

Mindfulness as a Factor in the Relationship between Insecure Attachment Style, Neurotic Personality and Disordered Eating Behavior

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ABSTRACT

Mindfulness, conceptualized as a dispositional trait that differs across individuals, may potentially influence disordered eating behaviors. Previous research has independently identified insecure attachment style and neurotic personality traits as correlates of disordered eating behavior. Thus this current study will investigate whether neurotic personality traits, insecure attachment style and mindfulness predict disordered eating behavior controlling for gender differences. Participants ($N = 126$) completed the Adult Attachment Scale [1], the Three Factor Eating Questionnaire – Revised 18 [2], The Cognitive and Affective Mindfulness Scale – Revised [3] and the International Personality Item Pool [4]. The results of this cross-sectional study indicated that neurotic personality traits, insecure attachment style and mindfulness were related to disordered eating behaviors. The variance in disordered eating behaviors that was accounted for by neurotic personality traits and insecure attachment style was significantly reduced with the introduction of mindfulness. The results provides preliminary support for the inclusion of mindfulness training in disordered eating behavior interventions for individuals exhibiting an insecure attachment style and neurotic personality traits. Limitations and implications for further research are discussed.

Keywords: Mindfulness; Disordered Eating Behavior; Neuroticism; Attachment

1. Introduction

Achieving the ideal body shape for both males and females receives a great deal of attention in magazine articles, television and internet advertising campaigns. As a result, there exists an increasingly larger disparity between the average female and male body size and that of the thin idealized form portrayed in the media. Potential consequences of this discrepancy between actual and desired weight and shape include body dissatisfaction, negative affect, low self-esteem and disordered eating [5]. Therefore, it is important to identify potential psychological factors that increase the risk for an individual to engage in maladaptive behaviors to maintain their desired weight.

The emphasis in society and the media on appearance, such as the thin body ideal coupled with a negative perception of one's physical appearance has been identified as an important factor contributing to vulnerability to, and maintenance of disordered eating behavior [6]. Disordered eating behaviors can be defined as three dissimilar styles of eating behavior: restrained, uncontrolled and emotional [7]. Restrained eating involves restriction of food intake or dieting. Dieting has been found to play a role in the development of eating disorders [8] and

promotes unhealthy cycles of weight loss and gain [9]. Restrained eating can be driven by appearance related evaluative processes and cognitions, such as judgment of the self in terms of shape and weight [10].

Emotional eating has been defined as eating in response to negative emotions and has been identified as an essential aspect of binge eating [11]. Emotional eating can be perceived as an escape from experiencing negative emotions [12]. More recent research extends the concept of disordered eating to encompass binge eating associated with loss of control; purging or self-induced vomiting and excessive exercise or laxative consumption [13]. For the purpose of this paper, disordered eating will include both restrained/controlled eating and the loss of emotional control, resulting in emotional binge eating [14].

Disordered eating behaviors tend to be associated with female adolescents who are concerned with achieving the thin-ideal body shape, typically considered desirable for young females in Western countries [13]. The prevalence of young women engaging in disordered eating behaviors is increasing with the average age of onset decreasing. Consequently, this places young women at an increased

risk of developing psychological difficulties and clinically diagnosed eating disorders [13].

Attachment theory can assist in understanding the development of eating disorders. Insecure attachment is linked to several factors characteristic of disordered eating including anxiety, self-esteem and emotional dysregulation [15]. Similarly, neurotic traits of insecure attachment, characterized by anxiety and emotional instability also mirror characteristics of disordered eating [16].

In recent years, Individuals are becoming increasingly more vulnerable to developing disorderly eating habits that are similar to eating behaviors of individuals diagnosed with anorexia nervosa and bulimia nervosa [17]. These disordered eating behaviors range from obsession with food and calorie counting, starving diets, compulsive binge eating, excessive laxative abuse and fasting [17]. Given the recent increase in the prevalence of disordered eating behavior in society, research has focused on identifying the psychological factors associated with the risk of developing disordered eating behaviors.

