# Parental bonding among individuals with recurrent depressive disorder, anxiety disorder and healthy controls

Vinit Kumar Singh<sup>1,\*</sup>, C.R.J. Khess<sup>2</sup>, Dipanjan Bhattacharjee<sup>3</sup>, Narendra Kumar Singh<sup>4</sup>

<sup>1</sup>Research Scholar, Department of Psychiatric Social Work (PSW), National Institute of Mental Health and Neuro Sciences, Bengaluru, India

<sup>2</sup>Late Professor, Department of Psychiatry; <sup>3</sup>Associate Professor, Department of PSW

<sup>4</sup>Psychiatric Social Worker, Department of PSW; Central Institute of Psychiatry, Kanke, Ranchi, India

# ABSTRACT

**Background:** The relationship between parents and children in early life has a significant determining role in the development of various aspects of mental health in human beings. This study aimed to have a comparative assessment of the quality of parental bonding among individuals with Recurrent Depressive Disorder (RDD), anxiety disorder and healthy controls while controlling the factors such as age, sex, and education. **Materials and Method:** This study was conducted at the Out-patient Department of a referral mental health care facility in India. The samples consisted of 30 individuals with the diagnosis of RDD, 30 individuals with Anxiety Disorder as per ICD-10-DCR and 30 matched healthy controls. Age ranged between 18-50 years. Parental bonding instrument was used to assess the parental bonding in all three groups. **Results:** The two groups RDD and anxiety disorder differed significantly from the healthy control group on maternal protection ( $\chi^2$ =42.643, p<0.001), paternal care ( $\chi^2$ =8.063, p=0.018) and protection ( $\chi^2$ =43.468, p<0.001) but did not differ significantly in terms of maternal care ( $\chi^2$ =0.449, p=0.799). **Conclusion:** Findings highlight the role of parental bonding in the etiology of RDD and anxiety disorders, which reflects the need for strengthening the healthy bonding between parents and children in order to prevent such psychiatric conditions.

Keywords: Parental bonding, recurrent depressive disorder, anxiety disorder

#### **INTRODUCTION**

Parental bonding is characterized by a sense of trust, concern, and affection between parents children. Numerous theories and and hypotheses have been originated from relatively divergent schools of thought suggest that quality, as well as the frequency of interactions with most important caring figures like parents in the early phase of life develops the basis for information processing structures for human beings. Theories being originated Psychodynamic from Psychoanalytical Schools e.g., 'attachment theory,'[1] 'object relations theory,"<sup>[2]</sup> and theories based on Cognitive School,<sup>[3,4]</sup> came up with the conclusion that unduly punitive, harsh, critical,



or neglectful parenting might have link with the development of faulty affective structures and negative cognitive schemas and those elements might have a significant role in making individuals vulnerable to depression and anxiety in their later life.

Parent's attitude and behavior towards their children is crucial in determining the quality of parental bonding and attachment between parents and children. Secure parent-child relationship and bonding are said to be a positive factor for the development of self of human beings.<sup>[5]</sup> Similarly, early attachment relationships tend to create the groundwork for adult attachment relationships and also determines the adult romantic, social and

#### Address for Correspondence:

Mr.Vinit Kumar Singh Research Scholar, Dept. of Psychiatric Social Work National Institute of Mental Health and Neuro Sciences, Bengaluru – 560029, India Email: vinitsinghpsw@gmail.com

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parenting behaviors.<sup>[6,7]</sup> Failing to attain this, insecure parental attachment leads to develop major depression and anxiety disorders in later life.<sup>[8]</sup>

Previous studies conducted on parental bonding either focused on depression or anxiety disorder alone. Some of the studies tried to assess and compare parental bonding between these two disorders but it was conducted within community samples, and few were conducted with clinical population but it was not compared with healthy controls. Moreover, most of the previous investigations were conducted in Western Countries to understand the influence of parental bonding as one among other causative factors for major depression and anxiety disorders, such attempts have not been made in Indian context so far. Considering cultural differences, investigation of these constructs are also essential in India. Furthermore, this study is a preliminary attempt in that direction looking at the perception of parental bonding among persons diagnosed with RDD, anxiety disorder with age, sex and education matched healthy control group.

