

Impact of Mentalization Based Treatment in Emotional Eating Behaviour

Tvishi Sharma¹ and Saima Ayyub²

¹M.Phil. Clinical Psychology Trainee, Department of Clinical Psychology,
Amity Institute of Behavioural & Allied Sciences, Amity University Uttar Pradesh Lucknow Campus

²Clinical Psychologist and Assistant Professor
Department of Clinical Psychology, Amity Institute of Behavioural & Allied Sciences,
Amity University Uttar Pradesh Lucknow Campus

Abstract

Mentalizing is the ability to understand mental states of self and others. A mature mentalizing capacity is facilitated by the affective bond formed in a stable early attachment relationship. Therefore, mentalizing is crucial for affect regulation and the subjective experience of unpleasant emotions. Emotional eating, a coping mechanism to overcome negative feelings, is assumed to have stemmed from insecure attachment manifested through deficit in emotional regulation and mentalizing abilities. The research suggests that emotional eating has the potential to progress into an eating disorder. A timely intervention would be a remedy to prevent emotional eating behaviours from progressing into eating disorders. **Aim:** To evaluate the impact of Mentalization Based Treatment on Emotional Eating Behaviour. **Method:** A pre-test-post-test quasi experimental design without control group was used in the study. The participants included 7 female university students indulging in emotional eating behaviour selected through purposive sampling method. The Emotional eating scale (EES) was used for screening. Reflective Functioning questionnaire-8 (RFQ 8) was used to measure the mentalizing capacity of individuals. The Wilcoxon sign rank test was used to measure significant difference between pre-test and post-test on emotional eating behaviour and mentalizing capacity (reflective functioning). **Results:** There were 7 participants at the beginning of which one left after 3 sessions, due to personal reasons. The Wilcoxon signed rank test revealed a significant difference in the Reflective Functioning uncertainty after Mentalization based treatment, $n = 6$, $z = 2.226$, $p < 0.05$ and a significant difference in the



Emotional Eating Behaviour after Mentalization based treatment, $n = 6$, $z = 2.201$, $p < 0.05$.

Conclusion: The present study showed that, it was an effective therapy to reduce emotional eating behaviour, especially in the female population. It was also effective in enhancing the mentalizing capacity or reflective functioning and improving affect regulation.

Keywords: *Emotional Eating Behaviour; Mentalizing; Mentalization Based Treatment; Reflective Functioning; Affect Regulation*

Impact Of Mentalization Based Treatment in Emotional Eating Behaviour

The ability to attribute hypothetical mental states to explain human behaviour and provide meaning to the subjective experience of having an inner world that is not visible to others is known as mentalization (Moller, 2018). According to research, a variety of psychopathologies characterized by poor emotion control may be influenced by inadequate mentalization (Batman & Fonagy, 2019; Kuipers, 2018; Kuipers, van Loenhout, van der Ark & Bekker, 2016). A mature mentalizing capacity is facilitated by the affective bond formed in a stable early attachment relationship and environment. This encourages the transition from co-regulation to self-regulation, which is employed in adaptive emotional regulation by recognizing, analyzing, and controlling affect (Jurist, 2010). The scope of mentalization within therapy has quickly expanded into an all-encompassing therapeutic framework known as Mentalization Based Treatment. It was initially studied and created by Fonagy and colleagues to treat individuals with borderline personality disorder diagnoses. The core of MBT is its systematic focus on attaining this understanding and, consequently, better affect regulation. It also aims to improve the psychological and social skills necessary for comprehending one's own and other people's thoughts. According to the general vulnerability view, attachment



insecurity worsens both mental and physical disorders (Zachrisson & Skarderud, 2010). Individuals who are insecurely attached are unable to create safe and strong mental foundations. This shortcoming is associated to a variety of negative psychological effects (e.g., weaker relationships, self-views, self-control, and so on), as well as a decreased resilience in coping with life events and a tendency to breakdown psychologically in stressful situations (Bowlby, 1988; Mikulincer & Shaver, 2012). Various studies of attachment orientations and eating behaviours reveal significant relationships between insecure attachment orientations and problematic eating habits. Emotional eating is one such coping mechanism which is characterized by a tendency to eat excessively in response to negative feelings such as stress, worry, irritation, sadness and boredom (Van Strien et al., 2007; Faith et al, 1997; Ganley, 1989). It is a phenomenon in which some people increase their eating in response to unpleasant feelings (Bruch, 1973). Food can bring comfort, provide a distraction from discomfort, provide respite from boredom, and serve as a treat or reward (Greeno & Wing, 1994; Wansink & Payne, 2007). Food can also be used to commemorate special occasions and connect with others (Alexander & Siegel, 2013). An insecure attachment base is thought to be a major contributor to maladaptive affect regulation through food, which can manifest as an eating disorder (Tasca, Ritche & Balfour, 2011). Individuals with eating problems may feel inadequate, ineffective, and out of control in the absence of dependable internal self-regulation. Such problematic eating may be a manifestation of deficits in emotion regulation and mentalization abilities, which stem from insecure attachment. The realms of dysregulation may also include emotions, food & body, interpersonal relationships, and therapeutic relationships. Emotional Eating Behaviour has the potential to progress into more problematic psychological disorders, as well



as serious health complications including eating disorders. Thus, a timely intervention would be a remedy to prevent emotional eating behaviours from progressing into an eating disorder.

