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Parenting Stress, Mindful Parenting, Adolescent Stress, and Mindfulness: A Cross-Sectional Study among Iranian Adolescents

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ABSTRACT

Past research has extensively explored the relationships between parenting stress, mindfulness, and adolescent well-being, primarily in Western contexts. However, there has been limited investigation into how these dynamics operate within the Iranian cultural context, particularly concerning the interaction between parenting stress, mindful parenting, and adolescent stress and mindfulness. This study examines these relationships among Iranian adolescents and their parents. A total of 103 adolescents participated, completing a Demographic Questionnaire, the Adolescent Stress Scale, and the Adolescent Mindful Attention Awareness Scale. Simultaneously, 103 parents filled out a Demographic Questionnaire, the Parenting Stress Index—Short Form-15 (PSI-SF-15), and the Interpersonal Mindfulness in Parenting Scale. The hypotheses were tested using confirmatory factor analysis and structural equation modelling (SEM). The results revealed that parenting stress was significantly and positively correlated with both adolescent mindfulness and adolescent stress. However, parenting mindfulness was not significantly associated with adolescent mindfulness, although it was positively linked to adolescent stress. These findings suggest that enhancing mindfulness in parents may help reduce stress in adolescents.

Keywords: parenting stress, mindful parenting, adolescent stress, adolescent mindfulness

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1 INTRODUCTION

Adolescence is a crucial developmental stage marked by significant physical, emotional, and social changes, which can be both exciting and challenging, sometimes leading to anxiety and depression (Smetana et al., 2006). Stress is a common trigger for mental health issues in adolescents, stemming from various sources such as academic pressure, social relationships, and family dynamics. Understanding and addressing these stressors is vital for promoting well-being during this developmental phase. Reports indicate that stress complaints among teenagers have been increasing in recent decades (Anniko et al., 2019). Several factors can help adolescents manage their stress effectively, with mindfulness practices being one of the most significant. Mindfulness can help adolescents manage their time, set priorities, and cope with stress more effectively (Zisopoulou & Varvogli, 2023). It offers numerous benefits for adolescents' overall well-being and development, such as stress reduction and improved mental health (Dariotis et al., 2023). Practices like meditation and breathing exercises can assist adolescents in managing stress and fostering calmness and relaxation (Zisopoulou & Varvogli, 2023). Mindfulness is associated with better mental health outcomes in adolescents, including reduced symptoms of anxiety and depression. It also enhances self-awareness and self-compassion, which encourages a positive mindset and reduces negative thinking patterns (Martono et al., 2023).

Parenting stress and mindfulness also significantly impact adolescents' psychological outcomes. A study by Burgdorf et al. (2019) found that lower levels of parenting stress are linked to fewer externalising behaviours and better cognitive outcomes in children. Parenting stress can affect how parents cope with their own stress, which in turn influences how children develop their own coping mechanisms. Stressed parents may model ineffective coping strategies or struggle to provide their children with the necessary support to develop healthy coping skills. It is crucial for parents to manage their stress to minimise its negative impact on their children. Wang et al. (2020) found that adolescents with more mindful parents were less likely to experience depressive symptoms and more likely to have better self-esteem. Another study found that parental depression increased the risk of depression in their adolescent children (Crandall et al., 2020). Lunsky et al. (2021) showed that a mindfulness-based intervention for parents led to improved mental health outcomes for both parents and adolescents. Based on the transactional stress theory (Lazarus & Folkman, 1987), stress arises from the interaction between an individual and their environment. This theory suggests that parents' mental health and mindfulness levels significantly influence the stress and mindfulness of both parents and adolescents (Obbarius et al., 2021).

