Original article

Adolescent depression in relation to cognitive distortion and parental bonding

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Abstract

Background: *Adolescence is a remarkable developmental period because of the confluence of transitions and challenges that occur during this period.* ***Aim:*** *The study aimed to examine the contribution of parent-child relationship and cognitive distortions towards the adolescent depressive symptoms.* ***Methods:*** *A total of 150 boys in late adolescence (18-19 years) were selected through random sampling from colleges and university campus. The sample was assessed using the Reynolds Adolescent Depression Scale to determine the severity of depressive symptoms, Cognitive Distortion Scales for the distorted or negative cognitions and Parental Bonding Instrument for children's perception of parent-child relationship in terms of parental behaviours and attitudes. Stepwise multiple regression analysis was conducted to study the contribution of cognitive distortions (self criticism, self blame, helplessness, hopelessness and preoccupation with danger) and parent-child relationship (mother care, mother overprotection, father care and father overprotection) towards the total depression score in adolescents.* ***Results:*** *The study findings revealed that self-criticism (β=0.60), helplessness (β =0.34), pre-occupation with danger (β=0.22), and Self Blame (β=0.71) positively contributed to adolescent depression. There was a significant positive contribution of Father Overprotection (β=0.10) and a significant negative contribution of Father Care dimension of parent-child relationship (β=-0.10) towards the adolescent depression.* ***Conclusion:*** *Adolescents need to be educated towards making healthy appraisals of events and occurrences within and around them. A healthy parent-child relationship can ensure better psychological health in adolescents.*

Key words: *Adolescent depression, Cognitive distortion, Parent-child relationship.*

Introduction

Adolescence is a remarkable developmental period because of the confluence of transitions and challenges that occur during this period.[1] Even though, most adolescents are able to cope with such dramatic changes, a large proportion of them do encounter problems and difficulties. If they are unable to cope with these changes, they may develop mental health problems, especially depression.[2] The young adolescents, as early as eleven years of age, begin to form their self-concept and may need to cope with increasing expectations from parents, friends, school, and society.[3] The intersection of these

experiences, coupled with other environmental stressors, can result in an increased psychological distress, such as anxiety and depression.[4]

Beck et al[5] conceptualizes depression on the underlying theoretical assumption that the affect and behavior of an individual are largely determined by the way the individual structures the world. His or her cognitions are based on attitudes or assumptions developed from previous experiences. The cognitive model states three specific concepts to explain the psychological substrata of depression: (1) Cognitive triad, which consists of three main cognitive patterns viz. depressed indiduals view themselves negatively, interpret their experiences negatively and have a negative view of future; (2) Schemes, which are relatively stable cognitive patterns that constitute the basis for the interpretations regarding a determined set of situations and (3) Cognitive errors, which is the tendency to construe or distort the significance of events in a way that is consistent with a negative view of the self, the environment and the future. The cognitive distortions play a central role in the development and maintenance of depression.[6] Cognitive distortions are likely to lead to depression in adolescents and the chances can be further maximized if they have faulty relationships with their parents.

Adolescence is a period when fitting in and connecting with others is highly valued; thus, interpersonal conflicts in close relationships can lead to an even greater anxiety and depression levels.[7] Depressed youths were found to have a harsher and less consistent parenting, as reported by both the child and parent, compared to youths who were not depressed.[8] Adolescents tend to experience elevated levels of depressive symptoms when they perceive their parents to be low in warmth but high in control [9,10] and when they experience more frequent conflicts with their parents.[11] Low parental warmth or care, high parental rejection, high parental control, overprotection, parental harshness, inconsistent discipline, hostility, and high family conflict are related to depressive symptoms in adolescents.[12,13] It was found that higher levels of self-criticism in adulthood were related to retrospective reports of poor parent–child relationships, particularly with mothers.[14] In a separate study, rejection accounted for approximately 8% of the variance and the control accounted for approximately 5% of the variance in childhood depression.[15]

According to Spoth et al,[16] the study of negative parent-child interactions can be categorized into two general groups: the unidirectional models (i.e., parent or child effects models) and the bidirectional models (i.e., parent-child interaction effects models). The latter model helps to better describe how both negative parental upbringing behaviors and children's problem behaviors can jointly affect one another.

Adolescent depression is one of the overlooked, undertreated psychological disorders. There is a need to study adolescent depression in relation to family factors, especially the parent-child relationship which is thought to provide a blue print for the child's development. There is also a need to explore it in the light of maladaptive cognitive patterns.

The aim of the study was to examine the contribution of parent-child relationship and cognitive distortions towards adolescent depressive symptoms. It was hypothesized that parental care (mother care and father care) would negatively contribute towards depressive symptoms in adolescents. Parental overprotection (mother overprotection and father overprotection) and cognitive distortions (self criticism, self blame, helplessness, hopelessness and preoccupation with danger) would positively contribute towards depressive symptoms in adolescents.

