

Relationship between Emotional Autonomy and Behaviour Problems Among Adolescents: Moderating Impact of Gender

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The objective of this study was to examine the relationship between emotional autonomy and externalizing and internalizing behaviour problems along with the moderation of this relationship by gender among adolescents. The sample for this research included 215 adolescents, aged between 16 to 18 years, boys ($n = 85$) and girls ($n = 130$), from the educational institutions of Islamabad and Rawalpindi. The measures used to assess emotional autonomy and behaviour problems were the Emotional Autonomy Scale (Steinberg & Silverberg, 1986) and the Child Problems Checklist (Tariq & Hanif, 2007) respectively. Positive relationship between emotional autonomy and externalizing as well as internalizing behaviour problems was observed as shown by results. Boys were found to be more emotionally autonomous while girls were high on internalizing behaviour problems. The adolescents belonging to public sector institutions were high on emotional autonomy. The effect of emotional autonomy on externalizing behaviour problems was moderated by gender. However, the results for behaviour problems (overall) and internalizing behaviour problems were nonsignificant.

Keywords: Adolescence, emotional autonomy, behaviour problems, gender

Emotional autonomy refers to the separation from parents and gaining awareness of independence from them in the form of individuation (as cited in Sandhu & Kaur, 2012; Steinberg, 1999; Zimmer-Gembeck & Collins, 2003). This leads to a change in relation with the parents (Zimmer-Gembeck & Collins, 2003). This kind of autonomy can be achieved by becoming self-aware and understanding that parents are separate individuals who make their own mistakes (as cited in Sandhu & Kaur, 2012), and overcoming the childish

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representations of parents (as cited in Sandhu & Kaur, 2012). Steinberg and Silverberg (1986) explained this subjective feeling of self-reliance through four central components of emotional autonomy namely deidealizing the parents (deidealization), taking responsibility for one's own behaviour (non-dependency), understanding that parents have roles outside of their parental status (parents as people), and establishing a sense of oneself as a separate individual and perceptions that parents do not know or understand the adolescent (individuation).

The models presented in order to explain emotional autonomy depict adolescents in a state of 'storm and stress', which is a struggle with an alliance to either parents or peers (Steinberg & Silverberg, 1986). Sigmund Freud, Anna Freud, and Peter Blos were of the view that normal development of autonomy occurs through emotional distance from parents (as cited in Sandhu & Kaur, 2012; Zimmer-Gembeck & Collins, 2003).

The concept of detachment from parents and changing perceptions about them remained the popular definition of emotional autonomy for some time (as cited in Adams & Berzonsky, 2008; Steinberg & Silverberg, 1986; Zimmer-Gembeck & Collins, 2003). According to this perspective, the age of adolescence is a transition and this phase of transition involves the initial feeling of detachment from parents that can result in peer pressure; but that transition results in reliance upon one's own self and resistance against peer pressure (Steinberg & Silverberg, 1986).

The above stated concept was challenged later and it was stated that both positive and negative outcomes can result from detachment from parents (Ryan & Lynch, 1989). The negative experiences might include separation and loss of valuable supportive connections leading to stress, improper development of identity (Ryan & Lynch, 1989), minimized support (Ryan & Lynch, 1989), low self-esteem (Ryan & Lynch, 1989), depression (Chou, 2000), and behaviour problems (as cited in Adams & Berzonsky, 2008; Chou, 2003).

Behaviour problems include such behaviours that become harmful to the individual along with others around him/her (Achenbach, 1991). These behaviour problems can be expressed in two forms which are either directed towards one's own self known as internalizing behaviour problems (Achenbach, 1991). These problems can arise due to decreased emotional expression (Achenbach, 1991). These behaviours can be manifested in the form of low self-esteem, feelings of inferiority, withdrawal or avoidance of social interactions, persistent depressed state, and unnecessary dependence on others

(McCulloch, Wiggins, Joshi, & Sachdev, 2000; Ollendick, Short, & Sander, 2008; Perle et al., 2013). The other manifestation of behavior problems is in the form of those behaviors that are directed towards others namely externalizing behavior problems (Achenbach, 1991; as cited in Archer, 2006). These behavioral problems include hostility, rebelliousness, viciousness and criminal behaviors to name a few (Jianghong, 2004). Achenbach introduced the terms of externalizing and internalizing behavior problems (as cited in Archer, 2006).