The research identifies a gap in understanding how parental stress and mindfulness practices directly affect adolescents' well-being and mental health outcomes. While studies have demonstrated correlations between parental stress, mindfulness, and adolescent outcomes (Crandall et al., 2020; Lunsky et al., 2021; Wang et al., 2020), further research is needed to explore the underlying mechanisms and longitudinal effects of these factors. This study aims to examine the links between parenting stress and parental mindfulness among Iranian adolescents and their impact on adolescent stress and mindfulness. The study seeks to identify factors contributing to adolescent stress and mindfulness and inform interventions that promote positive outcomes for families and young people. Understanding these complex relationships will provide valuable insights into factors influencing adolescent stress and mindfulness in the Iranian context.

Parents have a profound and lasting influence on their children's socioemotional, cognitive, and physical development (Fonseca et al., 2020; Lipps et al., 2012). Both parenting stress and mindfulness are critical factors affecting adolescents' levels of stress and mindfulness. Parenting stress refers to the emotional and psychological strain parents experience due to the demands and challenges of raising children (Giannotti et al., 2022; Rabbani et al., 2014; Rabbani et al., 2024). Various factors contribute to parenting stress, including the child's behaviour and development, family dynamics, financial pressures, and social support systems. This stress can manifest in different forms, such as anxiety, depression, feelings of being overwhelmed, and physical symptoms like headaches or fatigue (Ashwin et al., 2022). Parenting stress can be particularly pronounced during adolescence, when parents may face increased conflict with their children, concerns about their child's safety and well-being, and difficulties in balancing parental responsibilities with other obligations like work and personal relationships (Babore et al., 2023). While some level of parenting stress is normal and expected, chronic or severe stress can have detrimental effects on both parents and children, making it essential for parents to manage stress in a healthy and effective way.

Numerous studies have consistently distinguished parenting stress from other forms of stress, emphasising its significant impact on both parents and adolescents (Hock et al., 2018; Lipps et al., 2012). High levels of parenting stress can result in parents being less emotionally available and responsive to their children's needs, potentially leading to insecure attachment and affecting adolescents' emotional well-being. Adolescents whose parents experience high levels of stress may face increased stress, depression, and behavioural issues. Parenting stress can strain the parent-child relationship, causing parents to become less patient, less supportive, and more prone to negative interactions with their children (Oppermann et al., 2021). Additionally, parenting stress can impact children's cognitive and academic development, as stressed parents may struggle to provide consistent structure, guidance, and support (Jiang et al., 2023). Children and adolescents with highly stressed parents may be at greater risk of developing mental health problems themselves (Imran et al., 2020).

Research also highlights a strong link between psychological distress in parents and parenting stress, particularly among mothers (Finardi et al., 2022; Fonseca et al., 2020). This connection may explain the association between psychopathological symptoms such as anxiety and depression with specific traits like cognitive rigidity and excessive worry, which can elevate stress levels in parent-child interactions (Fonseca et al., 2020). Previous research has consistently explored the relationship between parenting stress and children's adjustment issues, identifying clinically significant behavioural, emotional, mental, and health problems linked to higher parental stress levels. There is consensus that parenting stress is bidirectionally related to developmental delays and internalising behaviours in children aged 3-5 years (Davis & Carter, 2008; Neece et al., 2012; Woodman et al., 2015; Zaidman-Zait et al., 2014). However, findings on the correlation between parenting stress and externalising behaviours in children have been inconsistent. For example, Woodman et al. (2015) found no association in either direction, while Neece et al. (2012) reported a correlation between overall behavioural issues (both internalising and externalising) in children and parenting stress. Similarly, Rodriguez-Morales et al. (2020) found that children's externalising problems had a more significant impact on parenting stress during late childhood and early adolescence, aligning with earlier studies (Davis & Carter, 2008; Huth-Bocks & Hughes, 2008).

