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FAMILY FUNCTIONING, ALEXITHYMIA AND SOMATIC COMPLAINTS IN EARLY ADOLESCENCE

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Abstract

The present study was aimed to examine the relationship between Family Functioning, Alexithymia and Somatic Complaints in Early Adolescence. A correlational research design was used in the present study. It was hypothesized that there would be a positive relationship between problematic Family Functioning, Alexithymia and Somatic Complaints. A sample of 101 early adolescents ranging between 10 -14 years of age, including 62 girls (M Age=12.8, SD=1.6) and 39 boys (M Age=13.1, SD=1.1) was recruited from online sources through snowball sampling. The measures which were included in this study were General Family Functioning Subscale (Epstein *et al*., 2003) for measuring family functioning, Alexithymia Questionnaire for Children (Rieffe *et al*., 2007) for measuring Alexithymia and Children Somatic Symptom Inventory (Walker *et al*., 2009) for Somatic Complaints. The results were analyzed through Pearson Moment Correlation, Independent Sample t-test and Mediation analysis through PROCESS. Results showed that there was significant positive relationship between problematic family functioning, alexithymia and somatic complaints. Gender differences were accounted for Alexithymia scale only, which were evident in boys. Family Functioning and Alexithymia predicted Somatic Complaints in Early Adolescents. Furthermore, Alexithymia played a role as a mediator between Family Functioning and Somatic Complaints. Adolescents experiencing symptoms of alexithymia and unhealthy family functioning are likely to experience more somatic complaints as compared to the adolescents having healthy familial functioning and no symptoms of alexithymia.

Keywords

Family functioning, Alexithymia, Somatic Complaints and Early Adolescence

1. Introduction

The capacity to understand and evaluate one's emotions and feelings, and also others' emotions and feelings, and to distinguish between them and to apply their abilities to direct one's thinking and activities, determines one's emotional intelligence (Salovey & Meyer, 1990). In other words, the base of emotional intelligence is formed by recognizing one's emotions. Human beings process emotions and experience them, which is the basic function of life. Every human retorts in a manner which is according to their cultural and social norms. Early childhood development starts at home, as children and adolescents fundamentally socialize and start interaction within the family, even though adolescents, with their advancing age, get involved in peers; but the influence of the family remains the strongest amongst all (Cox, Burr, Blow, & Para Cardona, 2011). Among all the factors, the family environment poses a huge effect on the behavior of its members, especially children and early adolescents. Only family structure is not responsible for either healthy or unhealthy family environment but also the other factors such as family members' emotional health, stability, parent-child relationship standard and quality of interactions within the family are the basics of successful family functioning (Breiner *et al*., 2017). Piaget (1936) in his theory states that adolescence is a transactional period in the life of adolescents where they get distant from their families and form stronger attachment to their social circle (Piaget, 1965). When influence of parents starts to decline, adolescents become self-reliant in the choice of their activities (Klein, Forehand, Armistead, & Brody, 1994). Adolescence is the difficult time for parents, and as a child needs to develop healthy attitude regarding their independence, self-reliance and healthy coping strategies (Ryngala, 2006; Stangor, & Walinga, 2010). This can only be done when adolescents socialize in their families to incorporate healthy standards of society learn from their parents. Children also become active agents in getting this healthy standard because during adolescence period they have a curiosity to explore the world (Moretti, & Peled, 2004). The McMaster model offers to explain the theoretical background for measuring family functioning. This model differentiates between healthy and unhealthy family functioning (Epstein *et al*., 2003). This model provides six key dimensions of domestic life which are thought to be most relevant for treating family functioning which requires the therapeutic interventions. The six dimensions include Problem solving which denotes to the capabilities of the family to resolve problems, communication assess the exchange of verbal communications related to everyday problems, roles measures behavioral patterns that requires the family members to accomplish family functions and its needs of family members, affective involvement measures the active involvement of family members in each other activities, Affective responsiveness the capability of family members that how they respond emotionally in a situation according to the context, behavioral control measures the responsibilities towards a member that how they respond in a dangerous situation (Epstein *et al*., 2003; Miller *et al*., 2000). On

