

Contribution of anger expression & anger suppression in adolescents having emotional eating



Psychology

KEYWORDS : Emotional eating, anger suppression, anger expression, adolescents

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ABSTRACT

Emotional eating is the tendency to eat in response to negative emotions. The main purpose of present investigation was to study the contribution of anger expression and anger suppression in adolescents having emotional eating.

The sample of the present study comprised 200 adolescent participants (103 males and 97 females). The tools used for present investigation were state-trait anger expression inventory-2 [1] and three factor eating questionnaire revised-21 [2].

Results: Results of regression analyses showed that trait anger emerged as a positive predictor of emotional eating followed by anger expression index emerged as a negative predictor of emotional eating in case of both adolescent girls and adolescents boys. Further, in adolescent girls' anger expression-in emerged as negative predictor followed by anger control-in emerged as a positive predictor.

Conclusions: So, it can be concluded that the present study highlights that emotional eating and other related constructs subsumed into clinical psychology as well as in health psychology will continue to find their way into prevention and therapy for people in general, and for the adolescents and young adults specifically.

INTRODUCTION:

Emotional eating, i.e., using food to cope with negative emotions, has been cited as a common problem among adolescents especially for those that are severely obese [3]. Adolescence is a very essential point of study because it is often viewed as a time of marked stress, and has been identified as a critical period in the development of obesity [4] and it has also been viewed as the age of onset for eating disorders [5]. The concept of emotional eating has been defined by various social scientists. According to Lluh et al. [6], "Emotional eating is an expression of beliefs about the frequency of eating when being emotional". According to Macht, [7], "Emotional eating theory postulates that negative emotions, such as anxiety, induce eating and in turn reduce and alleviate the negative emotion." It can be inferred that emotional eating is conceptualized as eating in response to a range of *negative emotions* such as anxiety, depression, anger, loneliness, and inadequate coping with negative affect. Emotional eaters consume foods to reduce and alleviate negative emotions, such as anger.

Anger suppression has been conceptualized as a form of avoidance [8], and generally considered to be an ineffective coping mechanism associated with physical health problems, such as elevated blood pressure [9] and can also have negative psychological consequences for adolescents, such as encouraging the development of eating problems. A recent study by Waller et al. [10] too, has shown the links between anger and core beliefs in eating pathology. Van Daalen-Smith [11], argued that there is no seemingly right way for females to deal with their anger as there are social consequences imposed upon them when they express their anger, and on the other hand when they try to suppress their anger they have to bear mental or physical health consequences. Mental health issues that have been associated with loss of voice and anger suppression include poor self-esteem [12], depression [13], and eating disorders [14, 15].

Thus, it can be said that anger is an aversive emotional state which causes distress and, perhaps, a desire to engage in emotional eating as a means to reduce the emotional state or replace it with a less aversive emotion, such as guilt. The present study was an initial step in this direction. The cornerstone of the study was to examine the contribution of anger expression towards emotional eating in adolescents. Another aim of the present study was to examine the contribution of anger suppression

towards emotional eating in adolescents.

Methods

Participants

The study comprised of 200 adolescents (103 males and 97 females) with the age range of 17 to 20 years (i.e., late adolescents); and studying in 10+2 classes to graduation belonging to urban areas. Selected from various governments, private schools and colleges of Punjab state (India). Incidental sampling was carried out.

Measures

The State-Trait Anger Expression Inventory-2 (STAXI-2) [1] is a 57-item inventory, which measures the intensity of anger as an emotional state (state anger) and the disposition to experience angry feelings as a personality trait (trait anger). This instrument consists of six scales, and five sub-scales: state anger, trait anger, anger expression-out, anger expression-in, anger control-out, anger control-in, and an anger expression index. The Anger Expression Index (*AX Index*) includes all items of AX-O, AX-I, AC-O, AC-I, i.e., 32 items and it provides a general index of anger expression based on responses to the AX-O, AX-I, AC-O, and AC-I items. Its internal consistency reliability has a value, ranging from 0.73 to 0.95 for the total scale, and from 0.73 to 0.93 for the subscales. *Suppressed anger* was measured by eight items from the State-Trait Anger Expression Inventory-2 (STAXI-2) which were used to measure modes of anger Expression. Suppressed anger was assessed through the following four items from the anger-in subscale (Cronbach's $\alpha = 0.60$). Another four items, which stemmed from the anger-out subscale, were used to assess angry temperament (Cronbach's $\alpha = 0.87$). *Three Factor Eating Questionnaire Revised-21 [TFEQ-R21]* [2] is a 21-item self-report instrument used to measure Disordered Eating Behaviors. The TFEQ-R21 items 1 through 16 are scored on a four-point likert scale ranging from 1 ("definitely true") to 4 ("definitely false"). Items 17 through 20 have a unique four-point likert-type scale. Item 21 is scored on an eight-point scale anchored by "I eat whatever and whenever I want to" (1) and "I am constantly limiting my food intake, never 'giving in'" (8). The revised version (TFEQ-R21) is made up of three subscales: Cognitive Restraint, Emotional Eating, and Uncontrolled Eating [16]. Higher scores indicate greater cognitive restraint, uncontrolled eating, or emotional eating. Internal consistency for each subscale has been found to range from 0.76 to 0.85, based on Cronbach's alpha [2]. The TFEQ-R21's convergent validity has been found to be high,

0.74 to 0.89 [17].