A substantial body of literature has examined the connection between higher parenting stress and lower quality of marital relationships (Burgdorf et al., 2019), higher levels of negative affect, and lower levels of positive affect (Deater-Deckard et al., 2016) among parents. Families experiencing higher levels of parenting stress often have children with inadequate cognitive skills and greater difficulties in interpersonal and social relationships (Anthony et al., 2005). Effective management of parental stress is essential for the well-being of both parents and their children. Integrating mindfulness into the parent-child relationship has been suggested as a potential strategy for achieving this (Bögels et al., 2010; Haydicky et al., 2015; Kabat-Zinn & Kabat-Zinn, 2021).

Mindfulness is generally defined as a psychological process involving non-judgmental awareness and non-reactive attention to present-moment experiences (Kabat-Zinn & Kabat-Zinn, 2021). While parenting stress can be detrimental to teenagers, research has shown that parenting mindfulness can significantly impact adolescents' stress and mindfulness levels. Parenting mindfulness involves being fully present and engaged in the parenting role with non-judgmental awareness and acceptance. It includes being attentive, responsive, and compassionate towards oneself and one's children. By adopting a mindful approach to parenting, parents can improve the quality of their interactions with their children, enhance overall well-being, and foster a positive and nurturing parent-child relationship (Gouveia et al., 2016). This practice involves being fully present and attuned to the child's needs, acknowledging and accepting one's thoughts and emotions, managing emotions mindfully, engaging in open and non-judgemental communication, and prioritising self-care (Webb, 2023).

Parenting mindfulness can positively impact children and adolescents (Gouveia et al., 2019). Mindful parents are better equipped to regulate their emotions and respond to their child's emotions with empathy and understanding, which helps children and adolescents learn to regulate their own emotions and manage stress more effectively. Mindful parenting also emphasises open and non-judgemental communication, creating a safe and supportive environment for children to express themselves and fostering a stronger sense of trust and connection between parents and children (Schofield & Beek, 2005). While mindfulness is not a cure-all for parenting challenges, incorporating it into parenting practices can be a valuable tool for promoting positive parent-child interactions and enhancing the well-being of both parents and children (Laakso et al., 2023). Understanding the relationships between parenting stress, mindfulness, and adolescent stress and mindfulness can help identify potential risk and protective factors for young people, informing targeted interventions and support services to promote healthy adolescent development. To achieve the objectives of this study, four hypotheses were proposed:

H1: There is a significant relationship between parenting stress and adolescents' mindfulness.
H2: There is a significant relationship between parenting stress and adolescents' stress.
H3: There is a significant relationship between parenting mindfulness and adolescents' mindfulness.
H4: There is a significant relationship between parenting mindfulness and adolescents' stress.

2 METHODS

2.1 Participants and Design

A total of 103 adolescents and 103 of their parents were recruited through convenience sampling, based on availability. The adolescent participants were from public schools in Tehran, Iran, and were aged between 12 and 18 years. This study employed a cross-sectional survey design to collect quantitative data to examine the relationships between variables**.**

2.2 Instruments

The present study utilised four instruments, each designed to assess different aspects of the participants' experiences. Initially, all English-language scales were translated into Persian using a back-translation method to ensure accuracy and consistency in the translation. To evaluate the readability and comprehensibility of the instruments, a pilot test was conducted with five respondents. Each participant completed the questionnaire and was subsequently interviewed to identify any potential issues with understanding the items. No revisions were deemed necessary based on the feedback received.

The first instrument used was the Parenting Stress Index—Short Form-15 (PSI-SF-15), revised by Luo et al. (2019), which demonstrated strong internal consistency with a Cronbach's alpha coefficient of $\alpha = 0.949$. The items on this scale are typically rated on a Likert scale, where respondents indicate their level of agreement or the frequency with which they experience specific stressors. The total score on the PSI-SF-15 is calculated by summing the individual item scores, with higher scores indicating greater parental stress. This instrument was completed by parents.

The second instrument was the Interpersonal Mindfulness in Parenting Scale, developed by Parent et al. (2016), which shows high reliability with a Cronbach's alpha of $\alpha = 0.921$. Respondents rate how frequently they engage in mindful parenting activities. The total score is determined by summing the individual scores, with higher scores reflecting greater mindfulness in parenting. This instrument was completed by parents.

