

# Alexithymia in Relation to Family Environment among Adolescents

## Abstract

The main aim of the study was to investigate the relationship of alexithymia with family environment among adolescents. A sample of 210 adolescents (105 males, 105 females) from different schools of Punjab was taken and assessed using Toronto Alexithymia Scale and Family Environment Scale. The analysis of results indicated that alexithymia was negatively related to family dimensions of cohesion, independence, active recreational orientation, moral religious emphasis; and was positively related to conflict in the family dimensions. It was also found that females were facing significantly more difficulties in describing their feelings as compared to males. The results and their implications are discussed in detail in the paper.

**Keywords:** Alexithymia and family environment

## Introduction

Alexithymia is a sub clinical personality trait characterized by the inability to identify, interpret, and verbalize physical signs of emotional arousal in oneself and others. It may cause difficulty in identifying and describing feelings and bodily sensations of emotional arousal and cause an externally oriented thinking which include restricted imagination, fantasies, and abstract thinking. The basic characteristics of alexithymia are marked as dysfunction in emotional awareness, social attachment, and interpersonal relations.

The term alexithymia is coined by Peter Sifneos in 1972. The word 'Alexithymia' is derived from Greek which means a lack of words to express feelings. Alexithymic people have limited ability to find the words to express and describe their emotions. Sifneos (1973) described that alexithymic individuals have a restricted emotional functioning and imagination, problem in interpersonal relations and inability to find appropriate words to describe emotions.

The family environment is a most important source of support for developing adolescents, providing close relationships, strong parenting skills, good communication, and modeling positive behaviors. Family environment bearing healthy and high quality characteristics affects psychological, emotional and social aspect that play important role for the development of child. Wiltfang & Scarbecz (1990) have defined the characteristics of family environment as the social status of the parents like educational level, occupational status and professions of the parents as well as the quality of the residence, working conditions of the parents and relations of the siblings. Grolnick & Slowiaczek (1994) define the environment in which the family lives as a setting of learning which has vital effects on the child. The sources of the family environment affect the child to a great degree while gaining experiences relating to life. The quality of the environment in which the child grows up lays the pathway of his /her lifelong functioning.

## Alexithymia and Family Environment

The study conducted by M Faramarzi, S Khafri (2017) on total of 133 students at Babol University of Medical Sciences (Medicine, Dentistry, and Paramedicine). The results of study demonstrate that alexithymia plays significant role in decreasing self-efficacy in academic students. The results reveal that alexithymia is high in academic students and affects, goal orientation, self-regulation and academic function.

This study conducted by Renske van der Crujisen, Jennifer Murphy, Geoffrey Bird (2019) on 140 adolescents aged 11 to 21 years (77 female). The aim of study was to explore the potential role of alexithymia in the development of depression and anxiety, separately for females and males. The results found that pubertal maturation in females was associated with alexithymic traits, as well as symptoms of depression and

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anxiety. By accounting alexithymia, the relationship between puberty and depression and anxiety was reduced in females. Thus, it was concluded from results alexithymic traits may have differential consequences for males and females, and contribute towards increased depression and anxiety symptoms among females during adolescence.

Fataneh Naghavi (2011) studied the correlations of family functioning and Alexithymia of early adolescents under a research titled "Family Functioning and Early Adolescents' Psychopathology" on 234 Iranian students. The results indicated a statistically significant relationship, positive with high magnitude, between family functioning and alexithymia of early adolescents. Early adolescents with category of high family functioning were reported to display higher alexithymia.

Lumley, Mader, Gramzow and Pepineau (2000) studied the family and parental correlations of alexithymia in a research titled "Family factors associated with alexithymia" on 127 young people who were assessed by alexithymia scale (TAS-20) and 80 of their mothers who filled out TAS-20 about themselves. The results showed that overall family pathology was related with alexithymia. Difficulty in identifying feelings was related with the affective involvement of a malfunctioning family, thinking with external orientation, with parental control of family behavior, and defective imagination, with inefficiency in solving family problems.

The other study conducted by Berenbaum and James (1994) which was specifically addressed towards the relationship between alexithymia and features of the family environment. The finding suggests that difficulty in identifying and communicating emotion result from a family environment in which the child is not provided with models of the nonthreatening expression of emotion.

Bronstein, Briones, Brooks, and Cowan (1996) conducted two studies, one report increased negative expressiveness, and another reports increased expressiveness for the negative emotions traditionally associated with the other sex. The study shows that greater anger expressed by girls and greater sadness expressed by boys. As for the impact of positive parental or family expressiveness on children's emotionality, it might expect that parents' positive expressiveness is associated with children's greater positive emotionality (which it is increasingly with age) and reduced negative emotionality (which it isn't).

