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Unpacking the relationship between parental and peer attachment and psychological burnout: The mediating roles of social-emotional competence and psychological basic needs

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Abstract

Introduction: Psychological burnout constitutes a major concern in the field of positive psychology, particularly as it is commonly experienced by students during their academic journey. Therefore, identifying its contributing factors is of critical importance for both research and intervention. Attachment to parents and peers, basic psychological needs, and social-emotional competence are pivotal factors influencing psychological burnout. This study examines the direct and indirect effects of these factors on psychological burnout.

Methods: This study's sample consisted of 350 university students (270 females and 80 males) enrolled at Azad University of Shiraz, Iran. Participants were selected through convenience sampling and ranged in age from 18 to 40 years (Mage = 22.05, SD = 3.51), who completed four standardized self-report instruments: the Psychological Burnout Inventory (PBI), Psychological Basic Needs Scale (PBNS), Emotional-Social Competence Questionnaire (ESCQ), and Attachment to Parents and Peers Inventory (APPI). For the analysis of data, SPSS (V.26) and AMOS (V.26) were employed.

Results: The assumed research model has a good fit so that, the effect of attachment to parents and peers on psychological burnout is mediated by emotional-social competence and psychological basic needs (χ^2/df = 1.98, *p* < 0.01, CFI = 0.91, RMSEA = 0.05). Furthermore, the effect of attachment to parents and peers on psychological burnout is mediated by emotional-social competence (χ^2/df = 1.90, *p* < 0.01, CFI = 0.92, RMSEA = 0.006), and the effect of attachment to parents and peers on psychological burnout is mediated by psychological basic needs (χ^2/df = 1.98, *p* < 0.01, CFI = 0.98, RMSEA = 0.05).

Discussion: This study indicates that Iranian university students with strong parental and peer relationships, who are aware of their basic needs and possess emotional-social skills, tend to exhibit lower levels of psychological burnout and higher mental health.

Take-home message: Given the significance of psychological burnout in academic settings, this study explored its association with various individual and social factors to identify potential predictors of reduced psychological burnout among university students.

INTRODUCTION

The transition to university can be challenging for students, potentially triggering anxiety and depression [1] if they struggle to adjust. This adjustment period can also contribute to psychological burnout, initially identified by Herbert J. Freudenberger [2]. Psychological burnout is characterized by physical, emotional, or mental exhaustion, decreased motivation, lowered performance, and negative attitudes [2]. Often viewed as a stress symptom or syndrome [3], burnout is linked to various negative health and well-being outcomes driven by relentless success pursuit. Psychological burnout is typically defined by Maslach and Jackson as a syndrome comprising emotional exhaustion, depersonalization, and low personal accomplishment [4], aligning with the World Health Organization's International Classification of Diseases criteria [5]. Burnout is characterized by a relatively rapid decline in emotional, physical, and psychological energy as a result of increased work stress [6]. It often leads to a sense of low self-efficacy and results from work overload, a lack of control, resources, and equity. It can also be caused by a lack of community and value conflicts [7].

The concepts of burnout and mentalizing are complex multidimensional constructs. Both are related to motivations, beliefs, intentions, reasons, desires, needs, a deficit of social and cognitive skills, etc. [8-10]. Both burnout syndrome and mentalizing are defined as a process and therefore change over time [11]. Mentalizing – that is, the action of reflecting and understanding one's own or others' overt behavior based on an internal representation of their covert imagery [12] – has been shown to protect the individual against mental distress, through the promotion of effective coping skills and its synergy with emotional competencies [13]. Social-emotional competence plays a vital role in mitigating psychological burnout, encompassing emotional recognition and regulation, goal setting, responsible decision-making, and effective interpersonal management [14].