The third instrument was the Adolescent Stress Measurement Instrument, developed by Byrne and Mazanov (2003) and Byrne et al. (2007), which demonstrates high internal consistency with a Cronbach's alpha of $\alpha = 0.966$. Items on this scale are typically evaluated using a Likert scale, where respondents rate the frequency with which they encounter stressors. The total score is calculated by summing the individual scores, with higher scores indicating greater stress experienced by the adolescents. This instrument was completed by adolescents.

The final instrument used in the study was the Mindful Attention Awareness Scale (MAAS), originally developed by Brown and Ryan (2003), which was used to assess adolescent mindfulness. The Cronbach's alpha for the MAAS was $\alpha = 0.907$, indicating strong internal consistency. Respondents rate how often they engage in mindful activities related to present-moment awareness. The total score is calculated by summing the item scores, with higher scores reflecting greater mindfulness in maintaining present-moment awareness. This instrument was completed by adolescents.

2.3 Procedure

The study adhered to ethical guidelines, ensuring informed consent was obtained from both adolescents and their parents. Participants completed paper-based questionnaires at their convenience. Once completed, the questionnaires were collected by the research team. Depending on participants' preferences and logistical factors, the questionnaires were returned in person, by mail, or electronically. To enhance the response rate and ensure timely returns, follow-up reminders were sent. An overview of the respondents' profiles, including gender, age, and education, is provided in Table 1.

2.4 Data Analysis

The data analysis was carried out in two stages. First, confirmatory factor analysis (CFA) was conducted using SmartPLS3 to evaluate the psychometric properties of the measurement instruments. The model fit was assessed using fit indices, including Chi-square (X^2), degrees of freedom (df), Standardised Root Mean Square Residual (SRMR), and the Normed Fit Index (NFI), to determine the adequacy of the model. In the second stage, structural equation modelling (SEM) was employed to test the hypotheses. The significance of these hypotheses was evaluated based on three criteria: a standardised beta coefficient (β) greater than 0.05, a t-value greater than ±1.96, and a p-value less than 0.05.

3 RESULTS

Table 1 provides an overview of the gender distribution, age groups, and educational levels of both adolescents and parents in the study sample.

Table 1. Demographic overview of respondents (N = 103).

	Variables	Frequency	%
Adolescents' characteristics	Gender		
	Boys	41	39.8
	Girls	62	60.2
	Age (years)		
	12-14	26	25.2
	15-16	48	46.6
	17-18	29	28.2
Parents' characteristics	Parent		
	Mother	72	69.9
	Father	31	30.1
	Age		
	30-40	22	25.2
	40-50	68	66
	50-60	13	12.6
	Education		
	Primary school	0	0
	Secondary and high-school	23	22.3
	Vocational school (two years program)	23	22.3
	University first degree	54	52.4
	Master or PhD degree	3	2.9

3.1 Measurement Model

Before testing the hypotheses, confirmatory factor analysis (CFA) was performed to evaluate the psychometric properties of the measurement instruments using SmartPLS3 software. The analysis indicated a good fit between the model and the data, as demonstrated by the following fit indices: $X^2 = 563.251$; df = 302; $X^2/df = 1.865$; SRMR = 0.056; and NFI = 0.859. The results, presented in Table 2, show that all measurement instruments had standardised factor loadings exceeding 0.5, which is considered acceptable.

To assess construct validity, particularly convergent validity, the average variance extracted (AVE) and composite reliability (CR) were examined. Both AVE and CR values for all constructs exceeded the thresholds of 0.5 and 0.7, respectively. It is important to note that certain measurement items from three of the four constructs were removed due to concerns regarding cross-loading. Additionally, internal consistency (reliability) was assessed using Cronbach's alpha and rho_A coefficients within the context of the CFA, with both values exceeding the acceptable threshold of 0.7. The mean and standard deviation for all constructs are provided in Appendix A.