Behavior problems are associated with negative consequences for the individual involved in such behaviors as well as the others around such individual (O'Brian, 2003; Sudhalter, 2001). The children who illustrate internalizing behavior problems have a greater tendency to grow up and become depressed and anxious adults (APA as cited in Sandhu & Kaur, 2012), while those with externalizing behavior problems may become delinquents and criminals as adults (Farrington as cited in Sandhu & Kaur, 2012).

These behaviors have been addressed in many researches in order to determine the underlying causes. Internalizing behavior problems are found to be associated with parenting styles (Bayer, Hemphill, & Sarrson, 2006) highlighting the role of family and peers (Sameroff & Mackenzie, 2003). The inability to control behavior is also mentioned to be one of the reasons for these behavioral outcomes (Murray & Kochanska, 2002).

Addressing the contributing factor for both emotional autonomy and behavior problems, it is observed that age and gender are most important. Numerous researches on emotional autonomy in adolescents reveal interesting results contrary to widespread stereotypes that emotional autonomy is significant and more rapidly developed among boys as compared to girls. The results showed that girls scored higher and significant differences were found on deidealization factor (Natarajan, 2013; Steinberg & Silverberg, 1986; Tung & Dhillon, 2006). There are other researches that reveal that girls felt less emotional autonomy from parents as compared to boys (see e.g., Noom, Deković, & Meeus, 2001; Ryan & Lynch, 1989). Longitudinal researches, on the other hand, revealed that emotional autonomy increased with age (Mubarak & Psi, 2009; Oliva, 2000) and was higher for girls in early adolescence while it was higher for boys in middle and late adolescence (Oliva, 2000).

Simultaneously, the onset and expression of behavior problems has been observed to be associated with age particularly adolescence (Bongers, Koot, van der Ende, & Verhulst, 2003). Gender has been revealed to be a contributing factor for behavior problems. Boys have

a greater tendency towards anti-social behavior (Tu, Lee, Chen, & Kao, 2014). On the other hand, girls have a greater tendency to develop behavior problems on the internalizing domain. This tendency is particularly enhanced during adolescent years (Steptoe et al., 2002; Stock, Wille, & Kramer, 2001; Tu et al., 2014).

Researches show that emotionally autonomy is correlated with behavior problems among adolescents (see e.g., Chou, 2003; Ryan & Lynch, 1989; Sandhu & Kaur, 2012; Zimmer-Gembeck & Collins, 2003). Externalizing behavior problems have been revealed to be associated with high emotional autonomy (Lamborn & Steinberg as cited in Sandhu & Kaur, 2012) and decreased supervision and look after by (Bacchini, Miranda, & Affuso, 2011). This relationship has been shown to be particularly significant for male adolescents (Bacchini et al., 2011). Women, however, are monitored more often as compared to men particularly by parents and this leads to a decreased tendency towards the expression of behavior problems on the externalizing end (Borawski, Iervers-Landis, Lovegreen, & Trapal, 2003).

The expression emotional autonomy was introduced to mean the decreased dependency on parents (Steinberg & Silverberg, 1986) which means withdrawing from the family and moving to wider community (as cited in Dhillon, 2014). Emotional autonomy has been found to be associated to depression or psychological maladjustment leading to internalizing problem behaviors (Dhillon, 2014). As the adolescents learn to make decisions on their own and have diminished support from parents, they can develop feelings of complexes and anxieties can emerge (Dhillon, 2014). However, as girls have a higher tendency to develop internalizing problems as compared to boys (Chou, 2003), and high emotional autonomy results in minimal parental support (Dhillon, 2014), so the above mentioned direction of relationship can occur in the case of girls more often. Another research has, however, revealed that reduced autonomy development in adolescence or over protection by parents has also been reported to be linked to depression, anxiety, and diminished self-competence (Holmbeck, et al., 2000).