Wentzel and Feldman (1996) and McKeown, Garrison, Jackson, Cuffe, Addy, and Waller (1997) have found that adolescents' perceptions of low cohesion within their families were associated with heightened feelings of depression and reduced social acceptance. The research also report that levels of cohesion reported by male and female adolescents have different implications for their personal and social adjustment. Females who were associated lower levels of family cohesion reports of feeling excluded and depressed, whereas male reports were not associated with their perceptions of family cohesion.

## Objectives of the Study

1. To determine the relationship between alexithymia and family environment among adolescents.
2. To explore gender differences in alexithymia and family environment in adolescents.

## Method

### Participants

The present study was carried out among 210 (105 females and 105 males) adolescents from different schools in Patiala, Punjab. The subjects were from rural and urban background with age range of 12-15 years. The sample was randomly chosen after obtaining informed consent.

### Hypothesis

Based on review of literature, the following hypotheses were proposed:-

1. It is expected that family conflict would be positively related to alexithymia while family cohesion, expressiveness and independence would be negatively related to alexithymia in adolescents.
2. It is expected that male adolescents would be higher in family conflict and independence and lower in family cohesion and expressiveness as compared to female adolescents.
3. It is expected that male adolescents would be higher in alexithymia as compare to female adolescents.

### Measures

To assess the sample for the study, following tools were used:-

#### **Alexithymia Questionnaire for Children (Rieffe, C., Oosterveld, P., & Meerum Terwogt, M., 2006):**

Rieffe's Alexithymia Scale (2006), which is consistent with the original adult questionnaire for alexithymia (Toronto Alexithymia Scale, TAS-20) developed by Bagby, Parker & Taylor, (1994), is used to assess alexithymia. It consisted of 20 items, representing 3 factors Difficulty identifying feelings (DIF, 7 items), Difficulty Describing Feelings (DDF, 5 items) and Externally-Oriented Thinking (EOT, 8 items). It is a three-point scale and higher the score higher is the level of alexithymia.

The three sub scales are described as:

1. Difficulty identifying feelings (DIF) assesses the ability to identify feelings and to distinguish them from the somatic sensations that accompany emotional arousal
2. Difficulty Describing Feelings (DDF) assesses the ability to describe feelings to other people
3. Externally-Oriented Thinking (EOT) is sub-factor of the alexithymia that assesses the thinking involving impoverished fantasies, and a focus on external concrete data of the sense environment.

#### **Family Environment Scale (Form R) (Moos, R.H., & Moos, B.S., 1994)**

The Family Environment Scale (FES) scale consisted of 10 sub scales pertaining to the social environmental characteristics of different types of families. FES real form (form R) was used for asking the respondent to describe their family as they currently perceive their family environment. The 90

items are categorized under 3 dimensions with 10 different sub-scales. The respondents are required to mark 'true' or 'false' as their response to each statement.

Three dimensions are namely:

### Relationship Dimension

The relationship dimension is assessed by three subscales:

1. *Cohesion (CO)*: It refers to degree of commitment and support that family members provide for one another.
2. *Expressiveness (EX)*: It Indicates the extent to which the family members are encouraged to express their feelings directly.
3. *Conflict (CON)*: It describes the amount of expressed anger, aggression and conflict among family members.

### Personal Growth Dimension

This dimension includes five sub scales described below:

1. *Independence (IND)* subscale measures the extent to which family members are assertive, self-sufficient and they make their own decisions.
2. *Achievement Orientation (AO)* assesses the extent to which school and work activities cast into an achievement-oriented or competitive framework.
3. *Intellectual cultural orientation (ICO)* measures the level of interest in political, intellectual, and cultural activities.
4. *The Active Recreational Orientation (ARO)* subscale measures the amount of participation in social and recreational activities.
5. *Moral Religious emphasis (MRE)* of personal growth dimension indicates the degree of emphasis on ethical and religious issues and values in the family.

### System Maintenance Dimension

The third dimension of family environment i.e. the system maintenance dimension was covered under two subscales: Organization and Control.