Research indicates that various factors contribute to psychological burnout, with social-emotional competence being a significant influencer. Social-emotional competence encompasses the ability to recognize and regulate emotions, set and achieve goals, make responsible decisions, and effectively manage interpersonal relationships [6]. This concept is further defined by the Collaborative for Academic, Social, and Emotional Learning (CASEL) framework, which identifies five core competencies [15-17]. These include self-awareness, involving recognition of emotions, thoughts, strengths, and weaknesses, as well as realistic self-confidence. Additionally, social awareness involves empathy, understanding diversity, and recognizing social-cultural norms and community support opportunities. Social competence is a multidimensional construct comprising emotion regulation, social skills, prosocial behavior, and cognitive reappraisal [18], including normative adjustment, social adjustment, and social efficacy [19]. Notably, the distinct components of social competence contribute uniquely to interpersonal relationships, suggesting a nuanced examination of social competence dimensions can provide valuable insights into adolescents' social behaviors [20].

Basic psychological needs, grounded in self-determination theory, significantly impact psychological burnout [21]. The three innate, universal needs - autonomy, relatedness, and competence - drive human behavior and are essential for adjustment, integrity, and growth [21,22]. Autonomy involves self-determination [23], relatedness seeks meaningful relationships [24], and competence encompasses effectiveness and goal achievement [24,25]. Emotional competence also mitigates long-term mental health issues [26]. These needs align with CASEL's five core Social and Emotional Competences [27].

Furthermore, attachment to parents and peers influences mental exhaustion. Humans are innately inclined to form emotional relationships with caregivers and later peers, driven by evolutionary pressures that enhance survival [28]. Bowlby's attachment theory describes the essential parent-infant bond, characterized by organized behaviors (e.g., crying, smiling, clinging) promoting interaction and survival. Individual differences in attachment quality arise from early caregiver experiences [29,30]. Parental attachment plays a crucial role in socialization, fostering adherence to societal norms and mitigating self-centered behaviors [31]. The attachment dilemma arises when individuals must balance connections with parents while exploring new social roles and developing attachments with peers and romantic partners [32]. Peer attachment styles represent core cognitive templates for relationships, formed and maintained throughout life, but particularly significant in adolescence when close bonds form outside the family [33-36].

Most research on adolescent peer attachment, largely based on [33]'s work, examines both parent and peer attachment across three dimensions. These dimensions include: (1) Trust, which involves adolescents' perception that parents and peers understand and respect their needs and desires; (2) Communication, assessing parents' and peers' sensitivity and responsiveness to emotional states, including involvement and verbal communication quality; and (3) Alienation, referring to feelings of isolation, anger, and detachment experienced in attachment relationships with parents and peers [37]. Extensive literature has explored peer attachment using [33]'s conceptualization and measurement, consistently showing that securely attached individuals perceive their peer relationships as characterized by greater social support, intimacy, affection, reliable alliance, companionship, satisfaction, and less conflict and antagonism [38]. Grounded in the self-determination model, this study investigates how psychological basic needs and emotional and social competence mediate the relationship between attachment to parents and peers and psychological burnout. University students face mental and psychological challenges when entering a new environment, meeting new people, and starting a new life phase. Examining predictors of psychological burnout is crucial to mitigate its effects. The findings of this research can inform authorities and decision-makers on strategies to enhance student mental health. Moreover, assessing student attachment can help strengthen safe and appropriate attachment with parents and peers, ultimately reducing psychological burnout [33,38].

The primary objective of this study is to investigate the mediating effects of social-emotional competence and basic psychological needs on the relationship between attachment to parents and peers and psychological burnout. Based on this objective, the following hypotheses are formulated: (1) Social-emotional competence and basic psychological needs mediate the relationship between attachment to parents and peers and psychological burnout; (2) Social-emotional competence mediates the relationship between attachment to parents and peers and psychological burnout, and (3) Basic psychological needs mediate the relationship between attachment to parents and peers and psychological burnout.

METHODS

Procedure and participants

This correlational study employed structural equation modeling to investigate its research questions. The study's population comprised students enrolled at Azad University in Shiraz, Iran. This study employed convenience sampling to select participants. The inclusion criteria consisted of being enrolled at Azad University of Shiraz, aged between 18 and 40 years (Mage = 22.05, SD = 3.51), and having no history of psychological disorders. Conversely, the exclusion criteria included consuming psychoactive medications for at least three months, having psychological disorders, and being over 40 years old. The initial sample consisted of 378 participants. However, 28

questionnaires were excluded due to incomplete or inconsistent responses. The final sample comprised 350 individuals (270 females and 80 males), who formed the basis of this study.