Positive correlations have been found between deidealization of parents and non-dependency on parents with internalizing and externalizing behavior problems among adolescents (Lamborn & Steinberg, 1993; Sandhu & Kaur, 2012), however, the perception about parents as separate individuals is negatively related with internalizing behavior problems among adolescents (Sandhu & Kaur, 2012).

Based upon the above mentioned researches, a model has been designed (see Figure 1) depicting the expected relationship of emotional autonomy, behaviour problems (see e.g., Chou, 2003; Ryan & Lynch, 1989; Sandhu & Kaur, 2012; Zimmer-Gembeck & Collins, 2003), and the moderation by gender of this relationship, as gender is influential in both development of emotional autonomy (Natarajan, 2013; Noom et al., 2001; Steinberg & Susan, 1986; Tung & Dhillon, 2006) and onset of behaviour problems (Angold et al., 2002; Bates Dodge, Kerley, Lofthouse, & Pettit, 2003; Chou, 2003; Ryan & Lynch, 1989; Steptoe et al., 2002; Stock et al., 2001). The direction for the relationship of emotional autonomy with internalizing behaviour problems is not definite, so one of the aforementioned researches (Dhillon, 2014) has been considered in the formulation of this model because of comprehensive explanation provided in this research.

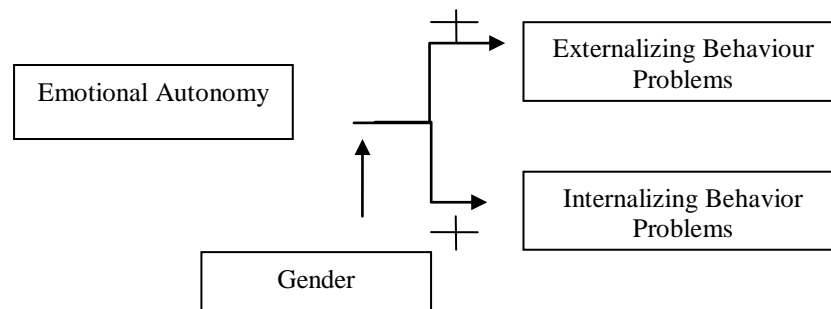


Figure 1. Model showing the predicted relationship of emotional autonomy with behavioural problems within adolescents and the moderation of this relationship by gender.

Rationale

Adolescence is primarily significant because of the developmental transition towards adulthood. During this period the decreased dependency upon parents and individuation can lead to beneficial as well as harmful outcomes. The rewarding result of emotional autonomy can be the development of a healthy and self-reliant individual. However, adolescent can also develop either externalizing or internalizing behavior problems because of decreased association with and monitoring by the parents. These negative outcomes need to be addressed more strongly because of the long lasting effects. Gender of the growing adolescent can also play important role in the on-set of behavior problems along with the development of emotional autonomy, owing to the fact that girls and boys have different social interactions and ways in which they are

brought up. Boys are monitored less as compared to girls who are taught increased dependence upon the family particularly in collectivistic cultures.

Resultantly, the aim of this research was to explore the gender variations in emotional autonomy and behaviour problems and the role gender of an adolescent plays in influencing the relationship between emotional autonomy and behaviour problems among adolescents. It is crucial to test this model in Pakistan because of the limited number of researches addressing this issue globally and none with the sample of adolescents residing within this particular region.

Another important aspect addressing the significance of this particular research is that the western researches are usually not beneficial for collectivistic cultures because of the difference in social setting and resultant behavioural outcomes. This research might be of benefit for the educational institutions, researchers, practitioners, and health care centres because only an in depth understanding of adolescent problems within our cultural context can lead to the development of healthy and prosperous future generations.