Materials and Method

Sample

A total of 150 adolescent boys in late adolescence (18-19 years) were drawn through random sampling from colleges and university campus. The educational institutions for data collection were selected randomly by the lottery method from a list of higher educational institutions of Patiala. The subjects picked for the study were also randomly selected from a class of 40-50 students through lottery system.

Instruments for assessment

- *Reynolds Adolescent Depression Scale (RADS-2):* It was developed by William Reynolds (2002) to find out the severity of depressive symptomatology in adolescents in clinical settings.[17] The RADS-2 is a brief, 30-item self-report measure that includes subscales which evaluate the current level of an adolescent's depressive symptomatology along four basic dimensions of depression: dysphoric mood, anhedonia/ negative affect, negative self-evaluation, and somatic complaints. In addition to the four subscale scores, the RADS-2 yields a total depression score that represents the overall severity of depressive symptomatology. The reliability and validity of test is well established (internal consistency: 0.86; test-.retest:0.8; validity criterion: 0.83).
- *Cognitive Distortion Scales (CDS):* Developed by John Briere,[18] it measures distorted or negative cognitions and consists of 40 items. Each symptom item is rated according to its frequency of occurrence over the prior month; using a 5 point scale ranging from 1 (never) to 5 (very often). Each of the 5 subscales of CDS, self- criticism, self blame, helplessness, and pre-occupation with danger, include 8 items each. The score on each of the dimension can be added to yield a total score. The reliability and validity of test is well established (reliability .89 to .97 and validity .94 to .98) and the scale has been widely used.
- *Parental Bonding Instrument (PBI):* The parental bonding instrument, developed by Parker et al,[19] is a 25 item instrument designed to assess the children's perceptions of parent - child relationship in terms of parental behaviours and attitudes. The author identified two variables as important developing parent child bonding: (a) care and (b) overprotection. Out of 25 items, 12 measure children's perception of their parents as caring with the opposite end of the spectrum being indifference or rejection, the remaining 13 items assess children's over-protectiveness with the extreme opposite being encouragement, independence. The care subscale allows maximum scores of 36 and overprotection subscale a score of 39. The scale yields information on four dimensions i.e. mother care, father care, mother overprotection, father overprotection. The participant's responses are scored on a four point Likert- type scale ranging from "very like" (0) to "very unlike" (3). Some of the test items are reverse scored. The parental bonding instrument demonstrated high internal consistency with split half reliability coefficients of .88 for care and .74 for over protection. The parental bonding instrument shows good concurrent validity and correlated significantly well with independent rated judgments of parental care and overprotection. [19]

Study procedure

Prior to the administration of psychological measures, rapport building was done with the subjects. All the measures were filled up by the subjects themselves. They were given clear

instructions for responding to each measure and were asked to complete all the booklets without leaving any statement unanswered. All the tests were administered in the group of 20-30 subjects. The subjects were explained that the confidentiality of their results will be maintained. No identifying information has been included in the presentation of results.

Statistical analysis

Stepwise multiple regression analysis was performed to determine the amount of variance in the dependent variable that could be accounted by the different variables (cognitive distortion dimensions and parent-child relationship dimensions) and the impact of each independent variable in the prediction of the dependent variable. Total depression score on RADS-2 was taken as the dependent variable.

Results

All were male subjects, aged between 18-19 years. The detailed results of regression analysis are shown in table 1. The highest positive contributing dimension was Self-criticism (β=0.60) which was followed by Helplessness (β=0.34), Pre-occupation with danger (β=0.22), Self-blame (β=0.14), and Father Overprotection (β=0.10) respectively. Whereas, Father Care dimension of parent-child relationship was contributing negatively towards adolescent depression (β= -0.10).

Discussion

The present study attempts to investigates the adolescent depression in relation to cognitive distortions and parent-child interaction. The findings revealed that the self-criticism is a significant positive contributor to adolescent depression. Self-critical concerns are fueled by difficulties maintaining a positive, effective sense of self and signaled by fear of failure and excessive need for autonomy and control.[20] Self-criticism is a psychological construct that is thought to denote a cognitive vulnerability to emotional distress, especially depression. It involves constant and harsh criticism and demands on the self, and chronic concerns about disapproval and rejection from others.[21] The association between self-criticism and depressive symptoms have been shown to be mediated by the occurrence of stressful life events.[22,23] Self-criticism in psychopathology can include such elements as negative and critical thoughts directed toward one's own personal or physical characteristics, excessive self-blame for shortcomings, the inability to accomplish goals and tasks in accordance with unrealistically high standards, and the low regard with which individuals believe they are being appraised by others. Such self-critical thoughts, beliefs, and attributions have been linked to the etiology or maintenance of several forms of psycho-pathology including depression.[24]