the other hand, if the healthy development of processing emotions is affected, it results in the problematic biological, social and psychological health of an individual because the inability to express emotions leads towards alexithymia. Healthy family environment with expressions of emotions is an indicator of healthy individual while unhealthy family environment with limited or no expressions of emotions can lead to alexithymia (Naghavi, & Mar'of , 2012; Naghavi, 2011). Alexithymia is an emotional and cognitive construct explained by an inability to express emotions. It is characterized by three factors which include difficulty identifying feelings from bodily sensations, difficulty in describing and verbalizing feelings and a predisposition for externally and superficially oriented thinking that is more focused on stimuli or objects rather than feelings and an absence of fantasy life. Sifneos (1973) invented the term from its Greek source: *a* (without), *lexi* (speech), *thymia* (emotions or moods) after recognizing the feature in patients displaying psychosomatic complaints. If the family becomes unresponsive to the emotional needs of a child due to low frustration tolerance and environmental factors such as economic instability or any other illness, this can cause the problematic development of early adolescence (Pellerone, Ramaci, López, & Craparo, 2017). So, resultantly, children experiencing early adolescence acquire defense mechanisms against their emotional needs, such as alexithymia due to family dysfunction (Gatta *et al*., 2017; Janiec, Toś,Bratek, Rybak,Drzyzga, & Kucia, 2019; Naghavi, 2016; Pellerone, Tomasello, & Migliorisi, 2017). When children that experience early adolescence internalize their emotions and feelings they do not discuss or share their emotions and feelings to anyone, instead keep in themselves, that lead them towards anxiety issues or somatic complaints. Maladaptive regulation of emotions is sometimes difficult to observe externally but represented as somatic complaints (Mannarini, Balottin, Palmieri, & Carotenuto, 2018). Somatic symptoms reduce the quality of life and in turn can cause depression and anxiety in the future. Naz, 2012 suggested that One risk factor of somatic symptoms is the home environment and parental criticism. Children exhibited a diversity of somatic problems, including headache, stomach-ache, dizziness, and lethargy (low energy) (Gupta & Winsler, 2016). Almost 10% of pediatric patients who visit the General Practitioners and pediatricians have reported that somatic symptoms where physical cause or illness was cannot be explained. It was seen that 20-25% cases of children who visit the doctors with any kind of physical and bodily symptoms or sensations were diagnosed to be related to psychological factors. Amongst all, abdominal pain, headaches or joint pains and sleep deprivation are common (Rask *et al*, 2018).

2. Literature Review

General home environment together with parenting style affects the emotional responsiveness of a child. Also, the disruptions in family functioning are closely related with alexithymia in adolescents (Gatta *et al*., 2017). Ogbogu and Odife (2019) studied the impact of parenting style in alexithymia among adolescents. The result presented that authoritative parenting style, except for permissive parental style, predicted

alexithymia among adolescences. The children in return learn to respond in environments with emotional unclarity and ambiguity. If there is emotional ambiguity, it results in somatic complaints through indirect effect of alexithymia in children during early adolescence (Cerutti *et al*., 2020; Kehoe, Havighurst, & Harley, 2015; Naz, 2012; Silberg *et al*., 2018). Alexithymia, in return, can add various negative consequences in early adolescences such as addictive behaviors , impaired mental health (depression, anxiety) and somatic complaints ranging from least problematic consequences to severe consequences (Cerutti *et al*., 2020; Honkalampi, 2009; Hadji-Michael, 2019). Children in early adolescence were more alexithymiac than those in older adolescence because of maturation effect and in developmental phase (Basile, Quadrana & Monniello, 2009; Gatta *et al*., 2012; Sakkinen *et al*., 2007). Also male adolescents reported increased level of alexithymia than girls and exhibited more psychological and behavioral problems (Chung & Chen, 2020). Likewise, the normative male alexithymia mediates the relationship between interpersonal problems and traditional masculinity in young adults (Liaqat *et al*, 2020). According to national researches, it was noted that the prevalence rate of somatic complaints related to family stressor in children was reported to be 43% in Pakistan (Rehna, Hanif, Laila, & Ali, 2016). The majority of these somatic complaints are linked with emotional difficulties and functional disability (Imran, Ani, Mahmood, Hassan, & Bhatti, 2014). At the same time, these symptoms are critical clinical warnings, which may put up with in adulthood, cause mental illness (Dhossche Ferdinand, van der Ende, &Verhulst, 2001). A cross sectional study in China on school children reported that 73% of children were stressed due to family relations and Over one-third of children reported psychosomatic symptoms at least once per week, 37% headache and 36% abdominal pain (Hesketh *et al*., 2010). Similarly a study on African American school children also reported that high prevalence of somatic symptoms were significantly associated with family conflict, school and peer stress (Hart *et al*., 2013).