Following hypotheses were formulated for present study:

1. Emotional autonomy has a positive relationship with externalizing and internalizing behaviour problems among adolescents.
2. Boys are more emotionally autonomous as compared to girls.
3. Externalizing behaviour problems are higher in boys as compared to girls.
4. Internalizing behaviour problems are higher in girls as compared to boys.
5. Gender moderates the impact of emotional autonomy on externalizing/internalizing behaviour problems among adolescents.

Method

Research Design

The research design was based on the objectives that centered on exploration of gender based moderation of the relationship between emotional autonomy and behaviour problems. In order to achieve this objective, two scales were used, out of which one was in English.

Resultantly the research was divided into two separate phases. The first section of the research was devised in order to try and determine the cultural appropriateness and comprehension difficulty level of the Emotional Autonomy Scale as this scale has not been used previously with the local context. In order to achieve this the author of the scale was contacted to seek consent. Ten students of M. Phil/Ph. D were approached and their opinions on the scale were collected in order to determine if the scale needed adaptation. Following this the scale was also administered upon 10 adolescents in order to enquire about the comprehension difficulty level of the scale. Feedback regarding the data generated in try-out phase was discussed with a committee of experts comprising of 7 members. The committee unanimously agreed that the scale was considered appropriate for adolescents between 16 to 18 years of age and hence no adaptation was required.

The second phase of this research comprised of data collection and generation of result based inferences.

Sample

The sample for the present research comprised of 215 adolescents ($n = 85$ boys, $n = 130$ girls) with age ranging from 16 to 18 years of age from the institutions of twin cities ($n = 118$ public, $n = 97$ private). Convenient sampling technique was used for this research.

Instruments

The following instruments were used for the present study along with a demographic sheet where information was collected about the age, gender, and type of educational institutions (public/private) from the participants.

Emotional Autonomy Scale (EAS). This scale consists of 20 items and comprised of four subscales namely Non-Dependency on Parents (N), Individuation (I), Deidealization of Parents (D), and Perceiving Parents as People (P) as mentioned by Steinberg and Silverberg (1986). The response options on this scale vary according to the level agreeability from 1 to 4. The scores range from 20 to 80. 11 statements out of the total are reverse coded. Remaining statements show that '*Strongly agree*' is 1, '*Agree*' is 2, '*Disagree*' is 3, and '*Strongly disagree*' is 4 and vice versa. Non-Dependency on Parents sub-scale comprises of items 2, 5, 6, and 13. Individuation sub-scale includes items 7, 9, 14, 17, and 19. Deidealization of Parents sub-scale

includes 1, 4, 11, 14, 18, and 19. Perceiving Parents as People sub-scale includes items 3, 8, 10, 12, 16, and 20. The test-retest reliability over a 15 days period, for different sub-scales was found to range from .71 to .81 (Sandhu & Tung, 2006).

Child Problems Checklist. Child Problem Checklist (CPCL) was used in order to measure the behaviour problems among adolescents. This scale has been developed in Urdu indigenously by Tariq and Hanif (2007). The norms for this scale have been established on 6 to 18 years children. The scale comprises of three components however, the somatic component of the scale was not used in this research. Only the externalizing and internalizing behaviour problems sub-scales were used for the research. The reliability of this scale is .90 (Ahmad, 2014). First 35 items are used to provide a composite score on externalizing behaviour problems while 36 to 68 items comprise of items about internalizing behaviour problems. This scale also provides rating options for the adolescents and lacks reverse coded items.

Procedure

The research comprised of two phases. In the first phase a tryout was conducted for the cultural adaption and language comprehensibility of the EAS. The second phase was the main study. Data was collected through group administration of the EAS and CPCL on 215 adolescents from Islamabad and Rawalpindi. The sample was approached using convenient sampling technique after consent of the head of their institutions as well as parental consent. Students were also asked to provide their agreement. They were assured that their identities and other information would not be violated along with other instructions about the research. The results were generated after statistical analysis.