Figure 1. Frequency distribution of participant' sex by age group.
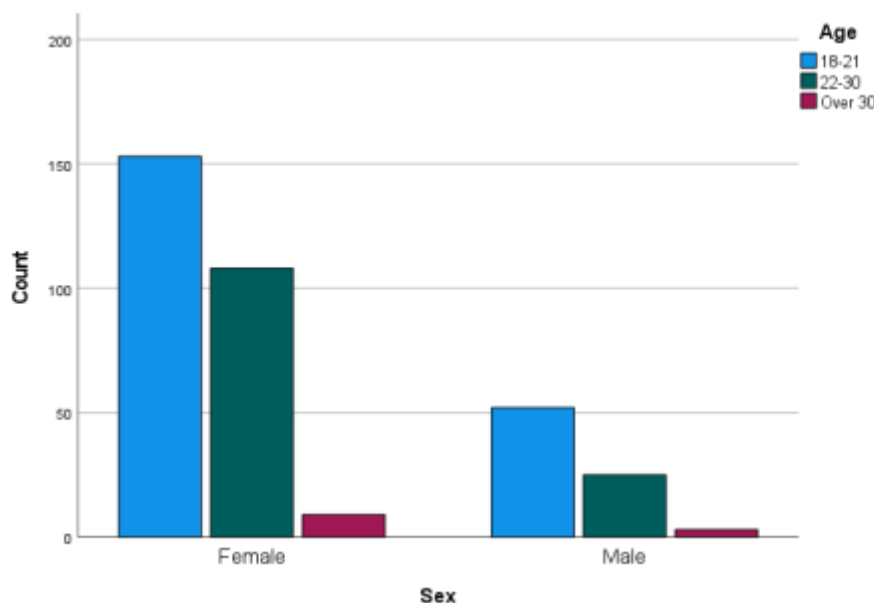
Regarding the sample, most of both female and male participants were within the 18–21 age range, whereas a small number were over 30 years old. Overall, there were more females than males in the sample.

Study instruments

In this study, attachment of parents and peers was the Exogenous variable, psychological burnout Endogenous variable. Emotional-social competence and psychological basic needs were mediating variables.

Psychological burnout

The Multidimensional Fatigue Inventory (MFI) is a 20-item self-report instrument designed to assess fatigue [39]. It consists of five subscales, each comprising four items: general fatigue, physical fatigue, reduced activity, reduced motivation, and mental fatigue. The general fatigue subscale assesses overall levels of fatigue and exhaustion, while the physical fatigue subscale measures fatigue related to physical activities and exertion. The mental fatigue subscale evaluates fatigue related to cognitive tasks like concentration and memory. The reduced activity subscale measures the impact of fatigue on daily functioning, and the reduced motivation subscale measures the effect of fatigue on motivation and engagement in activities. Participants rate their experience of fatigue on a Likert scale ranging from 1 to 5. Ten items are scored in reverse. The total score for each subscale ranges from 4 to 20, and the total MFI score is the sum of the subscale scores, ranging from 20 to 100. Higher scores indicate more severe fatigue [39].

The MFI has been validated in various populations, including patients with IBD, cancer, chronic fatigue syndrome, and multiple sclerosis, demonstrating good internal consistency, test–retest reliability, and construct validity [40]. Convergent validity was supported by comparing each scale to a Visual Analog Scale (VAS) assessing fatigue, with the general fatigue scale showing the strongest relationship [41]. Construct validity for each scale in relation to other relevant constructs has been confirmed in various validation studies for the MFI-20 [39,41,42], supporting the validity of the MFI. In the original validation study, internal consistency (Cronbach's alpha) for the 5 scales ranged from 0.53 to 0.93, with an average of 0.80 [39]. A recent validation study of the MFI-20 in the US

general population sample reported the following Cronbach's alpha values: general fatigue (0.83), physical fatigue (0.81), reduced activity (0.82), reduced motivation (0.71), and mental fatigue (0.86) [34].