Discriminant validity was evaluated using two methods. First, the square root of the AVE for each construct was compared with the correlations within the corresponding row. As shown in Table 2, the values in parentheses, representing the square root of the AVEs, were higher than the correlations in their respective rows. The second method involved analysing the squared correlation matrix, indicated by italicised values, which should be lower than the AVEs for each construct. Based on these two methods, the study successfully demonstrated discriminant validity. Table 2 provides the descriptive statistics, correlation matrix, and discriminant validity tests.

Table 2. Descriptive statistics, correlation matrix, and discriminant validity tests.

Constructs	Mean	SD	1	2	3	4	AVE
Parenting stress	3.593	0.776	(0.801)	0.505	0.451	0.008	0.642
Parenting mindfulness	3.756	0.830	0.711**	(801)	0.465	0.005	0.643
Adolescent stress	3.670	0.530	0.672**	0.682**	(0.707)	0.008	0.501
Adolescent mindfulness	3.606	0.591	-0.092*	-0.075*	-0.090*	(0.707)	0.500

Notes:
** Correlation is significant at the ($p < 0.01$).
* Correlation is significant at the ($p < 0.05$).
SD = (standard deviation); AVE (average variance extracted)
The bold numbers in the parentheses are square root of AVEs.
The italic numbers are square of correlation values.

3.2 Hypothesis Testing Results

Following the confirmatory factor analysis (CFA), structural equation modelling (SEM) was conducted using SmartPLS3 to evaluate the hypotheses. As shown in Figure 1, the study proposed four hypotheses. The results of the hypothesis testing supported three of the four hypotheses. Specifically, parenting stress had a significant and positive effect on both adolescent mindfulness (β = 0.199, t-value = 2.102, p-value = 0.040) and adolescent stress (β = -0.599, t-value = 8.321, p-value = 0.000). However, parenting mindfulness did not have a significant effect on adolescent mindfulness (β = 0.006, t-value = 0.964, p-value = 0.452), and as a result, this hypothesis was not supported. Nevertheless, parenting mindfulness did have a significant and negative impact on adolescent stress (β = -0.395, t-value = 4.219, p-value = 0.003).