2.1 Hypotheses

There were following hypotheses were proposed:

Hypothesis 1: There is likely to be a positive relationship between problematic family functioning, alexithymia and somatic complaints among early adolescents.

Hypothesis 2: Alexithymia is likely to mediate between family functioning and somatic complaints.

Hypothesis 3: Family functioning, Alexithymia and somatic complaints are likely to differ in boys and girls early adolescents.

3. Method

3.1 Research Design

Quantitative research method was used through the use of questionnaires and statistical analysis. Correlational research strategy was used in present research to find out the relationship between Family Functioning, Alexithymia and Somatic Complaints in Early Adolescents.

3.2 Sampling Strategy

Snowball sampling strategy was used in the present research. Participants who were approached online were requested to forward the form in their circle,

who was meeting the requirements of inclusion criteria.

3.3 Participants

Data were collected online through Google forms due to COVID-19. The 101 individuals consisting of 62 girls and 39 boys ranging between 10-14 years were recruited. The participants were not selected who were with any psychological illness and individuals who are currently living with their foster care families, such as grandparents, uncles, and aunts**.**

3.4 Measures

3.4.1 Socio-Demographic questionnaire

This questionnaire consist of items inquiring about age, gender, education, socioeconomic status, family system, general home environment, father, mother and siblings information, emotional expressivity and any physical and psychological problem. Modifications in the form were made after COVID-19, adding the question regarding change in home routine during lockdown, change in relationship with family members and online classes.

3.4.2 Family Assessment Device - General Functioning Scale

The General Family Functioning subscale (GF12) of The McMaster Family Assessment Device (FAD) has been authenticated as a single guiding measure to assess family functioning in individual's age 10 years and older (Boterhoven de Haan, Hafekost, Lawrence, Sawyer, & Zubrick, 2015). FAD assists in identification of healthy and unhealthy functioning within a family (Staccini, Tomba, Grandi, & Keitner, 2015). The GF12 subscale of the FAD has also been validated for characterizing overall family functioning, with good psychometric properties with Chronabach Alpha value of 0.85(Boterhoven de Haan, Hafekost, Lawrence, Sawyer, & Zubrick, 2015). It has high intercorrelations with the six dimensions of the FAD (Mansfield *et al*., 2015). It is calculated by adding all items and dividing by 12 to take average value. The Chronbach Alpha value of G-FAD in the present study was 0.84.

3.4.3 Alexithymia Questionnaire for Children

The Children Alexithymia Scale, (Rieffe, *et al*., 2006) is a self-report measure which is designed to assess the awareness of emotional states for children ranging between age 9 to 15 years old. The Alexithymia Questionnaire for Children consists of 20 items that represent the three factors which are Difficulty Identifying Feelings (DIF), Difficulty Describing Feelings (DDF) and Externally Oriented Thinking (EOT). The Cronbach´s Alpha for DIF subscale is.73, .75 for the DDF subscale meanwhile for the EOT subscale is .29 (Rieffe, *et al*., 2006). The Chronbach Alpha value for Alexithymia was 0.69. in this study.