**Table No.1: Correlation between alexithymia and family environment among adolescents (N=210)**

	Alexithymia				
	Dimensions	DIF	DDF	EOT	Total alexithymia score
Dimensions Of Family Environment Scale	CO	-0.21**	-0.27**	-0.04	-0.26**
	EX	-0.08	-0.06	-0.01	-0.09
	CON	0.26**	0.09	0.14*	0.27**
	IND	-0.05	-0.14*	-0.29**	-0.24**
	AO	-0.09	0.11	0.23**	0.10
	ICO	-0.03	0.03	0.03	0.01
	ARO	-0.12	-0.03	-0.13	-0.15*
	MRE	-0.19**	-0.24**	0.03	-0.20**
	ORG	-0.17*	-0.11	0.09	-0.08
	CTRL	0.10	0.08	-0.00	0.10

\*p < .05, \*\*p < .01

DIF: Difficulty in Identifying Feelings, DDF: Difficulty in Describing Feelings, EOT: Externally Oriented Thinking, CO: Cohesion, EX: Expressiveness, CON: Conflict, IND: Independence, AO: Achievement Orientation, ICO: Intellectual Cultural Orientation, ARO: Active Recreational Orientation, MRE: Moral Religious Emphasis, ORG: Organization, CTRL: Control.

1. *Organization (ORG)* measures the degree of importance of clear organization and structure in planning family activities and responsibilities.
2. *Control (CTL)* measures the extent to which set rules and procedures are used to run family life.

### Statistical Analysis

Pearson product moment correlation coefficient method was used to study the relationship between social anxiety and family environment. Mean scores, Standard deviations and t-values were computed to study gender differences in alexithymia and family environment.

### Results and Discussion

The results depicted in table 1 were yielded the association between the alexithymia and family environment. The results show the correlation which supported the hypothesis that the family conflict (CON) and control (CTRL) would be positively related with alexithymia while family cohesion (CO), expressiveness (EX) and independence (IND) would be negatively related with alexithymia in adolescents. Family Cohesion ( $r = -0.21, -0.27, -0.26$  ( $p < 0.01$ )) and IND ( $r = -0.14$  ( $p < 0.05$ ),  $-0.29, -0.24$  ( $p < 0.01$ )) shows significant negative correlation with Difficulty in Identifying Feelings (DIF), Difficulty in Describing Feelings (DDF), Externally Oriented Thinking (EOT) and alexithymia which means that lack of Cohesion and Independence in family results high alexithymia among adolescents. Adolescents who have the lack of cohesion and independence in their family were at the high risk of being alexithymic and have difficulty in identifying feelings and difficulty in describing feelings. This finding suggests that difficulty in identifying and communicating emotion are associated with a family environment in which the adolescent is not provided with cohesive and expressive environment for expression of emotion. Family environmental aspects were found to be related to the alexithymia in adolescents.

The study by Berenbaum and James (2000) showed that higher degrees of alexithymia had a meaningful correlation with decreased expression in the family and lower emotional protection feeling in adolescents. In this study, the importance of family functioning on alexithymia has been found to be very significant. Family conflict was responsible for alexithymic features among adolescents, as correlation revealed by our results between family

conflict, DIF (0.26( $p < 0.01$ )), EOT (0.14( $p < 0.05$ )), and alexithymia (0.27( $p < 0.01$ )). Conflict among family evidently plays an important role in alexithymia. The findings by Eisenberg et al. (2001) suggested that parents' emotion-related behaviors are linked to children's regulation of expressivity and externalizing behaviors. This research concluded that parents' discussion of emotion, in addition to parental warmth and positive emotion in interactions with their children is related to children's regulation of the expression of emotion or externalizing problem behavior. Parents' positive affect was related to a decrease in children's emotion dysregulation. When parents have warm interactions with their children and typical healthy emotion regulation, children may be less likely to develop alexithymic traits and externalizing behaviors. The same seems to be indicated by our study. Dysfunction in the family environment contributes to alexithymia (Crittenden, 1994).

There was significant correlation found between the Achievement Orientation and Externally Oriented Thinking (EOT) (0.23). It was concluded from the result that high achievement oriented families had associated externally oriented thinking in the

**Table No.2: Showing the Calculated t-value to determine the Gender Difference in Alexithymia and Family Environment among Adolescents**

	MEAN		SD		t-value
	Females	Males	Females	Males	
DIF	6.69	6.6	2.83	3.03	0.24
DDF	5.39	4.17	2.15	2.03	<b>4.87**</b>
EOT	6.47	6.28	2.72	2.50	0.56
Total alexithymia score	18.49	17.07	5.04	4.96	2.27
CO	48.73	50.15	11.83	8.50	-1.14
EX	45.98	46.07	10.57	9.28	-0.06
CON	46.06	44.70	9.74	9.88	0.98
IND	38.47	42.15	11.86	12.57	<b>-2.18*</b>
AO	52.34	51.34	8.44	8.31	0.93
ICO	49.02	48.51	8.61	8.46	0.43
ARO	43.26	43.48	7.19	8.97	-0.19
MRE	52.74	51.55	9.14	8.27	1.14
ORG	55.36	55.88	8.56	8.95	-0.42
CTRL	52.09	52.09	6.84	7.22	0.00