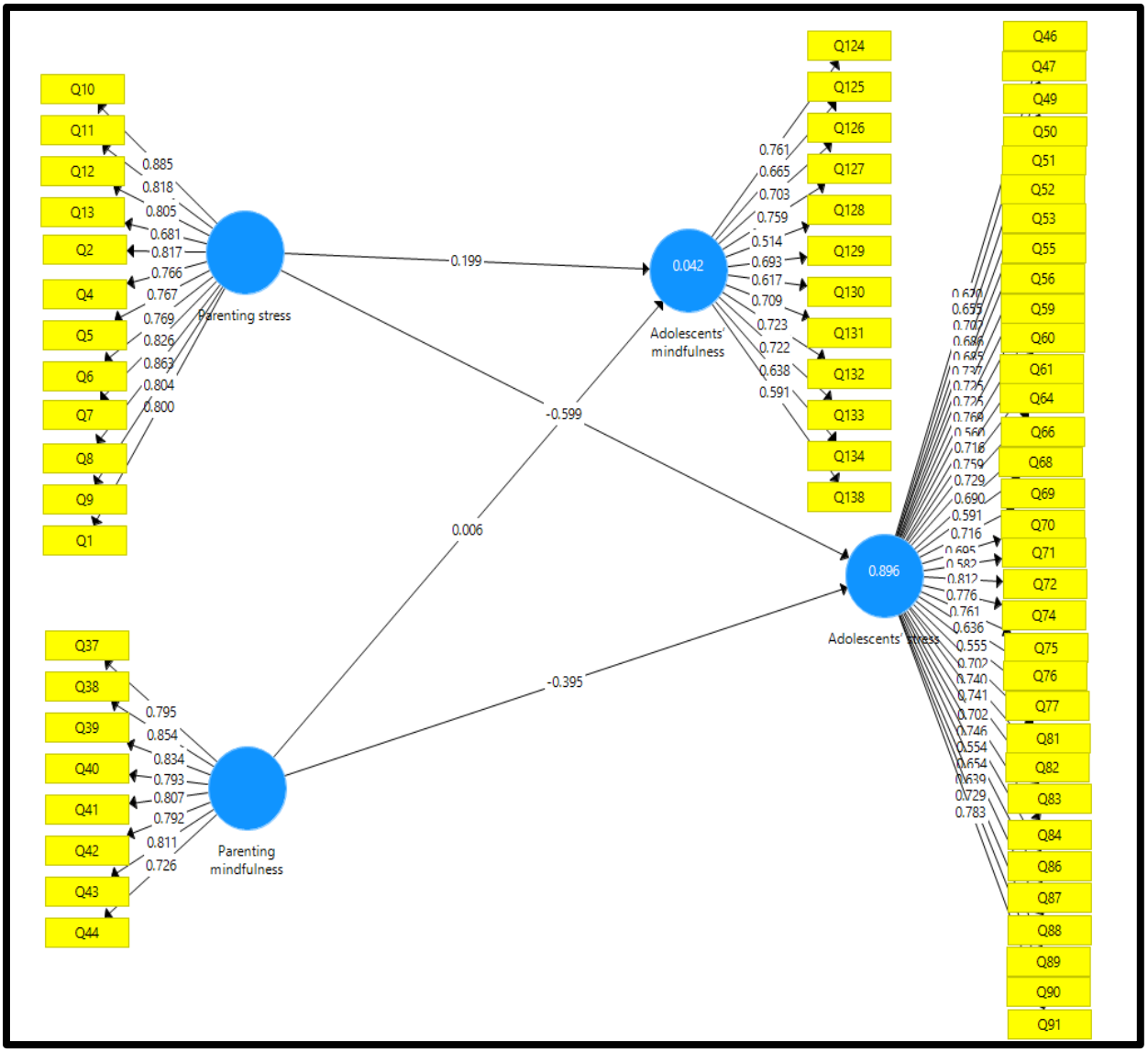

Figure 1. Results of structural equation modelling.

4 DISCUSSION

The present study examined the relationships between parenting stress, mindfulness in parenting, adolescent stress, and adolescent mindfulness among Iranian adolescents and their parents. It explores how these factors interrelate and influence the well-being of adolescents and their families. The findings provide valuable insights into the significant impact of parenting stress and mindfulness practices on adolescent stress and mindfulness levels.

The results indicate that parenting stress is associated with both adolescent stress and mindfulness. High levels of parenting stress were linked to increased adolescent stress levels and decreased adolescent mindfulness. These findings align with previous research by Burgdorf et al. (2019), which showed that interventions to reduce parenting stress can improve adolescents' internalising and externalising behaviours. Additionally, the study found a significant association between parenting mindfulness and adolescent stress. Parents who practise mindfulness and engage in mindful parenting behaviours create a supportive and positive family environment, thereby reducing adolescent stress. This is consistent with the work of Gouveia et al. (2016), which emphasised the role of mindful parenting in enhancing parent-child interactions and reducing parental stress.