Psychological basic needs

The Basic Psychological Needs Satisfaction Scale-general version (BPNS-general version) was developed by [43] and is based on the Basic Psychological Needs Satisfaction-work version [44]. This scale consists of 21 items that assess the satisfaction of three psychological needs: autonomy (7 items), competence (6 items), and relatedness (8 items). Respondents rate their agreement on a 7-point Likert scale ranging from 1 (not true at all) to 7 (very true) regarding the satisfaction of these needs in their lives. The scores range from 7 to 49 for autonomy, 6 to 42 for competence, 8 to 56 for relatedness and 21 to 147 for the total score, with higher scores indicating greater satisfaction [45].

Gagne´ reported Cronbach's alpha values of .69, .71, and .86 for autonomy, competence, and relatedness, respectively. In the initial validation study with 121 undergraduates, the BPNS-G showed good internal consistency (α = .89), and the subscales were strongly correlated (between .61 and .66, *p*< .001) [43]. In a study involving students from multiple campuses of a South African university across various fields of study, the BPNS and its subscales demonstrated satisfactory convergent and discriminant validity [46].

Emotional-social competence

The Emotional Skills and Competencies Questionnaire (ESCQ), developed by Taksic and colleagues in 2009, consists of 45 items with six response options ranging from 1 (never) to 6 (always) [47]. Higher scores indicate greater emotional competence. The questionnaire comprises three subscales: 1) Perceive and understand emotion (PU) evaluates the ability to recognize and differentiate emotions in one's own feelings, thoughts, and behaviors; 2) Express and Label emotion (EL) assesses the capacity to express one's emotional states effectively and label them accurately; 3) Manage and Regulate emotion (MR) measures the competence to adjust one's emotions to achieve a desired outcome.

Previous studies have shown adequate reliability for the subscales (α = .74-.86) [48]. Despite concerns about the discriminant validity of self-report measures, the ESCQ has demonstrated reliability and validity in various cultural contexts, showing convergent, concurrent, predictive, and incremental validity. Cross-cultural studies in Croatia, Portugal, Finland, Sweden, Slovenia, Spain, and Japan, involving high school and university students, as well as older individuals (workers and supervisors), have confirmed the psychometric properties and relationships of the ESCQ with relevant constructs [49]. A study on Indian university students also validated and standardized the ESCQ, demonstrating variability and sufficient item correlation. Overall, the ESCQ has been found to be a reliable and valid measure of emotional skills and competencies across different cultural settings, with adequate psychometric qualities and relationships with relevant constructs.

Attachment to parents and peers

The Inventory of Parent and Peer Attachment (IPPA) is a self-report scale that assesses adolescents' perceptions of their attachment to parents and peers. The original version of the instrument was developed by Greenberg and colleagues [50], and later refined by [33] to create a multidimensional measure. Adolescents annually reported their perceived attachment to parents and peers using a shortened version of the IPPA [33, 51]. The IPPA evaluates adolescents' perceptions of the quality of psychological security provided by parents and peers, as well as the accessibility and responsiveness of these attachment figures. The shortened version comprises 12 items divided into three subscales (4 items per scale): trust, communication, and alienation. The trust subscale measures the level of mutual trust provided by parents and peers (e.g., "I can rely on my friends when I need to talk about something"). The communication subscale assesses the perceived quality of communication parents or peers (e.g., "My friends care about my point of view when we discuss things"). The alienation subscale gauges the degree of anger or alienation felt in the relationship with parents or peers (e.g., "Discussing my problems with friends makes me feel ashamed or foolish").

Participants rate items on a five-point Likert scale ranging from never or almost never (1) to always or almost always (5). Negative items are reverse-coded, and a mean score of the 12 items related to peer attachment is calculated, with higher scores indicating stronger perceived peer attachment. The IPPA has demonstrated good

reliability and validity in assessing attachment to parents and peers [52,53]. A study on the validity of adolescent attachment styles to parents and peers in an Italian sample confirmed the IPPA's factor structure, reliability, and construct validity [54]. A study involving undergraduate students aged 16 to 20 found good internal consistency for the IPPA, with Cronbach's alpha coefficients ranging from 0.72 to 0.91 for the sub-scales on both parent and peer scales. The test-retest reliability was also good, with correlation coefficients ranging from 0.86 for peer attachment to 0.93 for parent attachment in a sample of 18 to 20-year-olds over a three-week period [33].