Similarly, recent research has endeavored to establish efficacy for mindfulness training as an effective intervention to reduce emotional and physical discomfort [18]. Mindfulness is a skill that involves learning to pay attention to one's moment to moment experiences to increase an individual's capacity to become aware of their immediate experiences [19]. Mindfulness has recently been introduced in the domain of psychology as a promising intervention for a variety of psychological disorders or mental health problems, including disordered eating behavior [20]. Today, only a small number of studies have addressed the role of mindfulness as a protective factor against the development of disordered eating behaviors. Recent research suggests a higher level of mindfulness is associated with lower levels of disordered eating-related cognitions [21]. The present study extends this research by investigating the relationship between mindfulness and disordered eating behaviors among individual's exhibiting neurotic personality traits and/or an insecure attachment style.

1.1. Disordered Eating Behavior

There is a notable difference between disordered eating behavior and clinically defined eating disorders [17]. In striving to attain a cultural mandate of thinness, individuals engage in the behaviors such as rigid exercise routines, calorie restriction, chronic dieting, bingeing and purging, and the use of laxatives and diuretics to control their weight. However, these behaviors do not manifest the full range of psychological traits usually associated with clinical cases of an eating disorder, for example, interpersonal distrust and perfectionism [17]. This sub-clinical behavior has been labeled as 'imitative anorexia'

or 'weight preoccupation', where the individual displays some disordered eating behaviors, however, lack 'classical' eating disordered psychopathology [17]. The phenomenon remains widely accepted by the wider community as a means of dealing with weight and body image issues and still remains largely untreated by clinical professionals despite its rise in prevalence [17].

Jones, Bennett, Olmsted, Lawson and Rodin [13] research identified the need for more adequate treatment programs for an increasing trend in disordered eating behavior. They identified individuals who were vomiting or taking diet pills were not being treated for these problems as current treatment program focus specifically on clinically diagnosed eating disordered such as bulimia nervosa (BN) and anorexia nervosa (AN). Given the chronic and treatment resistant nature of eating disordered individuals it was important that treatment programs be developed to prevent the development of disordered eating behaviors [13].

1.2. Models of Disordered Eating

The two predominant models associated with disordered eating are the cognitive behavioral model [22] and the emotional regulation model [23]. The cognitive behavioral model of the development and maintenance of disordered eating behaviors, such as bingeing and purging, postulates that these behaviors begin with distorted cognitions pertaining to a thin physique and dieting, particularly in individuals with low self-esteem and concerns about their body image [20]. These individuals pay attention to social pressures to be thin and develop related maladaptive cognitions and beliefs, leading to calorie restriction and subsequent binge eating episodes. These individuals, in turn, develop cognitions associated with feelings of guilt, distress and lowered self-esteem. Individuals then overcompensate and engage in purging or excessive use of laxatives, which is typically followed by a renewed determination to restrict calorie intake.

Given this model highlights the detrimental nature of acting on maladaptive cognitions; mindfulness has emerged as a preventative skill as it fosters a willingness to accept the present and is not primarily focused on reaching a goal or ideal state [19]. Baer *et al.* [20] postulate that developing mindfulness skills will allow the individual to distance themselves from cognitively distorted thoughts pertaining to eating behavior and accept that they will pass without acting upon them.

In addition to the cognitive behavioral model of disordered eating behavior, the emotional regulation model hypothesizes that disordered eating is the result of maladaptive emotional regulation. For example, Sim and Zeman, [25] identified girls who displayed a high level of disordered eating behavior reported elevated levels of negative affect and difficulties coping constructively

with negative emotion. Disordered eating behavior and experiential avoidance also demonstrates the efficacy of the emotional regulation model [23]. Experiential avoidance is classified as an unwillingness to experience negative feelings, sensations or thoughts and actively altering or avoiding experiences in which they are likely to occur. Research suggests that individuals display eating behaviors to alleviate emotional discomfort and engage in binge eating to avoid or reduce emotional distress [23]. This in turn however increases negative emotions after the consumption of food; therefore, eating is not an effective long term strategy to cope with emotions, rather a short term experiential avoidance technique [20]. Mindfulness can enable individuals who engage in disordered eating behavior to more fully experience their negative emotions, allowing them to pass, rather than engaging in disordered eating behaviors as a means of experiential avoidance [26].

1.3. Neuroticism

When considering the factors contributing to disordered eating behavior, personality more specifically, neuroticism is a key variable [27]. Podar, Hannus and Allik [28] identified various indicators of neuroticism such as increased experiences of negative emotions and difficulties implementing coping strategies to regulate emotions to be the strongest predictor of disordered eating behaviors.