3.4.4 The Children's Somatic Symptoms Inventory

The Children's Somatic Symptoms Inventory (formerly the Children's Somatization Inventory CSSI-24) is commonly used to assess somatic symptoms in children ranging between 10-16 years. It is a self-report measure consisting of 24 items with 5 -point Likert scale. High score indicates higher clinical characteristics. Clinical reference points for the CSSI-24 total score (<18, low; 19–31, moderate; ≥ 32, high) showing intensity of somatic symptoms (stone, 2019). The CSSI-24 showed good psychometrics (α=.87) and correlated.99 with the

original CSI-35(Walker, 2009). The Chronbach Alpha value of the scale was reported to be 0.73 values.

3.5. Procedure

Initially, the permission was taken from the Departmental Doctoral Programme Committee. Then the permission was taken from the authors of the tools to use the tools and translate them in the present study. The permission was taken from original authors for online data collection. The pilot study was conducted with five early adolescents after taking permissions from their parents, before main study to evaluate the feasibility, time and any other possible problem so that improvement for the design for performance on full scale research project can be made. After piloting, the issues were taken into consideration and main study was conducted online through Google forms. The participants and their parents were informed online along with survey form of the nature of the study, as data was collected online during COVID-19 times. They were asked to show willingness on informed consent before the administration of the questionnaire. In case of any emotional distress experienced during or after the administration of questionnaire. The participants were able to get help from counseling centers. The address and contact information of the counseling Centre was provided in the form. The participants were told that they reserve the right to withdraw from the study at any time.

4. Results

Data analysis was done through statistical package for Social Science Version 23. Data analysis consisted of descriptive and inferential statistics. Descriptions of the demographics was also found by calculating Frequency (*f*), mean (*M)*, and Standard Deviation (*SD*). Firstly, the Cronbach Alpha was found to examine the internal consistency of scales used in the study. Pearson Product Moment Correlation was conducted to search for the relationship between Family Functioning, Alexithymia and Somatic Complaints in Early Adolescents. Independent sample t-test was also performed to examine the gender differences. Meditation effect through process analysis was conducted to examine the mediating role of Alexithymia on Family Functioning and Somatic Complaints. Table 1 show that a total of 101 participated in this study that comprised of 62 girls and 39 boys. Most of the participants were belong to 8-10 class which belongs to adolescence period. Majority of participants have described their relationship with father and mother to be satisfactory, and temperament as being friendly. Around 80% of participants had satisfactory relationships with their friends.

Table 1: Descriptive stats of the demographics of the participants

Demographics Characteristics of the participants	Frequency (*f*)	Percentage %
Class		
4-5	10	9.9
6-7	41	40.6
8-10	50	49.5
Gender		

Boy	39	38.6
Girl	62	61.4
Relationship with Father		
Non-Satisfactory	2	2
Somewhat Non-Satisfactory	10	9.9
Somewhat Satisfactory	17	16.8
Satisfactory	73	72.5
Father's Temperament		
Angry/Irritable	6	5.9
Less angry/irritable	17	16.8
Less friendly	26	25.7
Friendly	51	50.5
Relationship with Mother		
Non Satisfactory	3	3
Somewhat non satisfactory	2	2
Somewhat satisfactory	14	13.9
Satisfactory	80	79.2
Mother's Temperament		
Angry/Irritable	3	3
Less angry/irritable	2	2
Less friendly	14	13.9
Friendly	80	79.2
Relationship with Friends		
Non Satisfactory	3	3
Somewhat non satisfactory	1	1
Somewhat satisfactory	18	17.8
Satisfactory	79	78.2
	Mean *M*	Standard Deviation *SD*
Age (Girls)	12.8	1.6
Age (Boys)	13.1	1.1
Father age	48.7	7.27
Mother age	43.1	7.19
Time spent home	3.19	1.17

Table 2 shows the Chronbach Alpha value for general family functioning scale was .834 which was strong. The Chronbach Alpha value for Alexithymia Questionnaire was .696 which was moderate. The Chronbach Alpha value for difficulty identifying feelings was reported to be .82 which is strong, .57 for difficulty describing feelings which is moderate. The weak alpha value for external oriented thinking was reported to be .06. Reliability value for External Oriented Thinking was 0.2 which is also weak (Rieffe *et al*., 2006). The Chronbach Alpha for Children

somatic symptoms inventory was also moderate (α=.73).

