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The Relationship of Parenting Stress and Parenting Styles with Coping Strategies in Adolescents: The Role of Modulators of Emotion Regulation and Mindfulness

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Abstract

Background: The family is the most important institution in identifying the personal coping strategies and emotion regulation skills of the individual.
Objectives: This study aimed to evaluate the role of emotion regulation and mindfulness modulators in the relationship of parenting stress and parenting styles with coping strategies.
Methods: The sample was composed of 400 adolescents in 2016 who were selected from different districts of Tehran by multistage cluster sampling. They completed the adolescent coping scale, the Baumrind parenting style questionnaire, an emotion regulation checklist, and a mindfulness assessment tool for children and adolescents. Data were analyzed using SPSS software.
Results: The results showed that mindfulness and emotion regulation are modulators in the relationship between parenting stress and coping strategies ($P < 0.0001$) and parenting styles and coping strategies ($P < 0.0001$). There were improper parenting stress and parenting styles but if adolescents developed emotion regulation and mindfulness skills, they would reduce the undesirable effects of bad parenting.
Conclusions: Emotion regulation and mindfulness skills along with coping strategies in adolescents can modulate the relationship between parenting stress and parenting style.

Keywords: Parenting Stress, Coping Strategy, Parenting Style, Emotion Regulation, Mindfulness

1. Background

Adolescence is one of the most challenging episodes in life (1). Some adolescents consider these situations and changes as threatening while others see them as a challenge and then cope with them (2). Coping mechanisms include psychological sources and strategies, which help cope, change, or manage stressful events. Forming the functional or healthy coping strategies depends on different factors, including parenting styles. Adolescence presents new challenges and duties for parents. When the parents are better able to cope with challenges, parenting stress will decrease and children will learn coping strategies. Parenting stress exists because of a conceptual imbalance between parenting requests and child rearing (3). These imbalances increase in adolescence. Therefore, parenting style is another factor that includes the emotional relationship and general relation style, which is an important factor to training (2, 4). Parenting style indicates parents' efforts to train their children (5). Meanwhile, it affects socio-psychological performance (6), self-efficacy (7), self-respect (8), and the conceptual and emotional process (9, 10). Parenting stress can affect emotion regulation. Emotion regulation is an ability to modulate, suppress, and express negative and positive emotions in a healthy manner. Negative emotions can be the basic reason for problematic behaviors in adolescence (11). Research shows there is a relationship between emotion deregulation and unhealthy coping strategies in adolescents (12, 13). When adolescents learn how to regulate their emotions in effective ways, healthy coping skills will increase (14).

Mindfulness as a non-judgmental and present-based awareness toward an experience in here and now is most

important in relation to emotion regulation and functional coping (15-17).

2. Objectives

This study aimed to evaluate the role of emotion regulation and mindfulness modulators in the relationship of parenting stress and parenting style with coping strategies in adolescents.

3. Materials and Methods

This is a descriptive and correlational study. The population included female and male adolescents studying in Tehran schools. The sample included 400 adolescents (and their parents) who were selected by a multi-stage cluster sampling method from different districts of Tehran that completed the following questionnaires.

3.1. Study Instrument

3.1.1. Adolescent Coping Scale (ACS)

The adolescent coping scale (18) was created based on the Lazarus theory to assess coping strategies. This scale has been designed to measure the coping methods in adolescents of 12 - 18 years old and includes a specific and a general form. Both of them have a long form (80 items) and a short form (18 items). The long form includes 18 scales (strategies). Each scale has a coping strategy and 3 - 5 phrases. Usually, these strategies are divided into three categories that show the functional or dysfunctional coping. Respondents select the exploitation level from the coping strategy among five options: "I do not" to "I always do." Daieepour and Bayanzadeh translated the adolescent coping scale from English into Persian; the scale reliability was reported to be 0.29 - 0.88 by re-test within two weeks (11, 19). The convergent construct validity of the scale concurrently using the adolescent coping scale and the General Health Questionnaire of Goldberg showed a positive significant relationship between fertile coping styles, referring to forming strategies, mental health, and forming factors (10). The scale validity in Australia based on Cronbach's alpha was obtained as 0.7 and the subscales reliability was reported between 0.44 and 0.81 by test-retest (14, 20).