Ethical aspects

Ethical approval for this study was granted by the review board of the Iran Information Science and Technology Research Institute (Irandoc), reference number 21983172. To ensure participant protection, all individuals provided informed consent and were assured of the confidentiality, anonymity, and privacy of their responses prior to participating in the research.

Data analysis

Descriptive statistics (e.g., mean, standard deviation) were computed for variables. Following confirmation of non-linear assumptions, data analysis proceeded. Normality was assessed using Mardia's coefficient [55], while multiple collinearity was evaluated via tolerance statistics and variance inflation factors. Structural equation modeling (SEM) tested the research model at $\alpha = 0.05$. For the analysis of data, SPSS (V.26) and AMOS (V.26) were employed.

RESULTS

Measurement and validity issues

We evaluated the measurement properties of the constructs using confirmatory factor analysis (CFA), confirming distinctiveness between: (1) Attachment (parents/peers) and psychological burnout and (2) Emotional/social competence and psychological basic needs. Items loaded exclusively onto their respective factors in the CFA model (group-level analysis). Furthermore, we calculated the within-group agreement (rwg) [48] and found average values meeting the recommended 0.70 cutoff [49]: attachment to parents/peers, 0.66 (0.53-0.84); psychological burnout, 0.72 (0.62-0.88); emotional and social competence, 0.70 (0.71-0.97); psychological basic needs, 0.70 (0.53-0.89). These results justify group-level data analysis.

Hypothesis tests

Table 1 presents descriptive statistics for the study variables. This study examines the mediating effects of psychological basic needs and emotional/social competence on the relationship between attachment to parents/peers and psychological burnout. To establish mediation, four conditions must be met. For psychological basic needs, these include: (1) attachment to parents/peers relating to psychological basic needs, (2) psychological basic needs relating to psychological burnout, (3) attachment to parents/peers relating to psychological burnout, and (4) psychological basic needs reducing the relationship strength. Similarly, for emotional/social competence: (1) attachment to parents/peers relates to emotional/social competence, (2) emotional/social competence relates to psychological burnout, (3) attachment to parents/peers relates to psychological burnout, and (4) emotional/social competence reduces relationship strength when controlling for psychological basic needs.

This involves meeting four conditions: (1) Attachment to parents and peers is related to psychological basic needs, (2) psychological basic needs are related to psychological burnout, (3) attachment to parents and peers is related to psychological burnout, and (4) the strength of the relationship between attachment to parents and peers and psychological burnout is reduced when psychological basic needs are included as a mediator in the model. (taking emotional and social competence as an example) in the attachment of parents and peers—psychological burnout relationship involves meeting four conditions: (1) attachment of parents and peers is related to emotional and social competence, (2) emotional and social competence is related to psychological burnout, (3) attachment of parents and peers is related to psychological burnout, and (4) The indirect effect of attachment to parents/peers on psychological burnout through emotional/social competence is weakened when psychological basic needs are incorporated as an additional mediator.

Structural equation modeling (SEM) was employed to test hypotheses and examine direct and indirect effects of parental/peer attachment on psychological burnout, mediated by emotional/social competence and

psychological basic needs. SEM's advantages in managing Type I error rates and statistical power [50] made it suitable for examining mediation effects. Table 2 presents the total, direct, and indirect effects of parental/peer attachment on psychological burnout.