Claridge and Davis [29] argues that neuroticism acts as an emotional amplifier by inflating pre-existing personality traits from adaptive, healthy, behaviors to unhealthy behaviors. Individuals displaying more neurotic personality traits have difficulty in regulating distressing emotions and are at increased risk of developing disordered eating behavior as a means of avoiding strong disturbing emotions [27].

Maclaren and Best [30] examined the individual temperaments and personality traits that increase an individual's vulnerability to develop disordered eating behaviors. Consistent with previous research the results showed participants who exhibited a high level of neurotic traits such as anxiety, anger, hostility and self-consciousness, reported significantly higher levels of disordered eating behaviors compared to those participants with lower levels of neurotic traits.

1.4. Insecure Attachment

Based on the responsiveness and attentiveness of the adult caregiver, children develop from a young age, an internal working model of themselves and others which facilitates the development of either secure or insecure developmental pathways [31]. Samuolis, Layburn and Schiaffino [32] propose that those with a secure internal working model or attachment are more resilient to psy-

chological problems and better equipped to deal with stressful situations; whereas those with an insecure internal working model or attachment may be predisposed to psychological distress and psychological problems. Avoidant attached individual's display a pervasive discomfort with intimacy and closeness whereas anxious individuals have a chronic fear of rejection and abandonment [31].

Individuals raised with an insecure attachment to their caregivers tend to have greater difficulties regulating emotions, and tend to utilize maladaptive coping strategies such as disordered eating behaviors as a way to regulate emotion [33]. Elgin and Pritchard's [15] research which investigated gender and attachment style as risk factors for disordered eating behavior showed a strong relationship between insecure attachment styles and disordered eating behaviors in females which is consistent with previous findings. Given the relationship research has unveiled between personality factors, insecure attachment and disordered eating behaviors, the present study examined the potential for mindfulness as a protective factor against the development of disordered eating behavior in individuals who display neurotic traits and insecure attachment styles.

1.5. Mindfulness

The benefits of mindfulness are increased mental wellbeing, lower depression, less emotional volatility, increased self-acceptance and self-compassion [24, 37]. Mindfulness is a skill that increases the capacity to pay attention to internal experiences in the present moment with a non-judgmental attitude [34]. Furthermore, accumulating evidence suggests that mindfulness promotes willingness to approach and experience emotions, and has the potential to reduce avoidance based coping, such as disordered eating behaviors e.g. emotional eating [35, 36, 38]. For example, Masuda and Wendell's [21] study indicated that mindfulness acts a partial mediator between disordered eating cognitions and negative psychological outcomes. These results suggest that mindfulness is an important factor in the relationship between distorted cognitions and negative psychological outcomes.

Mindfulness-based interventions have been shown to be effective in the treatment of disordered eating behaviors such as mindfulness-based cognitive therapy [39], which encourages individuals to employ a non-judgmental approach towards disordered eating cognitions whilst drawing attention to their bodily sensations such as hunger and satiety cues. It also teaches individuals to be mindful when eating high calorie foods typically included in binges and focus on the associated emotions whilst eating as it is postulated that disordered eating behavior could be a strategy to avoid negative emotions and experiences [40,20]. Research has supported the ef-

ficacy of MBCT, resulting in significant improvement in symptoms of bingeing and ability to improve non-judgemental acceptance of an individual's problems [20]. Further, it was highlighted individuals have the ability to improve their mindfulness skills as a result of mindfulness training.

The current study investigates the relationship between disordered eating (cognitive restraint, emotional eating and unrestrained eating), insecure attachment styles (avoidant and anxious), personality characteristics (neuroticism) and mindfulness. The aim of the study was to investigate the factors influencing or contributing to disordered eating behaviors. Building on the previous research presented in this review, the present study proposes: that disordered eating will be positively related with insecure attachment styles and neurotic personality traits.; that mindfulness will be significantly negatively related with disordered eating behavior and that; mindfulness will reduce the variance in disordered eating behavior's accounted for by neurotic personality traits and insecure attachment styles.

2. Method

2.1. Participants

126 undergraduate psychology university students age ranged from 18 to 60 years ($N=24$) were recruited for this study. The sample consisted of 119 females (86.9%) and 18 male participants (13.1%); 3 participants (1.6%) did not report their gender. Of the 137 participants 34 (24.8%) stated they actively practiced meditation on a weekly basis.