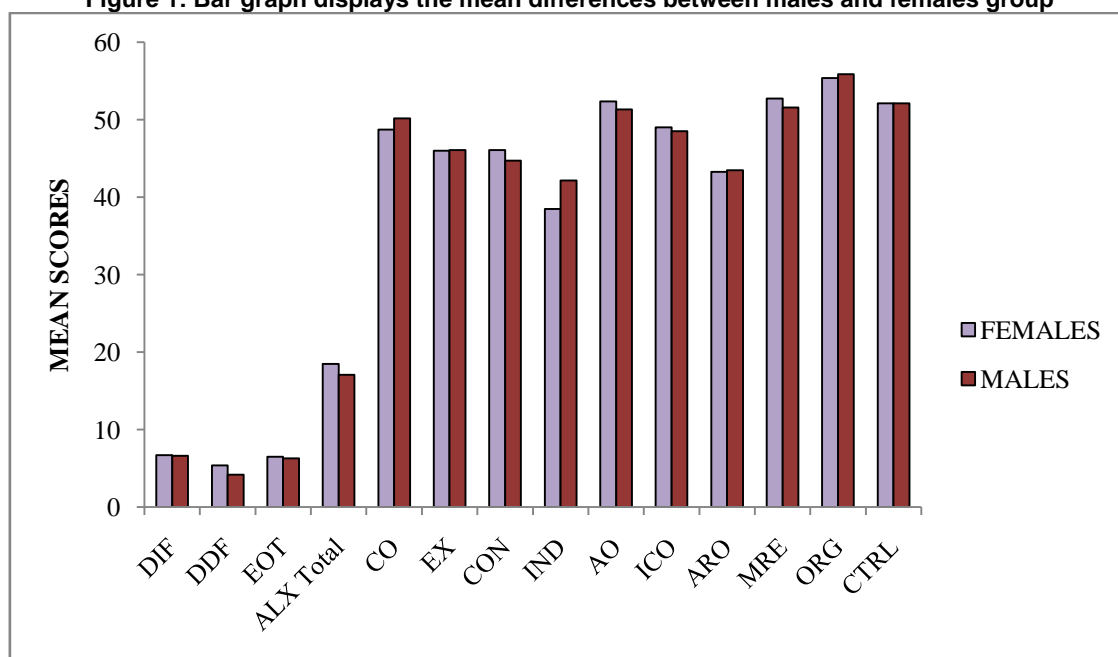
\* $p < .05$ , \*\* $p < .01$

DIF: Difficulty in Identifying Feelings, DDF: Difficulty in Describing Feelings, EOT: Externally Oriented Thinking, CO: Cohesion, EX: Expressiveness, CON: Conflict, IND: Independence, AO: Achievement Orientation, ICO: Intellectual Cultural Orientation, ARO: Active Recreational Orientation, MRE: Moral Religious Emphasis, ORG: Organization, CTRL: Control.

adolescents. Moral Religious Emphasis (MRE) has significant negative correlation with the Difficulty in Identifying Feelings (DIF), Difficulty in Describing feelings (DDF) and Alexithymia (-0.19, -0.24, -0.20( $p < 0.01$ )). Adolescents whose families pay less attention towards the moral and religious values had higher alexithymic features. The other aspects assessed by FES were not significantly related to alexithymia; i.e. alexithymia in adolescents is not related to achievement orientation, intellectual cultural orientation, organization and control aspects of family. The results of current study concur at some levels with the study of Naghavi (2011) on early adolescents. The 234 Iranian students under investigation exhibited a statistically significant positive relationship with high magnitude between family functioning and alexithymia, the higher level of the family functioning was linked to higher level of the alexithymia. In other words, early adolescents with category of high family functioning displayed high alexithymia. Our study consolidates these results, showing that later adolescents also have similar relations; also the relation is present even in the Indian population.

In the present study, gender differences were studied for alexithymia and Family Environment (FE) along with their dimensions by using t-ratio. The results (Table 2) display the mean differences between males and females group on the two scales (i.e. Alexithymia and FE) and their sub scales. The calculated t-value indicates the difference between males and females.