Based on these findings, we conclude that student perceptions, rather than demographics (e.g., context), primarily drive the observed effects. Before testing the research hypotheses, we evaluated the data's psychometric properties to ensure their suitability for parametric analysis. This assessment examined three fundamental assumptions: (1) Missing data, (2) Outliers, and (3) Normality of variable distribution. We handled missing values by substituting them with the mean values of the corresponding variables. We used SPSS's Explore command to detect outliers. Results showed no outliers in any research variables, ensuring modeling analysis validity. To assess multivariate normality, we calculated the Mardia coefficient (1.30), which is below the acceptable threshold of 3 [55], indicating normal data distribution. Scatter plot matrices and residual plots confirmed linearity between research variables. Oval-shaped scatter plots and rectangularly centered residual plots around zero supported linear relationships. Using tolerance statistics and variance inflation factors (VIFs), we assessed multiple collinearity among predictor variables: (1) Tolerance values exceeded 0.10 and (2) VIF values remained below 10. These findings indicate no significant multicollinearity between predictor variables.

A Kolmogorov-Smirnov test confirmed normal data distribution for attachment to parents and peers (KS = 0.06, df = 312, p = 0.2), social-emotional competence (KS = 0.06, df = 312, p = 0.4), basic psychological needs (KS = 0.06, df = 312, p = 0.1), and psychological burnout (KS = 0.07, df = 312, p = 0.3), thereby justifying parametric testing.

The results presented in this section confirm that all necessary assumptions have been met, paving the way for analysis. This study investigates the direct and indirect effects of parental and peer attachment on psychological burnout, mediated by social-emotional competence and basic psychological needs. The proposed hypotheses outline the causal relationships between these variables. To evaluate the research model, parameter estimation was conducted using the maximum likelihood method. Estimated parameters include: (1) Direct effect coefficients, (2) Indirect effect coefficients, and (3) Total effect coefficients. These coefficients enable the confirmation or rejection of the research hypotheses, providing insight into the complex relationships between parental/peer attachment, social-emotional competence, basic psychological needs, and psychological burnout.

Initially, the research's indirect hypotheses were presented, followed by their subsequent examination. Additionally, the total effects were estimated, representing the combined direct and indirect effects. As illustrated in Table 2, all research variables demonstrate either direct or indirect effects, or a combination of both.

Hypothesis 1: Emotional-social competence and psychological basic needs as mediator