Results

The objective of this research was to examine the relationship between emotional autonomy and behaviour problems among adolescents. The role of gender as a moderator of this relationship was also explored. Along with this other demographic variables were also examined and the results are generated after statistical analysis. Mean, standard deviation, skewness and kurtosis of the variables was computed revealing the following results.

Table 1

Descriptive analysis for Measures of Emotional Autonomy and Behavioural Problems and its sub-domains (N = 215)

Scales	α	M	SD	Range		Skew	Kurt.
				Potential	Actual		
EAS	.83	46.58	7.97	20-80	24-80	-.03	.55
D	.70	10.98	2.78	5-20	5-20	.18	-.19
N	.60	9.46	2.50	4-16	4-15	.36	.42
P	.61	14.86	2.91	6-24	8-24	.08	.64
I	.60	11.36	2.74	5-20	6-18	.31	.33
BP	.92	137.83	28.52	68-340	72-330	.50	.08
INT	.88	70.32	16.62	33-165	35-160	.55	.29
EXT	.89	67.51	17.14	35-175	39-172	.62	.32

Note. EAS = Emotional Autonomy Scale; D = Deidealization; N = Non-dependency; P = Perceiving Parents as People; I = Individuation; BP = Behaviour Problems; INT = Internalizing Behaviour Problems; EXT = Externalizing Behaviour Problems.

Table 1 shows the generated results for all the variables. The results show that the desired range of skewness and kurtosis is achieved and thus the data is normally distributed. This data can be used for parametric test application accordingly. Kurtosis indicates the peakness of data and thus high values of kurtosis for emotional autonomy and behaviour problems show high peaks. Deidealization subscale of emotional autonomy, however, indicates low values showing heavy tailed distribution of data. The reliability of all the scales and their sub-domains is also appropriate.

Table 2

Correlation among Study Variables (N = 215)

Sr. No.	Scales	1	2	3	4	5	6	7	8
1	EAS	-	.75**	.73**	.81**	.73**	.24**	.19**	.23**
2	D		-	.49**	.42**	.36**	.31**	.29**	.25**
3	N			-	.46**	.31**	.18**	.11	.20**
4	P				-	.55**	.12	.11	.12
5	I					-	.14*	.08	.18**
6	BP						-	.85**	.86**
7	INT							-	.49**
8	EXT								-

Note. EAS = Emotional Autonomy Scale; D = Deidelization; N = Non-dependency; P = Perceiving Parents as People; I = Individuation; BP = Behaviour Problems; INT = Internalizing Behaviour Problems; EXT = Externalizing Behaviour Problems.

* $p < .05$. ** $p < .01$.

Table 2 indicates that significant positive correlation exists between emotional autonomy and overall behaviour problems. Similar relationship is observed between emotional autonomy and internalizing/externalizing behaviour problems. The domains of emotional autonomy are also significantly positively related with behaviour problems (internalizing/ externalizing behaviour problems). These results are in the same direction as predicted in the hypotheses.

Group differences were examined as a part of this research for all the variables. These groups revealed differences on the basis of gender of the adolescents and their nature of institutions. The following Table shows the generated results after analysis.

Table 3

Gender Differences on Study Variables (N = 215)

Scales	Boys (n = 85)		Girls (n = 130)		<i>t</i> (213)	95% CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>LL</i>	<i>UL</i>	
EAS	47.90	8.37	45.71	7.60	1.98*	.01	4.36	.34
D	10.95	2.63	11.00	2.89	.12	-.81	.72	.22
N	9.88	2.57	9.18	2.43	2.00*	.01	1.38	.27
P	15.25	3.01	14.60	2.82	1.62	-.13	1.45	.23
I	12.02	2.92	10.93	2.54	2.90**	.35	1.83	.32
BP	137.96	29.96	139.50	31.04	.35	9.95	6.88	.07
INT	67.47	16.12	72.36	17.00	2.10	9.47	-.30	.14
EXT	71.11	20.52	66.81	17.68	1.63	-.88	9.48	.04

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit; EAS = Emotional Autonomy Scale; D = Deidelization; N = Non-dependency; P = Perceiving Parents as People; I = Individuation; BP = Behaviour Problems; INT = Internalizing Behaviour Problems; EXT = Externalizing Behaviour Problems.