While the hypothesis regarding the direct impact of parenting mindfulness on adolescent mindfulness was not supported, the significant negative effect of parenting mindfulness on adolescent stress underscores the importance of mindful parenting in promoting adolescent well-being. These results align with Lunsky et al. (2021), which demonstrated the positive effects of a mindfulness-based intervention for parents on adolescent mental health. A deeper understanding of the mechanisms underlying the relationships between parenting stress, adolescent stress, and mindfulness enhances the understanding of family dynamics. Parenting stress may affect adolescent emotional regulation by creating a tense and unpredictable family environment. High parental stress can lead to emotional reactivity and inconsistency in parental responses, disrupting adolescents' ability to regulate their emotions. This can result in heightened stress in adolescents, negatively affecting their emotional well-being and coping mechanisms. In contrast, mindful parenting may act as a buffer against adolescent stress by fostering a nurturing and emotionally supportive family environment. Parents who practise mindfulness tend to exhibit patience, empathy, and non-reactivity in their interactions with their children. These mindful behaviours can promote effective communication, problem-solving, and emotional regulation in adolescents, reducing stress and enhancing well-being.

The study’s findings contribute to the literature by further elucidating how parenting stress and mindfulness practices influence adolescent emotional regulation, coping strategies, and stress responses. These insights can inform the development of targeted interventions and support programmes that improve family dynamics, enhance parental well-being, and promote positive outcomes for adolescents.

These results are consistent with research by Lunsky et al. (2021), which demonstrated the positive outcomes of a mindfulness-based intervention for parents on adolescents' mental health. Incorporating a more detailed discussion of how the current study’s results align or contrast with

previous research, such as the studies by Burgdorf et al. (2019) and Gouveia et al. (2016), can provide a stronger theoretical framework and context for the findings. By examining why the results are consistent or diverge from past literature, the discussion can offer a more nuanced understanding of the implications of the study. For instance, the study by Burgdorf et al. (2019) demonstrated that interventions targeting parenting stress can lead to improvements in adolescents' behavioural outcomes. In the current study, the findings showing a significant association between parenting stress and adolescent stress levels align with Burgdorf et al.'s work, suggesting a consistent link between parental stress and adolescent well-being. By elaborating on how the current study's results support and extend the findings of Burgdorf et al., the discussion can underscore the importance of addressing parenting stress in promoting positive outcomes for adolescents. Similarly, the research by Gouveia et al. (2016) highlighted the role of mindful parenting in enhancing parent-child interactions and reducing parenting stress levels. The current study's results indicating a significant association between parenting mindfulness and adolescent stress levels are in line with Gouveia et al.'s findings, emphasising the positive impact of mindful parenting practices on adolescent well-being. By providing a detailed comparison of the results and methodologies of both studies, the discussion can elucidate how the current study contributes to the existing literature on parenting stress, mindfulness, and adolescent outcomes. By offering a more in-depth analysis of how the current study's findings relate to and build upon previous research, the discussion can strengthen the theoretical underpinnings of the results. This approach can enhance the scholarly contribution of the study by placing the findings within the broader context of existing literature, highlighting both the consistency and unique contributions of the current research.

The study's implications suggest that interventions aimed at enhancing mindfulness practices and reducing stress among parents can have a positive cascading effect on adolescent stress and mindfulness levels. By incorporating mindfulness training, coping strategies, and stress management techniques into parental support programmes, families can create a more nurturing and supportive environment for adolescents. These findings highlight the need for educational initiatives and policy development that prioritise mindfulness training for families to improve emotional regulation and overall family well-being.

The discussion of the study's findings on parenting stress, mindfulness practices, and adolescent outcomes can be linked to transactional theory, which emphasises the dynamic and reciprocal nature of interactions within family systems. Transactional theory posits that individuals and their environments mutually influence one another, leading to ongoing processes of adaptation and change.

In the context of the study's theoretical implications, the relationships between parenting stress, mindfulness practices, adolescent stress, and adolescent mindfulness can be viewed through the lens of transactional theory. This theory highlights the interconnectedness of parental factors and adolescent well-being, with the study's findings supporting this view. The associations identified between parenting stress and adolescent outcomes underscore the bidirectional nature of these relationships, where parental stress can affect adolescent stress levels, and vice versa. By recognising the interplay between parental stress and mindful parenting practices, the study emphasises the importance of considering how these factors interact to shape adolescent outcomes within the family system.