2.2. Materials

2.2.1. Demographic Questionnaire

A demographic questionnaire elicited information on participant's age, gender, and meditation practices.

2.2.2. The Adult Attachment Scale (AAS)

The scale was an 18 item inventory used to measure participant's style of attachment; secure, anxious and avoidant. Scores were summed for each of the six questions to give individual scores on each of the styles of attachment with higher scores on one style indicating a dominant style. The AAS maintains adequate psychometric properties and appropriate internal consistency, with Cronbach's alpha ranging from $\alpha = .69$ -.85 [1].

2.2.3. The International Personality Item Pool (IPIP)

This scale was a 50 item scale used to measure participant's personality including extraversion, Agreeableness, conscientiousness, Openness and Neuroticism. Internal consistency estimates (Cronbach's alpha) for the five subscales reportedly range from $\alpha = .79$ - $\alpha = .87$ [41]. The

IPIP possesses convergent validity as it is highly correlated with the NEO-IP.

2.2.4. Cognitive and Affective Mindfulness Scale – Revised

The scale was a 12 item measure of participants' mindfulness skills including attention to and awareness of the present moment. Participants' final score is derived from summing all total scores. Higher scores on the CAMS-R reflect higher levels of mindfulness. The CAMS-R possess convergent validity with significant correlated with other mindfulness scales such as the MAAS ($r=.5$, $p<.001$) and other measures of emotional clarity, emotional regulation, wellbeing and distress [42]. The scale has demonstrated good internal consistency and concurrent and discriminate validity [43].

2.2.5. The Three Factor Eating Questionnaire-Revised 18

This scale was an 18 item scale that measure participant's current dietary practice and measures three different aspects of eating behavior; restrained eating, uncontrolled eating and emotional eating. A total score is achieved by summing subscale scores. Higher scores are indicative of greater cognitive restraint, uncontrolled, or emotional eating [14]. The internal consistency of the factors as measured by Cronbach's alpha ranged from $\alpha = .79$ for cognitive restraint, $\alpha = .82$ for uncontrolled eating, and $\alpha = .89$ for emotional eating [44].

2.3. Analysis and Design

The data was analyzed using three hierarchical multiple regression. In the first, the independent variables were anxious attachment and mindfulness, with a dependent variable of disordered eating behaviors. In the second, the independent variable was avoidant attachment and mindfulness, with a dependent variable of disordered eating behaviors. In the third, the independent variables were neurotic personality traits and mindfulness, with the dependent variable of disordered eating behaviors. Minor variables such as age, gender and meditation practice were entered initially with the independent variables entered according to correlation size [45].

3. Results

Data was cleaned and prepared prior to running the analysis. A correlation analysis was run between the major variables. As these variables met assumptions of linearity, Pearson's correlations were used. **Table 1** displays these results.

These correlations indicate that as mindfulness increases, disordered eating behaviors decrease. Further, those participants who reported high on mindfulness also

reported low scores on insecure attachment styles and neurotic personality traits.

3.1. Analysis

In a regression analysis predicting mindfulness from anxious attachment style, anxious attachment accounted for significant variance in disordered eating (adjusted $R^2 = .06$, $F = 7.49$, $p = .007$). Anxious attachment accounted for 5.7 % variance in mindfulness, R^2 change = .06, F change (1, 124) = 7.49, $p = .007$, and the coefficient for anxious attachment was significant, ($\beta = -.24$, $p = .007$).

Table 2 summarizes the result of the regression analysis predicted disordered eating behavior from anxious attachment, step 1 and mindfulness, step 2.

At step 1, Anxious attachment accounted for a significant 3.2% of the variance in disordered eating behavior $R^2 = .03$, $Adjusted R^2 = .02$, $F = 4.07$, $p = .046$. The coefficient for disordered eating behavior was $\beta = .18$, $p = .046$. Anxious attachment accounted for 3.2% variance in disordered eating behavior, R^2 change = .03, F change (1, 124) = 4.07, $p = .046$. Mindfulness was entered at step 2 and accounted for a significant amount of variance in disordered eating behavior, $R^2 = .14$, $Adjusted R^2 = .13$, $F = 19.76$, $p = .000$. The coefficient for mindfulness was significant, ($\beta = -.37$, $p = .000$). Mindfulness accounted

for 13.7% of the variance in disordered eating, R^2 change = .14, F change (1,124) = 19.76, $p = .000$. When mindfulness was entered at step 2, the coefficient for anxious attachment decreased to $\beta = .18$, $p = .046$ to become a non significant beta coefficient $\beta = .09$, $p = .269$.