3.2. Parenting Stress Index (PSI)

This 36-item index was established by Abidin in 1990 (21) and there is a long form of 120 items, as well. The scale includes three parts to assess three main sources of stress in parents. In the first part, the parent perception of abnormal characteristics and behaviors is concerned. In the second part, the general characteristics of parents and family variables that affect the parents' ability to care are focused. Finally, the positional demographic stressful situations were studied. A five-point Likert scale is used for each item (1 - 6 points). A brief form of this scale was applied in this study. Cronbach's alpha was 0.9 and re-test validity during 18 days after the first testing was calculated to be 0.75 for the total scale of parenting stress.

3.3. Baumrind Parenting Styles Questionnaire

The questionnaire aims to assess the parenting styles and it was created by Baumrind by the extract of permissive, arbitrary, and rigid behavior patterns in 1991 (22). Buri (1991) reported the questionnaire reliability using retest as 0.81 for the permissive style, 0.92 for the arbitrary style, and 0.92 for the rigid style. Given the questionnaire validity, he obtained the value of -0.5 for the relationship between permissive and arbitrary styles and -0.52 for the relationship between parenting styles among mothers (13). Esfandiari obtained the value of 0.69 as the questionnaire reliability using retest for the permissive style, 0.77 for the arbitrary style, and 0.73 for the rigid style (14).

3.4. Emotion Regulation Checklist (ERC) for Children and Adolescents

The Emotion Regulation Checklist (ERC) is another scale including 24 items (negative and positive items). Each item is scored on a four-point Likert scale (one = always, four = never). This scale has been designed to assess the child's emotion regulation by their caregivers. Emotional instability subscale/negativism, including mood emotional instability, inflexibility, and negative emotion, is not evaluated. The emotion regulation subscale includes describing the emotion, emotional awareness, and sympathy (23). Ismaeilian et al. (15) studied 11- to 18-year-old adolescents and obtained the validity of emotion regulation checklist in Tehran. The findings of the exploratory factor analysis showed that out of the 24 items, 23 could load in emotional instability, self-awareness, emotion expression, position mismatch in emotion expression, control, managing negative emotions, and finally emotional flexibility. The internal consistency of ERC was reported as 0.89, which refers to a good reliability (24). The questionnaire divergent validity for the trait anxiety scale, Spielberger state-trait anxiety inventory for child (STAIC), depression inventory for children (CDI), the subscale of anger

trait, and anger state in the state-trait anger expression inventory (STAXI) was reported as 0.68, 0.48, 0.62, 0.78, and 0.69, respectively. Cronbach's alpha was 0.70 for the emotion regulation questionnaire (23).

3.5. Children and Adolescent Mindfulness Measurement (CAMM)

The child acceptance and mindfulness measure is a 25-item self-report measure about mindfulness provided by Greco et al. (25) for children and adolescents. The items answer the following questions. How do children and adolescents perceive their experiences? How do they accept innate experiences without judging them? The respondents were asked to clarify (on a 5-point scale from 0 it is never true for me to 4 it is always true for me). Each item reflects the extent of their experiences. This measure has a total score from 0 to 100. Higher scores show a higher level of acceptance and mindfulness. This study using CAMM refers to a good concurrent validity. For child acceptance and mindfulness, a good internal consistency is reported (Cronbach's Alpha of 0.87) that shows a good reliability (24, 25). The questionnaire's divergent validity is reported to be 0.59 by the subscale of disability and Cronbach's Alpha was 0.85.