Moreover, the study's focus on the mechanisms through which parenting stress and mindful parenting practices influence adolescent outcomes aligns with transactional theory's emphasis on processes of adaptation and change. The theoretical framework proposed by the study suggests that interventions targeting parenting stress and promoting mindful parenting practices can lead to positive outcomes for adolescents by fostering emotional regulation and enhancing family dynamics. This aligns with transactional theory's perspective on how individuals and their environments mutually influence one another through ongoing interactions and adaptations.

Overall, the study's theoretical implications provide valuable insights into the complex dynamics within family systems and their influence on adolescent well-being. By viewing these findings through the lens of transactional theory, researchers can deepen their understanding of the interplay between family interactions, emotional regulation, and adolescent mental health. This approach can inform future research on family dynamics and emotional outcomes within the framework of transactional theory.

In conclusion, the study highlights the importance of addressing parenting stress and promoting mindfulness practices to enhance adolescent well-being. By recognising the interplay between parental stress, mindfulness, and adolescent outcomes, targeted interventions and support services can be developed to foster healthy family dynamics and positive mental health outcomes for adolescents.

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APPENDIX A: CONFIRMATORY FACTOR ANALYSIS

Variables	Factor loadings	AVE	CR	Cronbach Alpha	rho_A
Parenting stress		0.642	0.956	0.949	0.952
PS 1	0.800				
PS 2	0.818				
PS 3	-				
PS 4	0.766				
PS 5	0.767				
PS 6	0.769				
PS 7	0.826				
PS 8	0.863				
PS 9	0.804				
PS 10	0.885				
PS 11	0.818				
PS 12	0.805				
PS 13	0.681				
PS 14	-				
PS 15	-				
Parenting mindfulness		0.643	0.935	0.921	0.923
PM 1	0.795				
PM 2	0.854				
PM 3	0.834				
PM 4	0.793				
PM 5	0.807				
PM 6	0.792				
PM 7	0.811				
PM 8	0.726				
Adolescent stress		0.501	0.969	0.966	0.968
AS 1	0.621				
AS 2	0.655				
AS 3	-				
AS 4	0.702				
AS 5	0.686				
AS 6	0.686				
AS 7	0.737				
AS 8	0.726				
AS 9	-				
AS 10	0.725				
AS 11	0.769				
AS 12	-				
AS 13	-				
AS 14	0.561				
AS 15	0.717				
AS 16	0.759				
AS 17	-				
AS 18	-				
AS 19	0.729				
AS 20	-				
AS 21	0.690				
AS 22	-				
AS 23	0.791				
AS 24	0.717				
AS 25	0.695				

AS 26	0.581				
AS 27	0.812				
AS 28	-				
AS 29	0.777				
AS 30	0.762				
AS 31	0.637				
AS 32	0.557				
AS 33	-				
AS 34	-				
AS 35	-				
AS 36	0.701				
AS 37	0.740				
AS 38	0.740				
AS 39	0.702				
AS 40	-				
AS 41	0.745				
AS 42	0.753				
AS 43	0.653				
AS 44	0.637				
AS 45	0.728				
AS 46	0.783				
AS 47	-				
AS 48	-				
AS 49	-				
AS 50	-				
AS 51	-				
AS 52	-				
AS 53	-				
AS 54	-				
AS 55	-				
AS 56	-				
AS 57	-				
AS 58	-				
Adolescent mindfulness		0.500	0.916	0.907	0.900
AM 1	0.788				
AM 2	0.695				
AM 3	0.712				
AM 4	0.743				
AM 5	0.745				
AM 6	0.699				
AM 7	0.667				
AM 8	0.744				
AM 9	0.722				
AM 10	0.742				
AM 11	0.664				
AM 12	-				
AM 13	-				
AM 14	-				
AM 15	0.536				