Table 2: Showing psychometric properties of General family functioning subscale of FAD (GF-12), Alexithymia Questionnaire for children (AQC-20) and Children Somatic Symptom Inventory (CSSI-24).

Measures	*K*	*M*	*SD*	A	Range		Skewed
					Potential	Actual	
G-FAD	12	2.21	.503	.84	1-3.33	1-3.33	-.23
AQC	20	19.23	5.65	.69	0-40	5-30	-.36
DIF	7	7.01	3.58	.82	0-14	0-14	-.24
DDF	5	4.96	2.22	.57	0-10	1-10	.19
EOT	8	7.26	2.09	.06	0-16	1-12	-.28
CSSI	24	17.55	12.49	.73	0-96	0-71	-.35

Note. G-FAD= General Subscale of Family Assessment Device, AQC= Alexithymia Questionnaire for Children, CSSI= Children Somatic Symptom Inventory

According to table 3, Gender has a significant negative relationship with alexithymia and its two subscales; identification and communication, which mean boys, are more likely to be unable to express their emotions. Relationship with father and temperament had significant negatively correlated with Family Functioning, Alexithymia, Difficulty identifying feelings, and somatic complaints, which shows that if relationship with father is improving than family functioning will be less problematic, more ability to identify and express emotions will increase and there will be less chances of somatic symptoms. Family time was negatively correlated with family functioning, which means increasing time with family associated with improved family functioning. Family functioning has significant positive relationship with alexithymia, its two subscales; difficulty identifying feelings, difficulty describing feelings and somatic complaints. This indicates that problematic family functioning was linked with difficulty in identifying and communicating one's emotions and feelings thus exhibiting high rates of somatic symptoms in children during adolescence. Table 4 shows that Gender differences were found on the alexithymia scale and its two subscales which are Difficulty in Identifying Feelings and Difficulty in Describing Feelings. Boys have been reported to shown high alexithymia rates than girls. However, the FAD mean was higher in males and somatic complaints means was higher in females. According to Baron and Kenny, mediation analysis (given by Andrew F, Hayes) involves the following steps:

- The predictor (Family Functioning) should predict the outcome variable (Somatic complaints)
- The predictor (Family Functioning) should predict the mediator (Alexithymia) The mediator (Alexithymia) should predict the outcome variable (Somatic complaints)

- The predictor variable no longer remains significant or is significantly reduced by controlling the mediator (Aron & Coups, 2006).

The first assumption of Barron and kenny was not fulfilled that Family Functioning was not predicting lack of correlation does not disapprove the causation and it is not a sufficient and necessary condition of the Somatic Complaints. But this did not reject our hypothesis of mediation. As Bollen (1990) stated that mediation (Hayes, 2017). The results of mediation are given in following table:

Table 3: Showing correlation between family functioning, Alexithymia; its Subscales and Somatic Symptoms