Method

Aim

The aim of the present study was to study the impact of Mentalization Based Treatment in Emotional Eating Behaviour.

Hypotheses

It was hypothesized that there will be a significant difference in the Reflective Functioning of research participants after Mentalization Based Treatment. It was also hypothesized that there will be a significant difference in the Emotional Eating Behaviour of research participants after Mentalization Based Treatment.

Participants

Participants included 7 female university students with an average age of 24 years. The inclusion criteria were university students between age range 18-28 years, female gender; scoring above cut off on emotional eating dimensions of Emotional Eating Scale and those, who gave consent to undergo individual Mentalization Based Treatment. The exclusion criteria were university students indulging in emotional eating Behaviour of other genders (male/transgenders); married university students; students diagnosed with any major psychiatric illness or physical illness and students on medication for appetite. The ethical



clearance was obtained from Departmental Ethics Committee, Amity University Uttar Pradesh, Lucknow Campus.

Research Design

A quasi-experimental study design was used with a pre-test-post-test and without a control group.

Tools for Data Collection

The tools for data collection used were Emotional eating scale (EES), Reflective functioning questionnaire-8 (RFQ-8) and General health questionnaire (GHQ-12).

Emotional Eating Scale (EES) (Arnold et. al., 1995)

It measures the relationship between distinct negative emotions (e.g., angry, irritated, bored, sad) and disordered eating among adults (18 years and above). It is a self-administered questionnaire comprising 25 items which are further divided into three subscales Anger/frustration, anxiety and depression. The desire to eat in response to each emotion is rated on a five-point scale (no desire, a small desire, a moderate desire, a strong urge, an overwhelming urge to eat). The scale has an adequate internal consistency (Cronbach's alpha $> .70$), and good test-retest stability ($r = .79$) of the total scale.

Reflective Functioning Questionnaire (RFQ-8) (Fonagy et. al., 2016)

The RFQ measures the degree of certainty/uncertainty the respondents experience in relation to their knowledge about their own and others' mental states. It is a shorter version of RFQ- 54, having self-reported, 8 item questionnaires. The questionnaire measures RFQc (RFQ certainty) and RFQu (RFQ uncertainty) on a seven-point likert scale (strongly disagree to



strongly agree). Poor mentalizing is detected if the score is higher than 1. The internal consistency and test–retest reliability of the subscales was satisfactory to excellent; internal consistency- 0.70.

General Health Questionnaire (GHQ-12) (Goldberg, 1988)

It is a measure for detecting psychological distress. It is the shorter version of GHQ 60, self- reported, 12 item questionnaire. The GHQ-12 consists of 12 statements to which individuals respond on a four-point scale (0 = Not at all; 3 = More than usual). Reliability coefficients have ranged from 0.78 to 0.95 in various studies.

Procedure

The quantitative data was gathered by administrating standardized scales of each variable in the beginning, and after the completion of individual therapy sessions. Thus, the researcher used a ‘before and after without control’ design to test the impact of Mentalization Based Treatment on Emotional Eating Behaviour and Reflective Functioning of Female University Students. The duration for each session was approximately 60 minutes per session. A total of 10 sessions were conducted in 10 weeks and they were conducted by two therapists (Therapist and co-therapist). The entire intervention was divided into four parts- Initial phase, Middle phase, Final phase, Follow up & Post-test.

Results

To test the hypotheses, statistical analysis of data was carried out by Wilcoxon Signed rank test. The difference in means of each variable was calculated distinctly. Prior to conducting the analysis, the assumption of normal distribution of data was examined by



Shapiro wilk test and it was not satisfied. Statistical analysis of data was carried out using SPSS IBM for windows. Null hypothesis was set to be rejected when $p < 0.05$.

Table 1

Description of Socio-Demographic variables

		Frequency	Percentage
Gender	Female	7	100
	Age		
	21 years	1	14.29
	23 years	2	28.57
	24 years	1	14.29
	26 years	2	28.57
	28 years	1	14.29
Courses	Bachelors	3	42.86
	Masters	2	28.57
	PhD	2	28.57
Area of Residence	Urban	3	42.86
	Semi-Urban	3	42.86
	Rural	1	14.29
Family Structure	Nuclear	3	42.86
	Joint	3	42.86
	Extended	1	14.29
GHQ- scores	M= 14.57		

Table 1 displays the sociodemographic variables of the research participants. The current education course of the participants varied from bachelors to Ph.D. 42.86% of the participants were pursuing their bachelors, 28.57% pursuing Masters and 28.57% pursuing Ph.D. 42.86 % of the participants resided in Urban area, 42.86 % in Semi Urban area, 14.29% in Rural area. 42.86 % of the participants belonged to a nuclear family structure, 42.86 % belonged to a Joint family structure and 14.29% belonged to an extended family structure. The mean score of the participants on General Health Questionnaire (GHQ) was 14.57.

