

1 **DOI: <https://doi.org/10.47391/JPMA.1384>**

2
3 **Family cohesion and depression in adolescents: a mediating role of**
4 **self-confidence**

5
6 **Sayyeda Taskeen Zahra, Sadia Saleem**

7 Institute of Clinical Psychology, University of Management and Technology, Lahore, Pakistan

8 **Correspondence:** Sayyeda Taskeen Zahra. **Email:** s2018166004@umt.edu.pk

9
10 **Abstract**

11 **Objective:** To identify the mediating role of self-confidence in family cohesion
12 and depression in adolescents.

13 **Method:** The cross-sectional study was conducted at five mainstream
14 government boys and girls schools in Lahore, Pakistan, from March 1 to
15 November 30, 2019, and comprised adolescents aged 12-19 years. Data was
16 collected using Family Cohesion Scale, Self-confidence Scale and Depression
17 Scale for Adolescents. Data was analysed using SPSS 25.

18 **Results:** Of the 394 subjects, 214(54%) were boys and 180(46%) were girls. The
19 overall mean age was 14.76+/-1.39 years. A significant positive association
20 between family cohesion and self-confidence ($p<0.001$), and a significant
21 negative association of family cohesion ($p<0.001$) and self-confidence ($p<0.01$)
22 with depression was found. Self-confidence partially mediated the relationship
23 between family cohesion and depression ($p=0.01$).

24 **Conclusion:** Early and timely identification of risk factors can prevent serious
25 consequences of depression in adolescents.

26 **Key Words:** Family cohesion, Self-confidence, Depression, Adolescents.

27

28

29 **Introduction**

30 Adolescence is the most critical period that requires continuous adjustment with
31 changing biological, social and emotional demands^{1,2} that may lead to a higher
32 risk for developing different mental health problems.³ The most prevalent mental
33 health problem is depression which affects 10-85% people around the world and
34 22-60% of them happen to be adolescents.^{4,5} Depression in adolescents is
35 associated with many negative consequences, including poor school adjustment,
36 poor school performance and high dropout rates, low self-esteem, social
37 incompetence, lower self-confidence (SC), feelings of loneliness, interpersonal
38 problems and lack of well-being later in life.⁶

39 Alarming increase in depression in adolescents has lead researchers to identify
40 the risk or protective factors of depression⁵. Among these factors, family cohesion
41 (FC) has attained a great interest.^{7,8} Family has long been considered the most
42 fundamental institution that influences the psychosocial and emotional well-
43 being of individuals.⁹ A cohesive family is characterised by supportive and
44 integrated family environment¹⁰ that influences psychosocial and emotional
45 functioning of adolescents, like low depression, anxiety and stress,
46 positive emotion regulation, high self-esteem and SC, adjustment, coping,
47 optimism, self-worth, social ability, social skills, social cohesion, educational
48 engagement and performance.^{7,10,11,12} Another key protective factor against
49 depression in adolescents is SC¹³ defined as a feeling of trust in one's ability,
50 qualities and judgment. It reflects a person's subjective evaluation of his own
51 self-worth. Studies have shown that the way in which adolescents evaluate and
52 perceive their abilities and qualities have influence on academic, emotional,
53 social and psychological development.¹⁴ Higher SC level is associated with many
54 positive outcomes, including higher level of well-being, quality of life (QOL) and
55 academic achievement and lower level of depression, anxiety and stress. On the
56 other hand, having lower SC level is associated with loneliness, social

57 withdrawal, poor emotion regulation and greater mental health issues, including
58 depression, anxiety and stress symptoms.¹⁵

59 The current study was planned to identify the interplay of FC and SC in the
60 development of depression in adolescents, and to assess the mediating role of SC.

61

62 **Subjects and Methods**

63 The cross-sectional study was conducted at five mainstream government boys
64 and girls schools in Lahore, Pakistan, from March 1 to November 30, 2019. After
65 approval from the Institutional Ethical Review Committee, Institute of Clinical
66 Psychology, University of Management and Technology, Lahore, Pakistan, the
67 sample was raised using multistage sampling strategy from among adolescents
68 aged 12-19 years at the respective schools. Those who were the only child of their
69 parents and participants living with a single parent were excluded.

70 After informed consent from the participants, the subjects were stratified
71 according to academic grades 8th, 9th and 10th, and gender. Basic demographic
72 information, including age, academic grade, gender and family system, was
73 obtained After which the validated Family Cohesion Scale (FCS)¹⁶ was used to
74 measure FC. The scale has 51 items that are measured on a 4-point rating, from
75 0 = never) to 3 = very much. Scores were obtained by calculating the sum of
76 scores on each item of the scale and possible scores ranged 0-153, with high
77 scores indicating higher FC level. Cronbach alpha of FCS in the current study
78 was 0.92, indicating good internal consistency. Previously, FCS has shown good
79 reliability with test-retest reliability = 0.76 and split half-reliability = 0.87 as well
80 as content validity = 0.95 and construct validity = 0.50-0.64 for Pakistani
81 adolescents¹⁶.