	1	2	3	4	5	6	7	8	9	10	11	12	13	M	S.D
1.G	-	-.05	-.09	.05	-.10	.03	.15	-.15	-.28**	-.25*	-.22**	-.07	.04	1.61	.49
2.R.F		-	.60**	.40**	.30**	.09	.26**	-.43**	-.34**	-.37**	-.19	-.04	-.28**	3.56	.76
3.T.F		-	-	.03	.11	.08	.07	-.21*	-.28**	-.29**	-.18	-.05	-.29**	3.22	.94
4.R.M		-	-	-	.45**	-.03	.45**	-.23*	-.07	-.12	-.09	.09	-.16	7.73	.65
5.T.M		-	-	-	-	-.05	.03	-.26**	-.23*	-.25*	-.06	-.12	-.21*	3.38	.89
6.F.T		-	-	-	-	-	-.04	-.23*	.05	.02	.06	.07	.03	3.19	.64
7.R.f		-	-	-	-	-	-	-.16	-.14	-.22*	-.07	.07	-.23*	3.71	.64
8.FAD		-	-	-	-	-	-	-	.43**	.46**	.25*	.09	.22*	2.21	0.51
9.AQC		-	-	-	-	-	-	-	-	.91**	.78**	.34**	.41**	19.23	5.65
10.DIF		-	-	-	-	-	-	-	-	-	.68**	.02	.39**	7.01	3.58
11.DDF		-	-	-	-	-	-	-	-	-	-	-.13	.38**	4.96	2.22
12.EOT		-	-	-	-	-	-	-	-	-	-	-	.08	7.26	2.09
13.CSS		-	-	-	-	-	-	-	-		-	-	-	17.55	12.49

*Note. G= Gender, R.F= Relationship with father, T.F= Temperament of Father, R.M= Relationship with Mother, T.M= Temperament of Mother, F.T= Family Time, R.f= Relationship with Friends, FAD= General family functioning subscale, AQC= Alexithymia Questionnaire for Children, DIF= Difficulty Identifying Feelings, DDF= Difficulty Describing Feelings, EOT= External oriented Thinking and CSS= Children somatic symptoms****<.001, *p***<.01, *p**<.01*

Table 4: Gender differences on family functioning, alexithymia and somatic complaints

Variables	Male		Female				95%CI		Cohen's
	M	*SD*	*M*	*SD*	*t*(101)	*P*	*LL*	*UP*	*d*
1.G-FAD	2.30	.46	2.15	.52	1.46	.15	-.05	.35	0.3
2.AQC	21.15	4.51	18.02	5.99	2.99	.01	.92	5.36	0.59
3.DIF	8.12	2.78	6.31	3.86	2.75	.01	.41	3.23	0.54
4.DDF	5.57	1.76	4.59	2.41	2.36	.02	.09	1.87	0.46
5.EOT	7.46	2.32	7.13	1.94	.78	.44	-.52	1.18	0.15
6.CSSI	16.92	12.45	17.95	12.61	-.40	.69	-6.12	4.06	0.08

Note. CI=Confidence Interval, LL= Lower Limit, UL=Upper Limit, G-FAD= General Subscale of Family Assessment Device, AQC= Alexithymia Questionnaire For Children, DIF= Difficulty Identifying Feelings, DDF= Difficulty Describing Feelings, EOT= External Oriented Thinking And CSS= Children Somatic Symptoms.

Table 5 shows that Family functioning was positive predictor of Difficulty Identifying Feelings but it did not predict the Difficulty Describing Feelings and External Oriented Thinking, Gender and Relationship with father negatively predicted the Difficulty identifying emotions with variance of 30% with F (3,95)=14.0, *p* ***<*.000.* Gender negatively predicted the Difficulty describing emotions with explained variance of 11% with F (3.95) = 4.05, *p* **<*.001*. General family functioning and gender was not predicting the Difficulty in Describing Feelings. None of the variables predicted the external oriented thinking. Difficulty Identifying Feelings positively predicted the somatic complaints with explained variance of 21% with F (6, 92) = 4.1, *p* **<*.00.* Besides this, no other variable had predicted somatic complaints.

Table 5: Direct Pathways between Family Functioning, Alexithymia Sub-Scales, Covariates and Somatic Complaints.

	Difficulty Identifying feelings	Difficulty Describing Feelings	External Oriented Thinking	Somatic Complaints
	B	B	B	β
General Family Functioning Subscale	.22**	.79	.29	.53
Difficulty Identifying Feelings				.10*
Difficulty Describing Feelings				.74
External Oriented Thinking				.56
Gender	-.16**	-.89*	-.31	.40
Relationship with Father	-.12**	-.36	-.04	-.17
	R^2=.30***	R^2=.11**	R^2=.01	R^2=.21**

Note. β= Standardized Co-efficient, $R^{2=}$ Co-efficient of Determination *p****<.001, *p***<.01, *p**<.01.