Table 2

Wilcoxon sign rank test-Reflective Functioning

	Post RFQu - PreRFQu	Post RFQc - Pre RFQc
Z	-2.226	-1.633
Asymp. Sig. (2-tailed)	0.026**	.102

**p<0.05

Table 2 displays the Wilcoxon sign rank test scores of Reflective Functioning. The Wilcoxon signed rank test revealed a significant difference in the Reflective Functioning Uncertainty (RFQu) after Mentalization based treatment, n=6, z= 2.226, p<0.05. The Wilcoxon signed rank test revealed no significant difference in the Reflective Functioning certainty (RFQc) after Mentalization based treatment.

Table 3

Wilcoxon signed rank test- Emotional Eating Behaviour

	Post EES - Pre EES
Z	-2.201
Asymp. Sig. (2-tailed)	0.028**

**p<0.05

Table 3 displays the Wilcoxon signed rank test scores of Emotional Eating Behaviour. The Wilcoxon signed rank test revealed a significant difference in the Emotional Eating Behaviour (EES) after Mentalization based treatment, n=6, z= 2.201, p<0.05.



Discussion

Mentalization based treatment (MBT) is an integrative intervention, combining elements of psychodynamic, attachment and social cognition approaches. The main focus of this intervention is on enhancing reflective functioning or mentalizing capacity of an individual. This would eventually stabilize the individual's sense of self and enhance stability in affect and interpersonal relationships.

The prime objective of this study was to evaluate the impact of Mentalization Based Treatment on Emotional Eating Behaviour. The participants of this study had undergone 10 sessions of individual therapy which extended to a period of 10 weeks, excluding Pre-test and Post- test sessions. The study was started with 7 research participants, out of which 1 research participant dropped out after the third session due to personal reasons.

The Reflective functioning certainty (RFc) measures hyper-mentalizing which indicates an unrealistic degree of certainty in respect to mental states. At pre-test, research participant's Reflective functioning certainty (RFc) was indicative of a more genuine mentalizing, acknowledging the opaqueness of mental states. The Reflective functioning uncertainty measures hypo-mentalizing and a high score indicates a high uncertainty about mental states, thus difficulties with mentalizing. At pre-test, research participant's Reflective functioning uncertainty (RFu) was indicative of a lack of knowledge about mental states and extreme difficulty in describing others in terms of mental states. The findings of the present study showed a reduction in the Reflective functioning uncertainty (RFu) after Mentalization based treatment. This difference was found to be statistically significant on Wilcoxon sign rank test ($z= 2.226, p<0.05$). Zeeck et al. (2021) conducted a pilot study to assess the efficacy of an



eating disorder (ED) day hospital programme following the introduction of mentalization-based treatment (MBT). The therapy significantly reduced eating disorders and other pathologies. Additionally, reflective functioning, issues with affect regulation, and interpersonal functioning all significantly improved.

The Emotional Eating Behaviour was assessed with Emotional Eating Scale (EES) where scores above cut off are indicative of significant reliance on using food to help manage emotions. All the participants scored above the cut off on EES. The findings of the present study showed a reduction in emotional eating behaviour after Mentalization Based Treatment. This difference was found to be statistically significant on Wilcoxon sign rank test ($z= 2.201$, $p<0.05$). Robinson et al. (2016) in their randomised controlled trial (RCT) in which they compared modified mentalization-based treatment (MBT-ED) to specialist supportive clinical management (SSCM-ED) in patients with eating disorders (EDs) and symptoms of borderline personality disorder (BPD). It was discovered that improvements in ED and BPD symptoms were seen in the entire research group throughout the course of the first 18 months in people who remained in the trial.

Conclusion

Mentalization-based Treatment (MBT) is recognized for its effectiveness in personality disorders especially borderline personality disorders, substance use disorder, eating disorder, trauma, and depression. The present study showed that, it was an effective therapy to reduce emotional eating behaviour in female population. It was also effective in enhancing the mentalizing capacity or reflective functioning and improving affect regulation. All the more, a short term individual Mentalization based treatment without any group therapy was a new



approach for this intervention. It proved to be successful with the limitation that even though there was an enhancement in the mentalizing capacity, it still did not reach genuine mentalization and though there was a reduction in emotional eating behaviour, it still did not break the cycle of emotional eating. However, the results of the present study correspond to the findings in the general mentalization based treatment literature. The bottom line is that, now there is a sample for the representation of the effectiveness of mentalization based treatment on emotional eating behaviours and hopefully a better direction from which to guide future research and application.

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