4. Results

The sample included 400 girls and boys (15 - 18) and their mothers (27 - 51). The mean age was 16.5 and 38.8, respectively. Data were analyzed using SPSS software, Pearson correlation, and hierarchical regression. Pearson matrix results showed there was a positive significant correlation between emotion regulation, mindfulness, parenting stress, permissive and rigid parenting styles, and functional coping strategies. There was a negative significant correlation between emotion regulation, mindfulness, permissive, and rigid parenting styles, and dysfunctional coping strategies. Finally, there was a positive significant relationship between parenting stress, permissive, and arbitrary parenting styles, and dysfunctional coping strategies (Table 1).

The role of modulating mindfulness and emotion regulation in the relationship of parenting stress and styles with functional and dysfunctional coping strategies in adolescents is determined in Tables 2 and 3.

As shown in Tables 2 and 3, the comparison of the regression analysis to evaluate the effect of emotion regulation and mindfulness and the relationship between parenting stress and style, besides the effective coping strategies in models 1 and 2 showed emotion regulation and mindfulness significantly increased R^2 by 6% and 5% ($P < 0.0001$). The models showed 6% and 5% variations in dysfunctional coping strategies scores of adolescents provided by the effect of emotion regulation and mindfulness modulator. In addition, the comparison of the regression analysis to evaluate the effect of emotion regulation and mindfulness modulator and the relationship between parenting stress and styles, besides the dysfunctional coping strategies in models 1 and 2, showed emotion regulation increases R^2 as 5% and 6%, respectively, which are significant ($P < 0.0001$). The models showed 6% and 5% variations in dysfunctional coping strategies scores of adolescents provided by the effect of emotion regulation and mindfulness modulator, respectively.

5. Discussion

This study aimed to evaluate the role of emotion regulation and mindfulness modulators in the relationship of parenting stress and styles with coping strategies. The results showed that emotion regulation has a modulating role in the relationships of parenting stress and styles with functional and dysfunctional coping strategies. Therefore, if adolescents have a better ability to regulate emotions, the relationship between parenting stress, suitable parenting styles, and dysfunctional coping strategies will decrease, and adolescents by emotion regulation (despite the negative factors e.g., parenting stress and unsuitable parenting styles) can reduce dysfunctional coping strategies. The awareness of physical state, positive and negative excitements, emotions expression, the use of excitements due to the situation, and management of excitements are the factors related to emotion regulation and can help adolescents to show a logical reaction in the stressful situations and apply functional strategies. As previous research has shown, emotion regulation facilitates a problem (16). This is related to behavior organization (17) and flexible reaction (18), which are antecedent to the use of functional coping strategies. The findings show that mindfulness has a modulating role in the relationship of parenting stress and styles with functional and dysfunctional coping strategies. The previous studies indicate that mindfulness correlates with a high tendency to regulate emotions and a better ability to regulate moods (22).

While parent distress and children-parent interaction are high and parents use dysfunctional parenting styles, like permissive and arbitrary, negative interactions and dysfunctional parenting styles increase the use of dysfunctional coping by adolescents. It seems that mindfulness

Table 1. Correlation Matrix of Variables[a, b]

Variables	Correlation Coefficients							
	1	2	3	4	5	6	7	8
1. Emotion regulation	1							
2. Mindfulness	0.27[a]	1						
3. Parenting stress	0.24[a]	0.07	1					
4. Permissive parenting style	0.31[a]	0.006	0.41[a]	1				
5. Arbitrary parenting style	0.28[a]	0.008	0.38[a]	0.65[a]	1			
6. Rigid parenting style	0.35[a]	0.18[a]	0.5[a]	0.67[a]	0.64[a]	1		
7. Efficient coping strategies	0.24[a]	0.24[a]	0.11[b]	0.07	0.009	0.1	1	
8. Inefficient coping strategies	0.13[a]	0.11[a]	0.12[b]	0.05	0.02	0.09	0.45[a]	1

[a] A significant correlation at $P < 0.01$.
[b] A significant correlation at $P < 0.05$.