Figure 1: Bar graph displays the mean differences between males and females group



Gender difference were found in alexithymia but this difference was significant only on the sub scale of alexithymia i.e. Difficulty in Describing Feelings. Females had more difficulty in describing the feelings and emotions as compared to males. This result is contrary to the stereotypical belief where it is expected that females tend to verbalize their emotions more often and in larger repertoire. This difference can be related to the gender differences in the socialization process. The effects of gender specific socialization may be more detrimental for emotional development of girls than boys, specifically with regard to autonomy and identity formation. The latter may be leading to them learning to be less explicit and forthcoming in expressing what they feel

It was hypothesized in the study that male adolescents would be higher in alexithymia as compared to female adolescents. The results of our study showed that females were high on alexithymia as compare to males but the results are not significant. Our Results were not supporting the hypothesis i.e. male would high on alexithymia. The previous studies also provided support for our results. Sakkinen, Kaltiala-Heino, Ranta, Haataja, & Joukamaa (2007) assessed alexithymia in a sample of 12 to 17-year-old adolescents (n = 882). The prevalence of alexithymia was 15.9% in all subjects, 14.6% in males and 17.3% in females, but the gender difference was not statistically significant.

In another research, Honkalampi, Tolmunen, Hintikka, Rissanen, Kylma, & Laukkanen (2009) studied alexithymia among sample of 13 to 18-year-old adolescents (n = 7087), in which the prevalence of alexithymia was 7.3% in all subjects; 4.9% in males and 9.4% in females. The prevalence was higher in females in all age groups.

It was hypothesized that male adolescents would be higher in family conflict and independence and lower in family cohesion and expressiveness as compared to female adolescents. It has been

analyzed that males and females perceived the differences in their family environment. Above results (table 2) show that males have reported more cohesive and expressive families as compared to females, which are alternative to our proposed hypothesis that males would be lower in family cohesion and expressiveness than females. The gender difference on the family cohesion and expressiveness was not statistically significant. The positive t-value (0.98) was reported for conflict which means that females reported more conflicted families than males. This difference, however, was also nil significant. Wentzel and Feldman (1996) and McKeown et.al (1997) found that adolescents' perceptions of low cohesion within their families were associated with heightened feelings of depression and reduced social acceptance. The research also report that levels of cohesion reported by male and female adolescents have different implications for their personal and social adjustment. Females who were associated lower levels of family cohesion reports of feeling excluded and depressed, whereas male reports were not associated with their perceptions of family cohesion. Significant negative difference in family independence (-2.18(p<0.05)) suggested that the family members of male adolescents were more independent in their decision making and more assertive than the families of females. Males were less dependent on their families and also perceived that their family members were not dependent on each other, whereas the females were more dependent on their families and also perceived dependence among other family members. It was hypothesized that males would be high in family independence, which is supported by present results. The difference was also assessed in Achievement Orientation, Intellectual Cultural Orientation, Active Recreational Orientation, Moral Religious Emphasis and Organization in males and females, but this difference was not statistically significant.

## Important Findings

1. Inter correlations were computed to study the relationship between alexithymia and FE and the results revealed that alexithymia was negatively and significantly related to family Cohesion (CO), Independence (IND), Active Recreational Orientation (ARO) and Moral Religious Emphasis (MRE) while conflict was positively related to alexithymia. Difficulty in Identifying Feelings (DIF) was negatively related with CO and MRE. Difficulty in describing feelings (DDF) was negatively related with CO, IND and MRE. Family conflict (CON) and Achievement Orientation (AO) was positively related to Externally Oriented Thinking (EOT). Rest of dimensions was not significantly correlated.
2. Significant gender differences were obtained on dimension of alexithymia i.e Difficulty in describing feelings (DDF) which revealed that females were higher than males. Gender difference was not significant on Difficulty in identifying feelings (DIF) and Externally oriented thinking (EOT).
3. There was no significant gender differences found in family environment of adolescents except on the family independence. Significant negative difference on independence was found and families of males were higher in independence than the females. On the rest of the dimensions of family environment no significant gender differences were found.

## Implications of Study

1. This study makes a strong case for need to counsel adolescents and their families with special focus on family aspects such as family cohesion, conflict, independence, recreational and moral religious activities. The counseling will also focus on emotional aspect of adolescent where adolescents can learn to identify and describe their emotions.
2. Family counseling is needed to enhance family cohesion and expressive-ness, while lowering the family conflicts, which will help deal with the alexithymia among adolescents.
3. There is need to provide counseling to the girls with emphasis on how to describe and express their feelings.
4. Thus, the current study has significant contribution towards counselors who need to work with adolescents'.

## Limitations of Study

1. The adolescents under study were not a clinical sample but a community based evaluation.
2. The sample is specific to Punjab.
3. The sample had larger number of students from rural area.
4. The study has used only self report measures.

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