Hypothesis 1 stated that emotional-social competence and basic psychological needs mediate the relationship between attachment to parents and peers and psychological burnout. To test this hypothesis, we employed Structural Equation Modeling (SEM), examining a fully mediated model (Figure 2) linking attachment to parents and peers to the mediators and subsequently to psychological burnout. We compared the fit of our hypothesized model to three partially mediated nested models. The first alternative model included a direct path from Attachment to Parents and Peers to Psychological Burnout, yielding fit indices: χ^2/df = 1.98, p < 0.01, CFI = 0.98, RMSEA = 0.05.
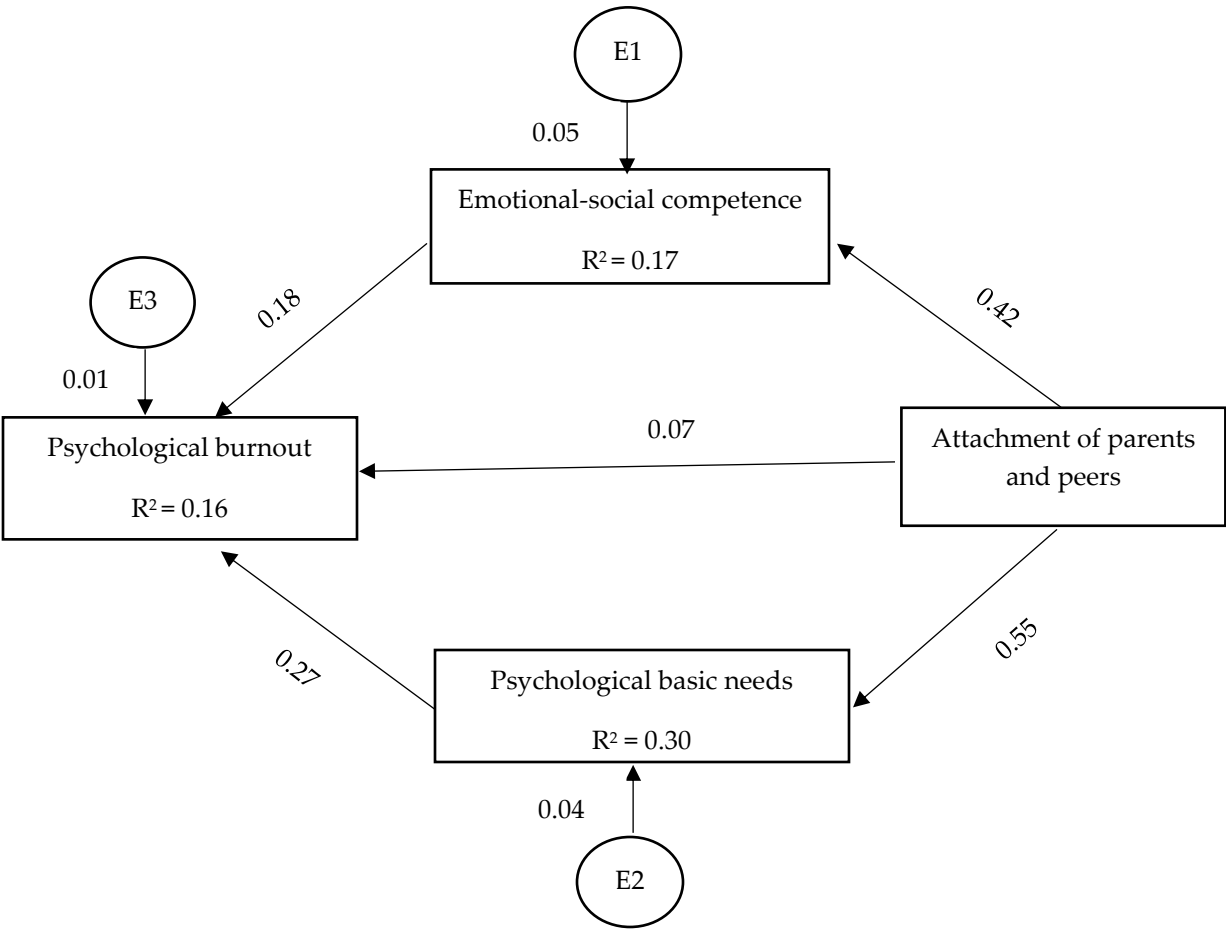
Figure 2. The final conceptual framework.

Table 1 presents the descriptive statistics (means and standard deviations) as well as the Pearson correlation coefficients for the study variables. The findings reveal significant negative correlations between psychological burnout and (1) attachment to parents and peers, (2) social-emotional competence, and (3) basic psychological needs. All correlations are statistically significant at the 0.01 level (two-tailed test).

Table 1. Descriptive statistics and correlation matrix.

Variables	*M*	*SD*	*1*	*2*	*3*	*4*
1. Attachment to parents and peers	41.68	6.06	(0.72)			
2. Emotional-social competence	155.05	24.12	0.41**	(0.93)		
3. Psychological basic needs	77.41	10.26	0.55**	0.56**	(0.75)	

4. Psychological burnout	66.44	12.12	-0.30**	-0.37**	-0.41**	(0.87)

Note: Correlation Matrix and Internal Reliabilities (Cronbach's α) for the Study Variables (N = 350)

*p < 0.05 (two-tailed test); **p < 0.01 (two-tailed test)

Table 2. Direct, indirect and total effects of psychological burnout.

Variables	Effects		
	Total	*Direct*	*Indirect*
Attachment to parents and peers	0.52**	0.07	0.45**
Emotional-social competence	0.18**	0.18**	
Psychological basic needs	0.27**	0.27**	

**p <0.01 (two-tailed tests)

Hypothesis 2: Emotional-social competence as mediator

Hypothesis 2 predicted that emotional-social competence mediates the relationship between attachment to parents and peers and psychological burnout. Using Structural Equation Modeling (SEM), we tested a mediation model linking attachment to parents and peers to emotional-social competence and subsequently to psychological burnout. The model fit indices were: (χ^2/df = 1.90, p < 0.01, CFI = 0.92, RMSEA = 0.006). The model's fit was comparable to that of Figure 2.