82 Also used was the Self-Confidence Scale (SCS) which was taken from Self-
83 Esteem Scale for School Children¹⁷ comprising 12 items. It is scored on a 5-point
84 rating scale ranging from 0 = not at all) to 4 = very much. the sum of scores on
85 each item yields total SC score, ranging 0-48, with high scores denoting higher

86 SC. Cronbach alpha of SCS in the current study was 0.80, indicating good internal
87 consistency. Previously it has shown good reliability with test-retest reliability =
88 0.79 and split-half reliability = 0.89 as well as concurrent validity = .70-0.76 for
89 Pakistani adolescents¹⁷.

90 The last data-collection tool was the Depression Scale for Adolescents (DSA)¹⁸.
91 It consists of 27 items scored on a 4-point rating scale ranging from 0 = not at all
92 to 3 = often. The sum of scores yields total score ranging 0-81, with high scores
93 indicating higher level of depression. Cronbach alpha of DSA in the current study
94 was 0.86, indicating good internal consistency. Previously it has shown good
95 reliability with test-retest reliability = 0.89 and split half-reliability = 0.83 as well
96 as concurrent validity = 0.63) for Pakistani subjects¹⁸.

97 Data was analysed using SPSS 25. Mean and standard deviation (SD) were
98 worked out for continuous variables, and frequencies and percentages for
99 categorical variables. Pearson Product Moment Correlation was calculated to
100 investigate the association of FC, SC and depression. Mediation analysis using
101 PROCESS v3 was carried out to explore the mediating role of SC in the
102 relationship between FC and depression. Bootstrapping approach¹⁹ was used to
103 observe SC as a mediator between FC as an independent variable and depression
104 as a dependent variable.

105

106 **Results**

107 Of the 394 subjects, 214(54%) were boys and 180(46%) were girls. The overall
108 mean age was 14.76+/-1.39 years. The majority of the sample 149(38%) was in
109 the 8th grade, and 252(66%) were living in a nuclear family setup (Table 1).

110 There was significant positive association between FC and SC ($p < 0.001$) and
111 significant negative relationship of FC ($p < 0.001$) and SC ($p < 0.001$) with
112 depression (Table 2), indicating that adolescents having high FC and SC levels
113 were less likely to experience depression.

114 Mediation analysis (Figure) showed a significant predictive relationship between
115 FC as independent variable and SC as mediator ($p < 0.001$). Also, FC was a
116 significant predictor of depression ($p < 0.01$). SC partially mediated the
117 relationship between FC and depression ($p < 0.05$) (Table 3).

118

119 **Discussion**

120 Adolescence period demands continuous adjustment with ever-changing
121 developmental process,¹ and during this period adolescents encounter many
122 pressures and challenges, like identity formation, biological changes, physical
123 growth, interpersonal changes, changes in emotions and high parental
124 expectations that together put adolescents at a greater risk for developing mental
125 health issues.³ Depression is considered one of the most prominent mental health
126 issue experienced by adolescents and children^{4,5}. Keeping in view of increased
127 prevalence, there is a dire need to identify risk and protective factors of depressive
128 symptomatology in adolescents. FC and SC are the most important protective
129 factors against depression in adolescents.^{8,20} Findings of the current study
130 revealed that SC partially mediated the association of FC and depression. FC and
131 SC emerged as protective factors against depression in adolescents.^{6,7,12} the
132 quality of attachment and cohesion in the family can later serve as a base from
133 which the child can explore the environment and, when required, return to find
134 relaxation.⁷ Furthermore, family also assists adolescents in managing challenges,
135 pressures and difficulties that they have to face during this developmental period.
136 Individuals can find comfort whenever facing any difficulty and adjustment
137 issue.¹¹ Family bonding becomes a guard against depression. All these findings
138 of the current study are consistent with various theories, like Family System
139 Theory, Parental Acceptance/ Rejection Theory and Parental Attachment
140 Theory.^{21, 22, 23}

141 Another protective factor of depression in adolescents is SC.¹³ Having positive
142 subjective evaluation about one's abilities was associated with lower level of

143 depression in the current study, which is in line with literature.^{13,14,15} There are
144 several sources of SC, and, among these sources, supportive and integrated family
145 environment of a cohesive family is considered one of the most important.²⁴
146 Family is the first social environment to which a child gets exposed. Individuals
147 can learn SC from family through social learning process and modelling. The
148 Social Learning theory also supports this conception, arguing that observation of
149 a model's behaviour may elicit imitative responses from the children.²⁵ Therefore,
150 it can be concluded that a cohesive family is helpful in lowering depression in
151 adolescents via SC, and this association is also supported by literature.^{14, 8}

152 The current study has some limitations. First, data was collected from only urban
153 population alone. Second, data was also gained from government-school setting
154 while leaving out private schools. Third, the study used self-reporting tools which
155 may have allowed to certain biases to creep in. Finally, this cross-sectional design
156 of the study has its own limitations. Future research shall take care of all these
157 limitations for more generalisable findings.