Thus, this study aimed to assess and compare the parental bonding in persons with RDD, anxiety disorder and healthy controls and establish whether the aspects of parent-child relationship dispose the child to major depression and anxiety disorder in adulthood.

# MATERIALS AND METHOD

Study setting and participants: This hospitalbased cross-sectional study was conducted at the Out-patient Department of a tertiary care mental health facility in India. The sample consisted of 30 individuals diagnosed with RDD, 30 individuals diagnosed with Anxiety Disorder such as Generalized Anxiety Disorder or Mixed Anxiety and Depressive Disorder and 30 healthy controls. The samples were recruited through purposive sampling method. The diagnosis was confirmed by two Consultant Psychiatrists of the institute as per the ICD-10-DCR.<sup>[9]</sup> The participants were included if they were aged between 18 to 50 years; without any comorbidity such as other disorders, mental retardation, psychotic suicidality, neurological disorders or any other medical conditions. Both the groups were appropriately matched for age, sex, and education.

Procedure: Individuals diagnosed with RDD and Anxiety disorder at the out-patient clinic were approached. Those who met the inclusion criteria were identified. After explaining the procedure of the study, a written informed consent was taken from each participant. Hamilton Rating Scale for Depression (HAM-D)<sup>[10]</sup> and Hamilton Rating Scale for Anxiety (HAM-A)<sup>[11]</sup> were used to screen the participants of RDD and Anxiety group for depression and anxiety respectively. Those who scored less than 7 on these two scales were recruited in the study. The General Health Questionnaire-12 (GHQ-12)<sup>[12]</sup> was used to screen the healthy controls for psychiatric disorder and those who scored <3were recruited in the study.

Parental Bonding Instrument (PBI)<sup>[13]</sup> was used to assess various areas pertaining to Parental Bonding. This instrument was applied to all the participants belonging to three groups. The PBI measures the basic parenting styles as perceived by the individuals. This instrument retrospectively measures perceived parental style, meaning that adults (over 16 years) complete the measure for how they remember their parents during their first 16 years. The measure is to be completed for both mothers and fathers separately. There are 25 items, including 12 *care* items and 13 overprotection items. High scores on overprotection indicate that the respondent's parents were interfering and controlling their children. Low scores on overprotection reveal that their parents promoted self-determination and autonomy. High care scores reveal warmth and affection from parents whereas low care scores reveal detached or rejecting parents.

Statistical analysis: The Statistical Package for Social Sciences for Windows Version 16.0 (SPSS 16) was used to analyze the data. Shapiro-Wilk test was used to assess the normality of data and found to be not normally distributed. Descriptive statistics such as frequency and percentage were computed to describe the characteristics of the samples. Chi-square test was performed to examine the differences in the proportion of nominal sociodemographic variables between the three groups. Kruskal–Wallis test was used for comparison among three groups on 'parental bonding'.

# RESULTS

Parental Bonding Variables		Sample Groups (N=90)				
		Recurrent Depressive Disorder (n = 30)	Anxiety Disorder (GAD & MAD) (n = 30)	Healthy Control (n = 30)	χ²	р
		Median (IQR)	Median (IQR)	Median (IQR)		
Mother	Care	29.50 (10.00)	31.50 (14.00)	30.00 (2.25)	0.449	0.799
	Over-protection	13.00 (5.00)	16.00 (9.00)	7.00 (5.00)	42.643	<0.001*
Father	Care	25.00 (8.25)	25.00 (13.25)	29.00 (2.00)	8.063	0.018*
	Over-protection	15.00 (8.00)	14.00 (9.25)	6.00 (2.25)	43.468	<0.001*

Table 1 Comparison of parental bonding

GAD-Generalized Anxiety Disorder, MAD-Mixed Anxiety and Depressive Disorder IQR- Interquartile range, \*Significance at 0.05 level

# Socio-demographic details

All three groups had an equal number of male (n=16) and female (n=14) participants. Participants were predominantly Male (53.3%), Married (71.11%) and belong to the Hindu religion (68.89%).