In a regression analysis predicting mindfulness from avoidant attachment style, avoidant attachment style accounted for a significant variance in mindfulness, $R^2 = .28$, $Adjusted R^2 = .21$, $F = 34.36$, $p = .000$. Avoidant attachment accounted for 21.7 % variance in mindfulness, R^2 change = .22, F change(1, 124) = 34.36, $p = .000$, and the coefficient for avoidant attachment was significant, ($\beta = -.47$, $p = .000$).

Table 3 summarizes the result of the regression analysis predicted disordered eating behavior from avoidant attachment, step 1 and mindfulness, step 2.

Table 1. Means, S.Deviations for all Variables.

	1	2	3	4	5	M	SD
1						41.5	8.64
2	.18*	.				13.5	4.14
3	.19*	.29**				27.8	7.00
4	-.37**	-.24**	-.47**			32.3	4.65
5	.36**	.45**	.46**	-.60**		24.6	5.98

* $p < .05$. ** $p < .01$; Note. 1. Disordered Eating 2. Anxious Attachment 3. Avoidant attachment 5. Mindfulness 6. Neuroticism.

Table 2. Hierarchical Multiple Regression Analysis Predicting Disordered Eating Behaviour from Anxious Attachment and Mindfulness with Standardised and Unstandardised Coefficients, R^2 , Adjusted R^2 and 95% Confidence Intervals.

Predictor	R2	Adj R2	β	B	SE B	95% CI for B
Step 1	.032	.02				
Constant				36.47	2.61	[31.2,41.63]
Anxious Attachment			.18*	.37	.18	[-.01,.73]
Step 2	.15	.13				
Constant				59.7	6.23	[47.35,72.04]
Anxious Attachment			.09	.12	.18	[-.15,.55]
Mindfulness			-.35***	-.64	.16	[-.96,-.33]

Note. $N = 126$. $CI = confidence interval$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. Hierarchical Multiple Regression Analysis Predicting Disordered Eating Behaviour from Avoidant Attachment and Mindfulness with Standardised and Unstandardised Coefficients, R^2 , Adjusted R^2 and 95% Confidence Intervals.

Predictor	R2	Adjusted R2	β	B	SE B	95% CI for B
Step 1	.03	.03				
Constant				35.07	3.12	[28.86, 41.26]
Avoidant Attachment			.19*	.23	.11	[-.016, .447]
Step 2	.14	.03				
Constant				62.60	7.78	[47.2, 78.09]
Avoidant Attachment			.02	.02	.12	[-.21, .25]
Mindfulness			-.36***	-.67	.17	[-1.02, -.32]

Note. $N = 126$. $CI = confidence interval$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Avoidant attachment, entered at step 1, accounted for a significant 3.5% of the variance in disordered eating behavior, $R^2\text{change} = .03$, $F\text{change} (1, 124) = 4.07$, $p = .036$. The coefficient for disordered eating behavior was $\beta = .19$, $p = .036$.

Entered at step 2, mindfulness accounted for a significant amount of variance disordered eating behavior, $R^2\text{change} = .14$, $F\text{change} (1,124) = 19.76$, $p = .000$. The coefficient for mindfulness was significant, ($\beta = -.37$, $p = .000$).

When mindfulness was entered at step 2, the coefficients for avoidant attachment decreased from, $\beta = .19$, $p = .036$ to become a non-significant beta coefficient ($\beta = .02$, $p = .845$).

In a regression analysis predicting mindfulness from neurotic personality traits, neurotic personality traits account for a significant variance in mindfulness, $R^2 = .36$, $Adjusted R^2 = .36$, $F = 70.48$, $p = .000$. The coefficient for neurotic personality trait was also significant, ($\beta = -.60$, $p = .000$).

Table 4 summarizes the result of the regression analysis predicted disordered eating behavior from neurotic personality traits, step 1 and mindfulness, step 2.

