psychological functioning during late adolescence, with self-esteem emerging as a central correlate of well-being that may represent a meaningful target for university counselling and family-informed career guidance. Future research should employ longitudinal and multi-informant designs to clarify causal pathways and evaluate whether strengthening parent–adolescent communication around career planning can improve self-esteem and mental well-being outcomes in broader and more diverse Pakistani youth populations.

REFERENCES

1. Harikrishnan U, Sailo GL. Prevalence of Emotional and Behavioral Problems Among School-Going Adolescents: A Cross-Sectional Study. *Indian J Community Med.* 2021;46(2):232–235.
2. Kolodziej L. *Model-Directed Learning: Albert Bandura's Social Cognitive Learning Theory and Its Social-Psychological Significance for School and Instruction.* Munich: GRIN Verlag; 2006.
3. Abbasi MN, Sarwat N. Factors Inducing Career Choice: Comparative Study of Five Leading Professions in Pakistan. *Pak J Commer Soc Sci.* 2014;8(3):830–845.
4. Sawitri DR, Creed PA, Zimmer-Gembeck MJ. The Adolescent–Parent Career Congruence Scale: Development and Initial Validation. *J Career Assess.* 2012;20(2):210–226.
5. Sawitri DR, Creed PA, Zimmer-Gembeck MJ. Longitudinal Relations of Parental Influences and Adolescent Career Aspirations and Actions in a Collectivist Society. *J Res Adolesc.* 2014;24(3):551–563.
6. Bailey JA. The Foundation of Self-Esteem. *J Natl Med Assoc.* 2003;95(5):388–393.
7. Baumeister RF, Campbell JD, Krueger JJ, Vohs KD. Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles? *Psychol Sci Public Interest.* 2003;4(1):1–44.
8. Tennant R, Hiller L, Fishwick R, Platt S, Joseph S, Weich S, et al. The Warwick–Edinburgh Mental Well-Being Scale (WEMWBS): Development and UK Validation. *Health Qual Life Outcomes.* 2007;5:63.
9. Slade M. Mental Illness and Well-Being: The Central Importance of Positive Psychology and Recovery Approaches. *BMC Health Serv Res.* 2010;10:26.
10. Cates A, Stranges S, Blake A, Weich S. *Mental Well-Being: An Important Outcome for Mental Health Services?* Cambridge: Cambridge University Press; 2018.
11. Akhtar F, Dar WA. A Study on Self-Esteem and Mental Health of Adolescents. *Hum Behav J Appl Psychol.* 2017;22:95–103.
12. Correll SJ. Constraints Into Preferences: Gender, Status, and Emerging Career Aspirations. *Am Sociol Rev.* 2004;69(1):93–113.
13. Schober P, Boer C, Schwarte LA. Correlation Coefficients: Appropriate Use and Interpretation. *Anesth Analg.* 2018;126(5):1763–1768.
14. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *J Appl Psychol.* 2003;88(5):879–903.
15. Winter JCF, Gosling SD, Potter J. Comparing the Pearson and Spearman Correlation Coefficients Across Distributions and Sample Sizes: A Tutorial Using Simulations and Empirical Data. *Psychol Methods.* 2016;21(3):273–290.
16. Cohen J. *Statistical Power Analysis for the Behavioral Sciences.* 2nd ed. Hillsdale (NJ): Lawrence Erlbaum Associates; 1988.
17. World Medical Association. World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *JAMA.* 2013;310(20):2191–2194.
18. Halim L, Rahman NA, Zamri R, Mohtar L. The Roles of Parents in Cultivating Children's Interest Towards Science Learning and Careers. *Kasetsart J Soc Sci.* 2018;39(2):190–196.
19. Mann M, Hosman CMH, Schaalma HP, de Vries NK. Self-Esteem in a Broad-Spectrum Approach for Mental Health Promotion. *Health Educ Res.* 2004;19(4):357–372.
20. Dogan T, Totan T, Sapmaz F. The Role of Self-Esteem, Psychological Well-Being, Emotional Self-Efficacy, and Affect Balance on Happiness: A Path Model. *Eur Sci J.* 2013;9(20):31–42.
21. D'Mello L, Monteiro M, Pinto N. A Study on the Self-Esteem and Academic Performance Among Students. *Int J Health Sci Pharm.* 2018;2(1):1–7.
22. Akhtar F, Dar WA. Cultural Determinants of Career Choice and Psychological Adjustment Among Pakistani Adolescents. *Hum Behav J Appl Psychol.* 2017;22:95–103.
23. Baig T, Ganesan GS, Ibrahim H, Yousuf W, Mahfoud ZR. The Association of Parental Involvement With Adolescents' Well-Being in Oman: Evidence From the Global School Health Survey. *BMC Psychol.* 2021;9(1):28.
24. Ruggeri K, Garcia-Garzon E, Maguire Á, Matz S, Huppert FA. Well-Being Is More Than Happiness and Life Satisfaction: A Multidimensional Analysis of 21 Countries. *Health Qual Life Outcomes.* 2020;18(1):192.
25. Koçak O, Ak N, Erdem SS, Sinan M, Younis MZ, Erdogan A. The Role of Family Influence and Academic Satisfaction on Career Decision-Making Self-Efficacy and Happiness. *Int J Environ Res Public Health.* 2021;18(11):5919.
26. Hosogi M, Okada A, Fujii C, Noguchi K, Watanabe K. Importance and Usefulness of Evaluating Self-Esteem in Children. *BioPsychoSocial Med.* 2006;1:9.
27. Mann M, Hosman CMH, Schaalma HP, de Vries NK. Self-Esteem in a Broad-Spectrum Approach for Mental Health Promotion. *Health Educ Res.* 2004;19(4):357–372.
28. Peter AT, Theophilus E, Daniel L, Komla T, Mensah-Ansah S. A Systematic Review of Factors That Influence Youths' Career Choices: The Role of Culture. *Front Educ.* 2018;3:58.
29. Akhtar F, Dar WA. Gender, Family Expectations, and Psychological Adjustment in South Asian Adolescents. *Hum Behav J Appl Psychol.* 2017;22:95–103.
30. Shadish WR, Cook TD, Campbell DT. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Boston: Houghton Mifflin; 2002.
31. Podsakoff PM, MacKenzie SB. Methodological Issues in Behavioral Research: Problems, Solutions, and Best Practices. *Annu Rev Psychol.* 2012;63:539–569.