158

159 **Conclusion**

160 SC mediated the association between FC and depression in adolescents. These
161 findings could help clinical psychologists, school counsellors, teachers and
162 parents to help adolescents experiencing depression. Growth groups and strength-
163 based trainings could be conducted to help adolescents to overcome depression.

164

165 **Disclaimer:** The text is based on a PhD research project.

166 **Conflict of Interest:** None.

167 **Source of Funding:** None.

168 **References**

- 169 1. Lin W, Yi C. The effect of family cohesion and life satisfaction during
170 adolescence on later adolescent outcomes: A prospective study.
171 Youth Soc. 2017; 128: 1-27.

- 172 2. Saleem S, Mahmood Z. Development of a scale for assessing emotional
173 and behavioral problems of school children. *Pak J Soc Clin Psychol.* 2011;
174 9: 73-78.
- 175 3. Dhuria M, Sharma N, Taneja DK, Kumar R, Ingle GK. Assessment of
176 mental health status of senior secondary school children in Delhi. *Asia Pac*
177 *J Public Health.* 2009; 21: 19-25.
- 178 4. Ibrahim AK, Kelly SJ, Adams CE, Brook CG. A systematic review of
179 studies of depression prevalence in university students. *J Psychiatr Res.*
180 2013; 47: 391-400.
- 181 5. Bansal V, Goyal S, Srivastava K. Study of prevalence of depression in
182 adolescents' students of a public school. *Indian J Psychiatry.* 2009; 18: 43-
183 46.
- 184 6. Saleem S, Jabeen A, Mahmood Z. Attachment style and self-concept as
185 predictors of depressive symptoms in educated adolescents.
186 *J Pak Psychiatr Soc.* 2019; 16: 30-35.
- 187 7. Lang A. Family structure, family functioning, and well-being in
188 adolescence: A multidimensional approach. *Int J Humanit Soc Sci.* 2018;
189 8: 24-31.
- 190 8. White J, Shelton KH, Elgar FJ. Prospective associations between the
191 family environment, family cohesion, and psychiatric symptoms among
192 adolescent girls. *Child Psychiatry Hum Dev.* 2014; 45: 544-554.
- 193 9. Mason WA, Haggerty KP, Fleming AP, Casey-Goldstein M. Family
194 intervention to prevent depression and substance use among adolescents of
195 depressed parents. *J Child Fam Stud.* 2012; 21: 891-905.
- 196 10. Cruz-Ramos AM, Heredia-Escorza Y, Cannon-Diaz BY. Academic
197 performance and family cohesion in a private junior high school in the U.S.
198 Mexico border. *World J Educ.* 2017; 7: 31-38.
- 199 11. Anto MM, Jayan C. Family environment and temperament as predictors of
200 emotion regulation. *Guru J Behav Soc Sci.* 2013; 1: 168-176.

- 201 12.Jhang F. Economically disadvantaged adolescents' self-concept and
202 academic achievement as mediators between family cohesion and mental
203 health in Taiwan. *Int J Ment Health Addict.* 2017; 15: 407-422.
- 204 13.Ali SA, Suhail N, Ali SA. Low self-esteem leads to depression among
205 elderly: Case study of nursing home. *J Univ Surg.* 2016; 4: 1-4.
- 206 14.Masselink M, Van Roekel E, Oldehinkel AJ. Self-esteem in early
207 adolescence as predictor of depressive symptoms in late adolescence and
208 early adulthood: The mediating role of motivational and social factors.
209 *J Youth Adolesc.* 2018; 47: 932-946.
- 210 15.Mu W, Luo J, Rieger S, Trautwein U, Roberts B. The relationship between
211 self-esteem and depression when controlling for neuroticism.
212 *Collabra Psychol.* 2019; 5: 1-13.
- 213 16.Zahra ST, Saleem S. The development of a family cohesion scale: A
214 preliminary validation. (Unpublished Manuscript). Institute of Clinical
215 Psychology, University of Management and Technology, Lahore. 2019.
- 216 17.Saleem S, Mahmood Z. The development of a self-esteem scale for
217 children in Pakistan. *Pak J Psychol Res.* 2011; 26: 1-21.
- 218 18.Saleem S, Khalid T, Mahmood Z. Self-reported depressive
219 symptomatology in adolescents: A psychometric study. *FWU J Soc Sci.*
220 2014; 8: 57-66.
- 221 19.Hayes AF. Introduction to mediation, moderation, and conditional process:
222 A regression based approach. New York: The Guilford Press. 2018.
- 223 20.Moreira JFG, Telzer EH. Changes in family cohesion and links to
224 depression during the college transition. *J Adolesc.* 2015; 43: 72-82.
- 225 21.Bowen M. The use of family theory in clinical practice. *Compr Psychiatry.*
226 1966; 7: 345-374.
- 227 22.Rohner RP. The parental acceptance-rejection syndrome: Universal
228 correlates of perceived rejection. *Am Psychol.* 2004; 59: 830-840.