Table 6 shows that Difficulty Identifying Feelings was mediating the relationship between family functioning and somatic complaints. The mediation effect was reported to be with Difficulty Identifying Feelings between family functioning and somatic complaints.

Table 6: Indirect Effect of Family functioning on Somatic Complaints through Alexithymia (N=101)

	Somatic complaints	
	B	95%CI
Difficulty Identifying Feelings	.23	[.38, .5.04]
Difficulty Describing Feelings	.59	[-.70, 2.2]
External Oriented Thinking	.16	[-.66, 1.1]

Note. CL=Class Interval, *B*=Unstandardized Co-efficient

See figure 1 to see the graphical representation of meditational effect of alexithymia on family functioning and somatic complaints.

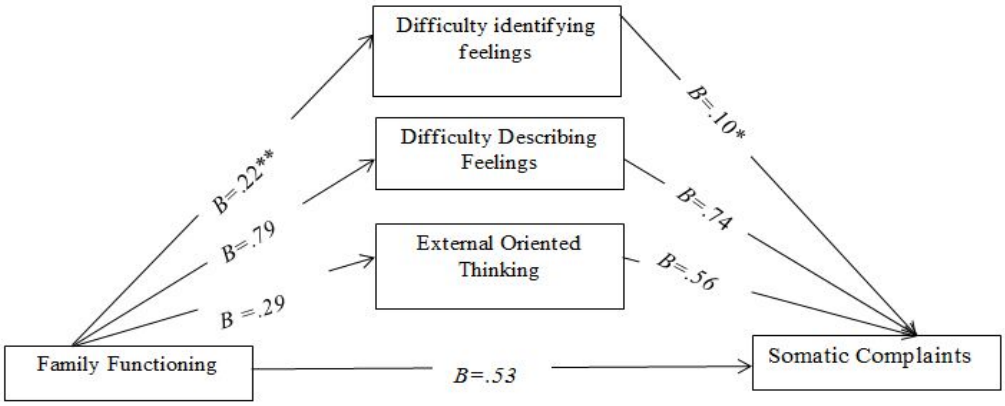

Figure 1: Shows the graphical representation of meditational effect of alexithymia sub-scales on family functioning and somatic complaints.

5. Discussion

The present study was aimed to explore the relationship between Family Functioning, Alexithymia and Somatic Complaints in early adolescents. It was hypothesized that family functioning, alexithymia and somatic complaints differed in boys and girls. The results of the present study showed that boys were more likely to report alexithymia symptoms than girls. Boys were more likely to suppress their emotions and find difficulty in identifying appropriate emotions and communicating them further (Chung & Chen, 2020; Van der, Murphy, & Bird, 2019). According to eastern culture that discourages the independency of adolescents, also expected from boys to stay strong and are not allowed to cry on their emotions. Results also suggest that relationship with father had significant negative relationship with problematic family functioning, alexithymia and its one subscale; identification of emotions and somatic complaints. This shows that satisfactory relationship with father will perceive their family functioning as healthy, experience less alexithymia and more capable in identifications of emotions and experience less somatic symptoms (McErlean & Lim, 2020). Temperament of father and mother had significant negative relationship with family functioning, alexithymia and its identification subscale and somatic symptoms. This specifies that when individuals perceive their parents temperament as more friendly (lenient parenting), they experience healthy family functioning and alexithymia and somatic complaints were also reduced. The current findings were consistent with the background literature as authoritarian paternal parenting was more correlated with alexithymia and aggression in emerging adolescents and authoritative parenting correlated with healthy emotional development. Lower parenting both paternal and maternal parenting comprised of strict parenting which comes in zone of authoritarian parenting (high demandedness and low responsiveness) style that predicts emotion suppression in adolescents and vice versa for authoritative parenting (Cuzzocrea *et al.*, 2015). Religious perspective in the parenting reinforced parents to be more responsiveness in the needs of their child and our religion. As Islam stressed more