Table 2. The Regression Analysis for the Role of Modulating Mindfulness and Emotion Regulation and the Relationship Between Predictor and Criterion Variables

Variables	Efficient Coping Strategies					Inefficient Coping Strategies				
	B	S.E	β	T	Significance	B	S.E	β	*t*	Significance
Emotion Regulation										
Model 1										
Parenting stress	-0.04	0.03	-0.09	-1.59	0.11	-0.04	0.03	-0.08	-1.38	0.17
Permissive	-0.05	0.07	-0.05	-0.75	0.46	-0.11	0.07	-0.11	-1.51	0.13
Arbitrary	-0.09	0.07	-0.096	-1.37	0.17	-0.009	0.07	-.009	-0.13	0.9
Rigid	-0.08	0.06	-0.11	-1.36	0.18	-0.11	0.06	-0.13	-1.73	0.09
Model 2										
Parenting stress	-0.03	0.026	-0.08	-1.3	0.19	-0.03	0.03	-0.06	-1.08	0.28
Permissive	-0.02	0.07	-.02	-0.34	0.73	-0.08	0.07	-0.08	-1.11	0.27
Arbitrary	-0.1	0.07	-0.11	-1.57	0.12	-0.002	0.07	-0.002	-0.02	0.98
Rigid	-0.03	0.06	-0.04	-0.45	0.65	-0.05	0.06	-0.06	-0.82	0.42
Emotion regulation	-0.27	0.05	-0.27	-5.04	0.0001	-0.28	0.05	-0.27	-5.12	0.0001
Mindfulness										
Model 1										
Parenting stress	-0.04	0.03	-0.09	1.57	0.11	0.04	0.03	-0.08	1.38	0.17
Permissive	-0.05	0.07	-0.05	0.75	0.46	0.11	0.07	-0.11	1.51	0.13
Arbitrary	-0.09	0.07	-0.1	-1.37	0.17	0.009	0.07	-0.009	0.13	0.9
Rigid	-0.08	0.06	-0.11	-1.36	0.18	0.11	0.06	-0.13	1.73	0.09
Model 2										
Parenting stress	-0.05	0.03	-0.1	-1.75	0.08	0.04	0.03	-0.09	1.58	0.12
Permissive	-0.09	0.07	-0.09	-1.28	0.2	0.15	0.07	-0.15	2.18	0.03
Arbitrary	-0.06	0.07	-0.07	-0.98	0.33	0.04	0.07	-0.04	0.6	0.52
Rigid	-0.01	0.06	-0.02	-0.22	0.83	0.02	0.06	-0.03	0.37	0.71
Mindfulness	-0.18	0.04	-0.23	-4.54	0.0001	0.22	0.04	-0.27	5.49	0.0001

has a protective role and modulates the negative effect of parenting stress and unsuitable parenting styles on coping strategies. Previous studies indicated that mindfulness helps people to regulate emotions, which will facilitate healthy coping strategies (14, 22).

In general, the results show that emotion regulation

Table 3. A Brief of the Hierarchical Regression Analysis Model Based on Standard and Non-Standard Coefficients

Criterion Variable	Model	R	R^2	Modulated R^2	$\triangle R^2$	$\triangle F$	P
Emotion Regulation							
Efficient coping strategy	1	0.17	0.03	0.02	0.03	2.89	0.02
	2	0.3	0.09	0.08	0.06	25.35	0.0001
Inefficient coping strategy	1	0.28	0.08	0.07	0.08	8.1	0.0001
	2	0.37	0.13	0.12	0.05	26.22	0.0001
Mindfulness							
Efficient coping strategy	1	0.17	0.03	0.02	0.03	2.89	0.022
	2	0.28	0.08	0.07	0.05	20.65	0.0001
Inefficient coping strategy	1	0.28	0.08	0.07	0.08	8.1	0.0001
	2	0.38	0.14	0.13	0.06	30.2	0.0001

and mindfulness are modulators in the relationship between parenting stress and styles. Thus, the results indicate emotion regulation and mindfulness are key factors to select healthy coping strategies in adolescence.

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Footnotes

Authors' Contribution: Ghahari conceived and designed the study and revised and translated the manuscript. Kheradmand collected the clinical data, performed the statistical analysis, and drafted the manuscript. All authors read and approved the final manuscript.

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