PROCEDURE:

For assessing emotional eating and anger in adolescents, a set of two questionnaires were given to the participants. A rapport was established with participants before beginning the investigation, and informed consent was taken prior from their parents. They were assured that their personal information as well as their responses would be kept strictly confidential. The instructions for each questionnaire were given at the top of each scale. Scales measuring emotional eating (TFEQ-21), anger expression and anger suppression (STAXI-2) were administered, and scoring for each scale was done as mentioned in their respective manuals.

STATISTICAL ANALYSES:

In order to analyze the contribution of anger expression and anger suppression (State anger, trait anger, anger expression-in, anger-expression-out, anger control-in, anger-control-out and anger expression index) towards emotional eating in adolescents, stepwise multiple regression analyses were applied. The data was analyzed by using the software SPSS-20.

Results

Regression analyses:

Stepwise multiple regression analyses revealed that 65% (R²=0.65, p<0.01) of the variance in emotional eating in females (table 1) was being explained by trait anger and anger control-in (which emerged as a positive predictor of emotional eating) and anger expression index and anger expression-in (which emerged as a negative predictor of emotional eating).

In case of adolescent girls, regression analyses revealed that trait anger was the main positive predictor of emotional eating. It accounted for 62% of the variance in emotional eating in girls followed by anger expression index, which explained an additional 1% of variance and anger expression index, again followed by anger expression-in, which again explained additional 1% of variance in emotional eating in girls. Similarly, anger expression-in was followed by anger control-in, which explained an additional 1% of variance in emotional eating in girls.

Stepwise multiple regression analyses revealed that 70% (R²=0.70, p<0.01) of the variance in emotional eating in boys (table 2) was being explained by trait anger and anger expression index. Trait anger emerged as positive predictor of emotional eating whereas, anger expression index emerged as negative predictor of emotional eating.

In case of adolescents boys, trait anger emerged as the main positive predictor of emotional eating (which explained 69% of variance in emotional eating). This was followed by anger expression index which emerged as a negative predictor of emotional eating (and explained an additional 1% of variance in emotional eating).

DISCUSSION

Emotional eating, i.e., using food to help cope with negative emotions, has been cited as a common problem for those that are severely obese [3]. The aim of the present study was to examine the contribution of anger expression and anger suppression in adolescents having emotional eating. Thus, from results of regression analyses, it was interesting to note that trait anger emerged as a positive predictor of emotional eating followed by anger expression index emerged as a negative predictor of emotional eating in case of both adolescent girls and adolescents boys. Further, in adolescent girls' anger expression-in emerged as negative predictor followed by anger control-in emerged as a positive predictor.

As, trait anger is an internal pre-disposition which forces person to react in a negative situation. The individuals who are high on trait anger lack adequate anger expression, which may make them to act inappropriately during stress-inducing situations, leading to emotional eating. Deffenbacher et al., [18], found that individuals with high trait anger, a disposition of anger proneness, tend to experience anger frequently and intensely. They get angry easily while being provoked [19], and experience anger for longer durations [20].

Furthermore, adolescents often used emotional eating behavioral pattern as a substitute of suppressed feelings of anger. To support the current research findings, a study was conducted by Zaitsoff, et al. [21] which also revealed that adolescents with higher eating disorder symptoms scores had higher levels of anger inhibition and silencing the self-scores.

So, current research proves that in adolescents, suppression of anger leads to emotional eating which is a maladaptive coping style.

CONCLUSION

To conclude it can be said that emotional eating is a pervasive problem for both adolescent boys and girls (especially age of 17-20) are often faced with much change and are more susceptible to the pressures and influences of their surroundings. Early recognition and treatment of emotional eating, especially anger management coupled with other psychotherapies will help to avoid the long-term physical and emotional eating problems.

Table 1: Stepwise multiple regression analyses for emotional eating in adolescent girls (N=97)

Variables	T-A		A-IX		AXI		ACI		R ²	F	R ² Δ	F (For R ² Δ)
	a	b	β	b	β	b	β	b				
Trait Anger (T-A)	-61.83	1.88	.80						.62	156.67*		
Anger expression Index (A-IX)	28.11	1.46	.61	-1.16	-.22				.63	83.80*	.01	2.54
Anger Expression-in (AXI)	33.09	1.42	.59	-9.87	-.19	-.22	-.10		.64	57.22*	.01	2.58
Anger Control-in (ACI)	3.87	1.43	.60	-.65	-.12	-.33	-.14	.34	.10	43.86*	.01	2.62

**p<0.01

Table 2: Stepwise multiple regression analyses for emotional eating in adolescent boys (N=103)

Variables	T-A		A-IX		R ²	F	R ² Δ	F (For R ² Δ)	
	a	b	β	b					β
Trait Anger (T-A)	-64.52	1.92	.84			.69	234.01		
Anger Expression-in (A-IX)	-8.72	1.69	.72	-.72	-.15	.70	121.41	.01	34.40**

**p<0.01

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