upon family ties (Franceschelli & O'Brien, 2014). Islamic literature regarding parenting suggests that holistic parenting that comprises the teachings of Quran and Al-Hadith. It consisted of five dimensions: Qudwah Hasanah (Assimilated Role Model), Al Adah (Habituation), Al Mauidzah (Effective Advice), Al Mulahadzah (Equality in Care and Control), and Uqubah Wa Ujaroh (Relational Consequences). Holistic parenting was positively related to the well-being of the child (Rahmawati, 2017). The present results regarding parenting were in line that shows the fewer somatic complaints in the adolescence because our cultural and religious factors are involved in this. So, Muslims are bound to their religious values and most of the parents tend to follow the guidelines from the Islam. All these narratives motivate Muslims individual to properly build their parenting skills and nurture them in healthy ways. Moreover it was found that increased family time was negatively correlated with problematic family functioning. Quality family time increases the healthy development of child physically, emotionally and psychologically (Ellington, 2011). Furthermore, results also suggest that satisfactory relationship with friends also negatively correlated with alexithymia identification subscale, which indicates that if a relationship with peers is satisfactory then they were more likely to identify their emotions and feelings to them, which eventually reduces alexithymia and somatic complaints. As Alexithymia is likely to mediate between negative attachment to peers and mental health problems (Sechi, Vismara, & Lucarelli, 2020). It was hypothesized that problematic family functioning had positive relationship with alexithymia. Increased scores on family functioning were positively correlated with alexithymia and its two subscales; identification and communication of feelings and emotions. This indicates that when family functioning becomes problematic than alexithymia also increases (Freed *et al*., 2016; Gatta *et al*., 2015; Hennenberger *et al*., 2016; Naghavi, 2016; Koleoso, Uwadiae, and Nnakife, 2019; Ogbogu, & Odife, 2019;). It was hypothesized that problematic family functioning had a positive relationship with somatic complaints. Results had showed positive correlation between unhealthy family functioning and somatic complaints. This showed that if family functioning was unhealthy it can lead to somatic complaints early adolescents. Literature also support this finding that dysfunctional family pattrens and parental criticism leads to somatic complaints in early adolescents (Horwitz, 2015; Kehoe, Havighurst, & Harley, 2015; Ozefiak & Wallander, 2016; Silberg, *et al*., 2018; Van Gills, Janssens, and Rosmalen, 2014)). When individuals become overwhelmed by their emotions which they don't tell anyone than this psychological conflict change into behavioral problem and eventually show itself in the form of somatic complaints in adolescents. Cerutti, *et al*., (2020) reported that increased levels of alexithymia were associated with somatic complaints in adolescents. This finding is also backed by previous literature (Basharpoor, Almardanisomeeh, and Shahmohammadzadeh, 2015; Natalucci, *et al*., 2018; Ordóñez, Maganto & González, 2015; Villanueva, Górriz, Prado-Gascó & González, 2015). It was hypothesized that alexithymia was likely to mediate between family

functioning and somatic complaints. Results suggest that alexithymia had significantly mediated the relationship between family functioning and somatic complaints with Difficulty identifying feelings. Alexithymia had an indirect effect on family functioning and somatic complaints. Alexithymia is acting as a path of prediction between un healthy family functioning and somatic complaints Previous literature also suggest the mediating role of alexithymia between family functioning and psychopathology (Naghavi, 2016; Smith & Flannery-Schroeder, 2013). It was concluded from the study that Unhealthy family functioning was positively correlated with alexithymia and somatic complaints. Alexithymia was found to be mediating the relationship between family functioning and somatic complaints with its one subscale; difficulty identifying feelings. Gender differences were found in alexithymia as boy's adolescents were found to be more alexithymia than girls. Satisfactory relationship with parents and easy temperament was correlated negatively with alexithymia and somatic complaints as parent's temperament formulates the family environment. If healthy family environment then it will enhance the emotional health and processing ability of a child , thus he or she will share more with their family members than to keeping in themselves, which reduces the chances of developing somatic complaints without any reason.

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