The median age of RDD group was 28.00 (Interquartile range = 12.25) years, Anxiety group was 30.00 (Interquartile range = 14.25) years, and Healthy control was 32.00 (Interquartile range = 11.75) years. The median years of education of RDD group was 12.00 (Interquartile range = 5.00) years, Anxiety group was 11.00 (Interquartile range = 7.00) years, and Healthy control was 12.00 (Interquartile range = 5.25) years. There was no significant difference between the three groups with regard to age ( $\chi^2$ =0.83, p=0.65) and education ( $\chi^2$ =2.88, p=0.23). Thus, the three groups were similar in terms of age, sex, and education.

Table1 shows the median difference in parental bonding between persons with RDD, anxiety disorder and healthy control groups. The two groups RDD and Anxiety disorder differed significantly from healthy controls in terms of over-protection from the side of mothers ( $\chi^2$ =42.643, p<0.001), fathers' care ( $\chi^2$ =8.063, p=0.018), and fathers' over-protection ( $\chi^2$ =43.468, p<0.001).

# DISCUSSION

The current investigation reveals that patients with RDD and anxiety disorders had the experience of 'being overprotected by their both parents' in their childhood. However, the findings also suggest that persons with RDD and anxiety disorder had the lower perception of 'being cared by their father' as compared to healthy controls. There was no significant difference seen among the three groups in terms of 'mothers care'. Though, the healthy control group reported a higher level of 'mothers care' in comparison to Study Groups (i.e., RDD and anxiety disorders), the reason of such finding may be due to cultural differences, as in Indian society generally mothers are caring towards their children and it is by and large the tradition in most of the Indian families.<sup>[14]</sup> However, this finding found to be contradictory to the previous studies. These studies found that low maternal care or rejection significantly associated with major depression and anxiety disorder.<sup>[6,7,15-17]</sup>

Further, the two groups RDD and anxiety disorder group differed significantly with the healthy control group ( $\chi^2$ =42.643, p<0.001) in terms of mother protection. High mother protection was found in RDD and anxiety disorder group as compared to healthy control group and this finding is consistent with the findings of previous studies.<sup>[17,18]</sup> These studies found that greater maternal

overprotection was significantly associated with major depression and anxiety disorder. Moreover, many studies have found that dysfunctional parenting or insecure attachment during childhood may increase the risk of major depression and anxiety-related psychopathology in adulthood. <sup>[7,15,16]</sup>

Similarly, the three groups also differed significantly in terms of father care ( $\chi^2$ =8.063, p=0.018) and protection ( $\chi^2$ =43.468, p<0.001). In the present study individuals with RDD and Anxiety disorder reported low father care and high father protection than healthy controls. These results are consistent with the findings of previous studies from clinical and community sample.<sup>[6,7,16,17]</sup> These studies reveal that inadequate parental care and bonding are strong predictors of mental health issues like depression and anxiety disorder in adulthood.

As per socio-demographic variables, while selecting the participants for all three groups, they were matched on age, sex, and education, so there were no significant differences found between the groups on these variables.

Some of the important socio-demographic variables like age, sex and education were controlled considering the fact that these variables can influence the way people perceive the parental bonding/attachment and which could also color the results of the present study. This is one of the strengths of the study.

#### Limitations

Retrospective nature of the study as participants retrospectively (first 16 years) evaluated the childhood prenatal bonding, which may lead to recall biases among the participants. Further, causative factors could not be inferred from the results due to the cross-sectional nature of the study. This study was carried out in a single hospital and small sample size also limits the generalizability of the study.

#### CONCLUSION

The current investigation highlights the crucial role of parental bonding in the etiology of RDD and anxiety disorder and adds to the existing scientific evidence. Parenting programs to strengthen the healthy bonding between parents and children can be initiated to prevent the risk of children developing RDD and anxiety disorders in their later life.

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