Table 1: Step-wise multiple regression analysis (N=150)

Variable	R	R^2	$R^2\Delta$	p	β	p
Self-Criticism	.60	.36	.36	< 0.01	.60	< 0.01
Helplessness	.67	.44	.08	< 0.01	.34	< 0.01
Pre-occupation with danger	.68	.47	.03	< 0.01	.22	< 0.01
Father Overprotection	.69	.48	0.01	< 0.01	.10	< 0.01
Father Care	.70	.49	0.01	< 0.01	-.10	< 0.01
Self-blame	.71	.50	0.01	< 0.01	.14	< 0.01

$R^2\Delta$: R^2 change; β:standardized coefficient

The results indicate that various cognitive distortion dimensions contribute towards depression in adolescents. Beck [25] also suggested that depressed persons demonstrate cognitive distortions through engaging in faulty information processing. Specifically, depressed persons are characterized by a number of systematic errors in thinking, including selective abstraction, mental filter, all-or-none thinking, magnification, minimization, and overgeneralization.

Helplessness was another significant positive contributor to adolescent depression. When the adolescent boys feel helpless in any troublesome situation they probably withdraw or give up. Some researchers have reported that cognitive distortion is not specific to depression, but is also found in patients with non-affective disorders.[26, 27] Pre-occupation with danger and Self-blame, which are the dimensions of cognitive distortion, were also found to be positive contributors towards adolescent depression. It seems that adolescents give up against the problem and they have no way of dealing with the depression situation. Depressed adolescents appear to have predominantly cognitive symptoms with negative thought processes, e.g. feelings of self-blame, self-hate, punishment, dissatisfaction and failure.[28, 29] Researches show that eliminating these distortions and negative thought is said to improve mood and discourage maladies such as depression and chronic anxiety. The process of learning to refute these distortions is called cognitive restructuring.

Father Overprotection positively contributed to depression in adolescent boys. According to theoretical views, parental overprotection may lead to anxiety by increasing beliefs in the dangerousness. of the situation and the lack of ability to avoid the danger.[10] This reflects as intrusive actions that emphasize the closeness of the parent-child bond, such as restricting the child's independent activities, and unnecessary management, which display high levels of distress and neediness in children. It may prevent the formation of independent behavior on the part of the child, leading to infantilization.[30] In turn, this limits children' opportunities to practice and improve their self-regulation and active coping skills, and communicates the message that they are incapable and require parental assistance to handle normal life tasks.

The results of analysis also suggest that father care is an important predictor of depression in boys. Father care dimension of parent-child relationship was a negative contributor towards adolescent depression. Fathers' interactions exert a powerful influence on every domain of their children's functioning beginning at infancy. Recent research substantiates how fathers impact their children's social, emotional, and cognitive development. For example, in the first few days of life, many newborn infants turn their heads preferentially to their father's voices versus the voice of a stranger.[31] Mothers and fathers influence their children in similar ways with regard to development of morality, competence in social interactions, academic achievement, and mental health. Fathers' role may be especially important in the psychosocial development of an adolescent boy. However, father involvement is of a different nature than mother involvement. In terms of relative frequency, fathers devote more time to playing with their children than do mothers. When children are young (0-4 years), fathers tend to engage in more tactile physical and stimulating activities. As children enter middle childhood (the school-aged years), fathers engage in more recreational activities such as walks and outings as well as private talks. Fathers also have a strong influence on their children's gender role development and are important role models for both girls and boys.[32] The long-term effects of fathers' direct involvement in the care

of their children manifest through childhood and adolescence. For children with a father figure, those who described greater father support had a stronger sense of social competence and fewer depressive symptoms.[33]

The current investigation provides useful insight for understanding adolescent depression and has important implications for dealing positively with the issue of adolescent depression. However, the study has several limitations. The study was limited only to the male adolescents aged 18-19 years and the findings cannot generalized to females and other age groups. Moreover the sample was selected from one city only, which limits the scope for a wider generalization. Many variables, other than cognitive distortion and parent-child relationship, might contribute to adolescent depression, but were not included in the present study.

To conclude, the study suggests self-criticism, hopelessness, preoccupation with danger, father overprotection and self blame were positive contributors to adolescent depression. Father care was a negative contributor to adolescent depression scores. It is clear that parent-child relationship and inaccurate or distorted thoughts and ideas are important determinants of depressive symptoms in adolescents. Adolescence is a challenging phase of life; however healthy parent-child relationship can cushion the effects of ruthless biosychosocial changes of this period. Adolescents need to be educated towards making healthy appraisals of events and occurrences within and around them and a healthy parent-child relationship can ensure better psychological health in adolescents.

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