* $p < .05$. ** $p < .01$.

The results from the Table 3 reveal significant gender differences on the emotional autonomy and behaviour problems. The boys are found to be high on emotional autonomy as compared with girls thus supporting the second research hypothesis. The results also show gender differences on internalizing behaviour problems where girls have scored significantly higher. This finding supports our fourth research hypothesis. Thus the evidences from the results indicate that the boys are more emotional autonomous, whereas girls have a higher tendency to develop internalizing behaviour problems. Cohen's *d*

indicating effect sizes are found to be small for all the variables including their subscales.

The group differences were also explored based upon the nature of institutions to which the adolescents belonged. On the basis of this variation the adolescents of public and private sector institutions were compared. The analysis revealed the following variations among the sample.

Table 4

Differences in Adolescents from Public and Private Institutions on Study Variables (N = 215)

Scales	Public (n = 118)		Private (n = 97)		t (213)	95% CI		Cohen's d
	M	SD	M	SD		LL	UL	
EAS	47.78	8.29	45.11	7.33	2.47*	.54	4.80	.33
D	11.26	2.85	10.63	2.67	1.63	-.12	1.37	.24
N	9.77	2.57	9.08	2.38	2.01*	.01	1.36	.25
P	15.16	2.99	14.48	2.77	1.72	-.09	1.46	.24
I	11.75	2.88	10.88	2.49	2.32*	.13	1.60	.34
BP	137.86	30.14	140.14	31.17	-.54	-10.54	5.98	.07
INT	69.31	16.24	71.78	17.44	-1.07	-7.00	2.06	.14
EXT	68.87	19.00	68.08	18.93	.30	-4.33	5.91	.04

Note. CI = confidence interval; LL = lower limit; UL = upper limit; EAS = Emotional Autonomy Scale; D = Deidealization; N = Non-dependency; P = Perceiving Parents as People; I = Individuation; BP = Behaviour Problems, INT = Internalizing Behaviour Problems, EXT = Externalizing Behaviour Problems.

* $p < .05$.

Table 4 shows group differences based upon the nature of institutions of the adolescents both emotional autonomy and behaviour problems. The Non-dependency, Individuation, and overall Emotional Autonomy variables were revealed to be significantly high for the adolescents belonging to government sector institutions. However, the private sector institutions were found to be high on internalizing behaviour problems.

Moderation analysis is used to check the influence of a third variable on the relationship between two variables. Therefore in accordance with the objectives of this research the analysis was performed in order to determine the role of gender as a moderator on the effect of emotional autonomy upon behaviour problems (externalizing/internalizing). The results for overall behaviour problems ($\beta = -.346$, $p > .05$) and internalizing behaviour problems ($\beta = -.04$, $p > .05$) were found to be nonsignificant. However, significant results were revealed for externalizing behaviour problems.

The regression analysis was used for determining the moderation by gender of the effect of emotional autonomy on externalizing behaviour problems. The results of this analysis were revealed to be positive and are given below.

Table 5

Moderation of the effect of Emotional Autonomy on Externalizing Behaviour Problems by Gender Among Adolescents (N = 215)

Predictors		Adjusted			
Model		R^2	β	t	p
1	(Constant)			5.745	.00
	Emotional Autonomy		.22	3.379	.00
	Gender	.05	-.08	-1.205	.23
2	(Constant)			5.912	.00
	Emotional Autonomy		.21	3.193	.00
	Gender		-.07	-1.118	.26
	Gender x Emotional	.07	.14	-2.188	.03
	Autonomy				

The results show that gender influences the relationship between emotional autonomy and externalizing behaviour problems. The interaction of gender and emotional autonomy accounts for 7% variation in the relationship of emotional autonomy and externalizing behaviour problems. The significant positive value of β , therefore, shows that the relationship among the variables is strengthened due to the moderation. These results are in agreement with the conceptual model of this research which states that gender tends to moderate the effect of emotional autonomy on behaviour problems (externalizing behaviour problems). However, the influence of gender being a categorical variable requires further elaboration and therefore a mod graph is also generated.