229 23. Baumrind D. Effects of authoritative parental control on child behavior.
 230 Child Dev. 1966; 37: 887-907.

231 24. Mogonea F, Mogonea F. The role of the family in building adolescents'
 232 self-esteem. Soc Beh Sci. 2013; 127: 189-193.

233 25. Bandura A. Social learning and personality development. New York: Holt,
 234 Rinehart, and Winston. 1963.

235

236 -----

237

238 **Table 1: Demographic Characteristics (N = 394)**

Variables	Categories	f (%)
Gender	Boys	214(54)
	Girls	180(46)
Age	12-14 years	186(47)
	15+ years	208(53)
Grade	8th	149(38)
	9th	121(31)
	10th	124(31)
Family System	Nuclear	252(66)
	Joint	142(34)

239

240 -----

241

242 **Table 2: Inter-correlations among Family Cohesion, Self-confidence and**
 243 **Depression of adolescents (N = 394)**

Variables	<i>M</i>	<i>SD</i>	FC	SC	D
FC	121.63	17.23	-	.46***	-.22***
SC	32.41	7.18	-	-	-.24***
D	38.82	12.68	-	-	-

244 FC: Family cohesion, SC: Self-confidence, D: Depression, SD: Standard deviation.

245 $p < .001$, $df = 393$.

246

247 -----

248

249 **Table 3: Regression Coefficients, Standard Error (SE), and Model Summary**
 250 **information for Family Cohesion, Self-Confidence and Depression of**
 251 **adolescents Mediation analysis (N=394)**

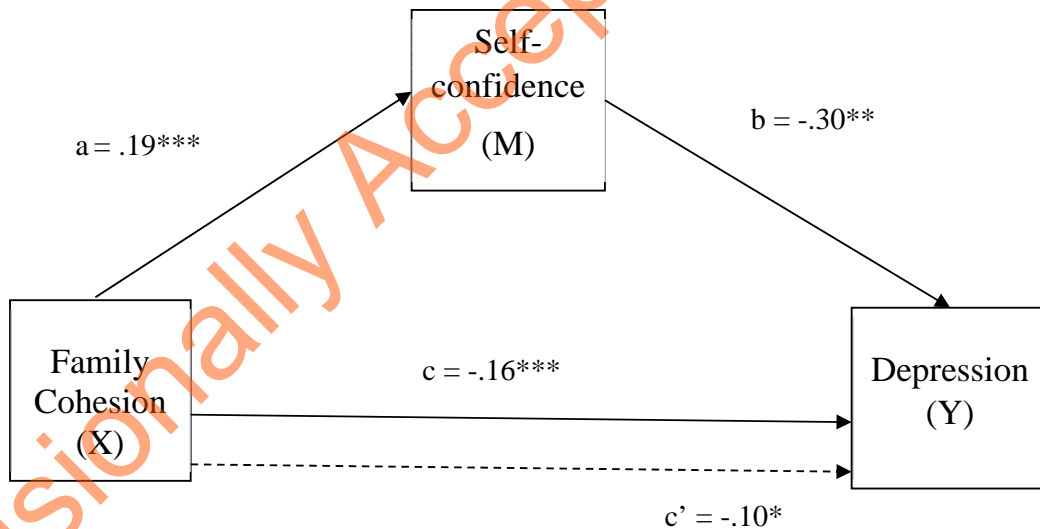
Antecedent	Consequent								
	M(SC)			Y(D)					
	β	SE	<i>p</i>	β	SE	<i>p</i>			
FC (X)	<i>A</i>	.19	.02	.001***	<i>c'</i>	-.10	.04	.01*	
SC (M)	---	---	---	---	<i>b</i>	-.30	.10	.002**	
Constant	<i>I</i>	9.52	2.27	.001***	<i>i</i>	61.15	4.45	.001***	
			$R^2 = .21$				$R^2 = .27$		
			$F(1,392) = 103.77, p = .001***$				$F(2,391) = 15.01, p = .001***$		

252 FC: Family cohesion, SC: Self-confidence, D: Depression
 253 * $p < .05$, ** $p < .01$, *** $p < .001$

254

255

256



257

258 **Figure: Mediation model of self-confidence (M) on the relationship between Family**
 259 **Cohesion (X) and Depression (Y).**

260