Neurotic personality traits, entered at step 1, accounted for a significant 12.7% in disordered eating behavior, $R^2\text{change} = .13$, $F\text{change} (1, 124) = 18.07$, $p = .000$. The coefficient for neurotic personality trait was significant, ($\beta = -.60$, $p = .000$). Entered at step 2, mindfulness accounted for a significant amount of variance in disordered eating behavior, $R^2\text{change} = .36$, $F\text{change} = (1, 124) = 70.48$, $p = .000$, and the coefficient for mindfulness was significant, ($\beta = -.37$, $p = .000$). When mindfulness was entered at step 2, the coefficient for neurotic personality trait decreased to, $\beta = .21$, $p = .045$.

4. Discussion

This study investigates whether neurotic personality traits, insecure attachment style and mindfulness predicts

disordered eating behavior. The results indicate that participants who reported high levels of mindfulness, few neurotic personality traits, and secure attachment style reported low levels of disordered eating behaviors. The prediction that disordered eating would be associated with insecure attachment styles and neurotic personality traits was supported. This finding supports previous research which suggests that individuals with neurotic or insecure attachment traits, who display disordered eating behaviors, do so in order to utilize a temporary coping strategy such as restrained eating or binge eating to regulate aversive emotions [27, 15]. The prediction that mindfulness would be significantly associated with disordered eating behaviors was supported, indicating that individuals reporting high levels of mindfulness also reported low levels of disordered eating behavior.

The prediction that mindfulness practice would reduce the amount of disordered eating behavior for individuals displaying neurotic personality traits and insecure attachment styles was supported. This finding is consistent with previous research that suggests that mindfulness reduces an individual’s tendency to engage in disordered eating behaviors [36, 38].

The results of this current study indicate a general trend that participants who reported high levels of mindfulness also report low levels of disordered eating behavior, therefore further analyses was conducted to establish the potential for mindfulness to act as a protective factor for individuals with an insecure attachment style against developing disordered eating behavior. Mindfulness has the potential to assist individuals who score high on insecure attachment by increasing their capacity to be with their aversive emotions or cognitions with a non-judging attitude rather than engaging in maladaptive coping strategies such as disordered eating [15,20,21].

The results of the present study also support previous research that identifies a relationship between neurotic personality traits and disordered eating behaviors [30].

Table 4. Hierarchical Multiple Regression Analysis Predicting Disordered Eating Behaviour from Neurotic Personality Traits and Mindfulness with Standardised and Unstandardised Coefficients, R², Adjusted R² and 95% Confidence Intervals.

Predictor	R2	Adjusted R2	β	B	SE B	95% CI for B
Step 1	.13	.12				
Constant				28.78	3.08	[22.68, 34.87]
Neuroticism			.36***	.51	.12	[.27, .75]
Step 2	.16	.15				
Constant				48.73	8.93	[31.04, 66.41]
Neuroticism			.21*	.30	.15	[.007, .59]
Mindfulness			-.24*	-.45	.19	[-.83, -.075]

Note. $N = 126$. $CI = \text{confidence interval}$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Participants in the current study who possess neurotic personality traits rated higher on disordered eating behaviors than did their counterparts who scored lower on neurotic personality traits. These results support previous research that has identified that neurotic personality traits exacerbate the development of disordered eating behaviors as it is believed that these individuals engage in maladaptive coping strategies to avoid experiencing aversive emotions or cognitions in an attempt to avoid or reduce their negative experiences [28].

4.1. Limitations and Future Research

The limitations of this study warrant mention including the limit of generalizing the findings to the general population as the sample consisted of predominantly of Caucasian females, aged between 18-26 years of age, from a university population. It is recommended that future research should include a more representative sample in terms of gender, age and education levels. Moreover it would be beneficial to analyze these variables when controlling for gender differences as the overrepresentation of females in the current study may have artificially inflated the results. Given the current literature on disordered eating focuses on the western population, it would be notable to conduct similar research on a more ethnically diverse sample of women.

4.2. Conclusions

To date the disordered eating literature has explored only a limited number of factors that have the potential to act as protective factors for women and men from developing clinically diagnosed eating disorders. The results from the present study offers preliminary support for mindfulness as a protective factor for women with insecure attachment or neurotic personality traits from developing disordered eating behaviors.

These findings provide important implications for future research as the results indicate that mindfulness has the potential to act as a buffer between insecure attachment styles, neurotic personality traits and disordered eating behavior. These findings provide preliminary support for mindfulness as a potential early intervention strategy to reduce the tendencies to engage in disordered eating behaviors in women with neurotic personality and insecure attachment style.

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