The Figure 2 shows that in a graphical form that gender influences and moderates the relationship between emotional autonomy and externalizing behaviour problems. This relationship is strengthened in the case of boys for high levels of emotional autonomy. However, the direction of graph for girls is relatively closer to neutral indicating a minimal variation in the relationship of emotional autonomy and externalizing behaviour problems as a consequence of moderation by gender. The slopes calculated for both curves turned out to be $t = 5.86$ ($p = .00$) for boys and $t = 0.67$ ($p = .05$) for girls.

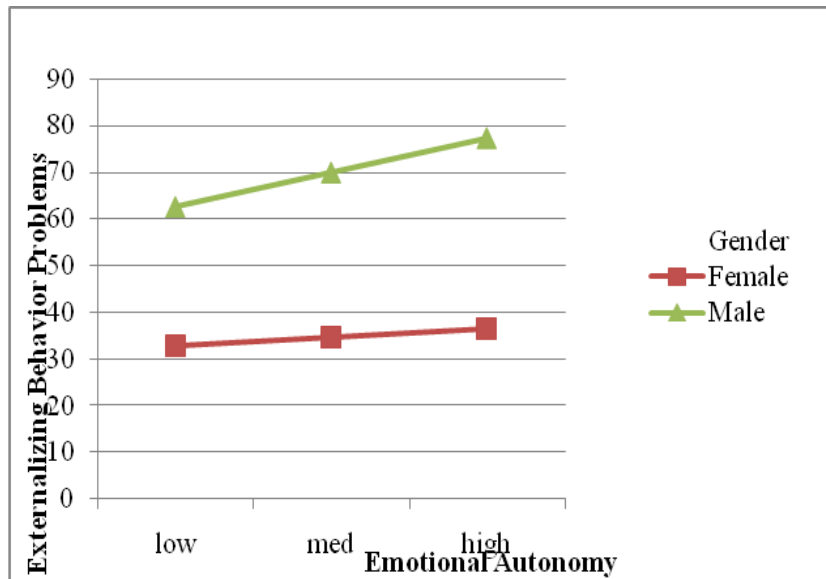


Figure 2. Mod-graph showing the moderation of gender on the relationship between emotional autonomy and externalizing behaviour problems.

Discussion

This research was designed in order to evaluate the construct of emotional autonomy and its relationship with behavioural problems among adolescents. Another objective of this research was to examine the moderation by gender of this relationship along with group differences across demographic variables such as nature of educational institutions etc. Data was generated from adolescents belonging to the educational institutions of Islamabad and Rawalpindi within age group 16 to 18 years.

The research was accomplished making use of the Emotional Autonomy Scale (Steinberg & Silverberg, 1986). The scales have reasonable reliability, however an anomaly was observed in case of Non-dependency, Perceiving Parents as People and individuation sub scales of Emotional Autonomy Scale. Nevertheless, three of the four subscales do have reliability coefficient exceeding or equal to .60 is encouraging (Steinberg & Silverberg, 1986). This scale has been used in various researches and the results indicate the appropriateness of these measures (Adams & Berzonsky, 2008; Chou, 2003; Mubarak & Psi, 2009; Natarajan, 2013; Noom et al., 2001; Oliva, 2000; Zimmer-Gembeck & Collins, 2003 Sandhu & Kaur, 2012; Tung & Dhillon, 2006). The data was normally distributed as indicated by the skewness

and kurtosis values of the scales and their sub-scales for both emotional autonomy and behaviour problems.