Hypothesis 3: Psychological basic needs as mediator

Hypothesis 3 predicted that psychological basic needs mediate the relationship between attachment to parents and peers and psychological Burnout. SEM analysis yielded: (χ^2/df = 1.98, p < 0.01, CFI = 0.91, RMSEA = 0.05). Model fit was similar to Figure 2.

DISCUSSION

This study's findings revealed that emotional-social competence and psychological basic needs play a mediating role in the relationship between attachment to parents and peers and psychological burnout among students. Specifically, attachment to parents and peers indirectly influenced psychological burnout through emotional-social competence and psychological basic needs. Conversely, emotional-social competence and basic psychological needs directly impacted psychological burnout. Notably, attachment to parents and peers did not have a direct effect on psychological burnout. These findings align with previous research (e.g., [59,60]), underscoring the significance of emotional-social competence and psychological basic needs in understanding the attachment-burnout relationship.

The indirect effect of attachment to parents and peers on psychological burnout via emotional-social competence can be explained as follows: Individuals with secure parental attachment tend to receive constructive emotional feedback, enhancing their emotional regulation abilities [61,62]. This enables effective social interactions and fosters positive relationships with others [63,64]. Consequently, they develop higher emotional-social competence, leading to (1) Enhanced stress management and mental fatigue coping, (2) Increased energy and enthusiasm for tasks, and (3) Reduced psychological burnout. In essence, secure attachment to parents and peers lays the groundwork for emotional-social competence, which in turn mitigates psychological burnout.

Additionally, attachment to parents and peers indirectly reduces psychological burnout by promoting satisfying basic psychological needs, including autonomy, competence, and relatedness [21]. Secure attachment fosters a foundation for emotional regulation, effective social interactions, and personal growth, ultimately decreasing mental fatigue and exhaustion. Conversely, insecure attachment can hinder emotional-social development and basic need fulfillment, increasing vulnerability to psychological burnout. Overall, these findings

emphasize the critical importance of nurturing secure attachment relationships during developmental periods to prevent psychological burnout.

The direct effect of emotional-social competence on psychological burnout can be justified as follows: Individuals with emotional-social competence employ effective cognitive and emotional skills to communicate with others, fostering positive relationships [65]. Given that psychological burnout encompasses negative attitudes toward work, life, and others [66], emotionally and socially competent individuals maintain a more optimistic outlook, thereby experiencing reduced psychological exhaustion.

According to Self-Determination Theory, fulfilling psychological basic needs (autonomy, competence, and relatedness) fosters psychological growth and flourishing [67-69]. When these needs are met, individuals experience numerous benefits, including enhanced motivation and energy, reduced fatigue and burnout, increased resilience and well-being, and decreased feelings of despair and helplessness. Consequently, satisfying psychological basic needs directly mitigates psychological burnout. The attachment between Iranian students and their parents and peers may not have a direct impact on psychological burnout. This could be attributed to the possibility that these students lack sufficient emotional nourishment in their relationships, leading to ineffective interactions. Consequently, they may experience mental fatigue, which undermines the potential protective effects of attachment on psychological burnout [70-76].

This research is subject to the following limitations: (1) The sample consisted solely of Iranian university students, which may limit the generalizability of the findings to other populations and (2) the correlational design of the study, utilizing structural equation modeling, precludes causal inferences and qualitative insights.

This research proposes two suggestions for future research. To enhance generalizability, the study should be replicated across diverse age groups, including the elderly, in addition to students. Furthermore, conducting semi-experimental studies would validate findings and establish causality. Practically, this research's outcomes can inform workshops aimed at familiarizing students with their basic psychological needs and strategies for fulfillment. Additionally, courses teaching effective communication skills with parents and peers can be developed, ultimately reducing psychological burnout among students.

CONCLUSION

The study's results shed light on key individual and social factors driving psychological burnout among students. While parent-peer communication does not directly cause psychological burnout, it affects burnout through its impact on perceived competence and needs fulfillment. Consequently, positive relationships alone are insufficient. Targeted interventions should prioritize awareness of basic needs and cultivate competence-promoting environments to mitigate psychological burnout effectively.

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