Evaluating the relationship among key variables was a prime objective of this research. The first hypothesis generated based upon the literature stated emotional autonomy and behaviour problems have a direct relationship as well as the two domains of behaviour problems. The results of this research support the first hypothesis by revealing that the relationship between Emotional Autonomy along with its sub-scales and Behaviour Problems (Internalizing/ Externalizing Behaviour Problems) for adolescents is direct ($p < .01$). These results are in agreement with the exiting literature (Adams & Berzonsky, 2008; Chou, 2003; Lamborn & Steinberg, 1993; Ryan & Lynch, 1989; Sandhu & Kaur 2012; Zimmer-Gembeck & Collins, 2003). The relationship between Behavior Problems and Individuation subscale of Emotional Autonomy Scale was also positive ($p < .05$). The results support the research hypotheses and show agreement with the conceptual model (Adams & Berzonsky, 2008; Chou, 2003; Dhillon, 2014; Natarajan, 2013; Noom et al., 2001; Ryan & Lynch, 1989; Sandhu & Kaur, 2012; Steinberg & Susan, 1986; Steptoe et al., 2002; Stock et al., 2001; Tung & Dhillon, 2006; Zimmer-Gembeck & Collins, 2003). Thus the first hypothesis was supported.

Group differences observed based on gender revealed that boys have high scores on emotional autonomy along with the non-dependency and individuation. The result supports the second hypothesis of this research and this is supported by previous researches (Frank et al., 1988; Noom et al., 2001; Oliva, 2000; Ryan & Lynch, 1989). The girls on the other hand scored significantly higher on the internalizing domain of behaviour problems. The result is supported by literature (Achenbach, 1991). Whereas for the third hypothesis although the gender differences are nonsignificant on externalizing behaviour problems the mean difference was higher for boys as compared to girls which was in the direction proposed by existing literature (Tu et al., 2014).

Differences were revealed among adolescents belonging to government owned and private institutions. High emotionally autonomy was observed among members of public sector institutions as compare adolescents of private institution. They were significantly high on non-dependency and Individuation sub-scales too. The results highlight the influence of educational institutions on the developmental milestones of adolescents. A new model was generating making use of the already available researches (Adams & Berzonsky, 2008; Chou, 2003; Dhillon, 2014; Natarajan, 2013; Noom et al., 2001; Ryan & Lynch, 1989; Sandhu & Kaur, 2012; Steinberg &

Susan, 1986; Steptoe et al., 2002; Stock et al., 2001; Tung & Dhillon, 2006; Zimmer-Gembeck & Collins, 2003). The model explained that gender moderates the effect of emotional autonomy on internalizing and externalizing behaviour problems (see Figure 1).

The results revealed that there exists a direct relation between emotional autonomy and behaviour problems. Results also revealed that the relationship of emotional autonomy and externalizing behaviour problems is moderated by gender. The graphical representation of this moderation revealed that, the moderation of the effect of emotional autonomy is higher for boys as compared to girls, thus revealing the significance of gender in this relationship. This result is of paramount significance because boys already show a higher tendency towards externalizing behaviour problems and in case of neglect during the developmental years, particularly with reference to of emotional autonomy, the chances for onset of such problems could be amplified. This result is supported by research evidences (Adams & Berzonsky, 2008; Chou, 2003; Lamborn & Steinberg, 1993; Ryan & Lynch, 1989; Sandhu & Kaur 2012; Zimmer-Gembeck & Collins, 2003).

The moderation results for overall behaviour problems and internalizing behaviour problems were revealed to be nonsignificant. Such a variation in the results might be due to the nature of the sample that was from urban institutions only. There is research evidence revealing that the parenting practices vary in urban and rural areas because mothers monitor their children more in urban communities within African American sample thus reducing the chances for development of internalizing behaviour problems (Armistead, Forehand, Brody, & Maguen, 2002). Chances are any such practices might exist in the local context as well and resultantly internalizing behaviour problems might be monitored more often as compared to externalizing behaviour problems because aggressive tendencies are tolerated for children these days usually attributing such tendencies to media and violent games and thus much adjustment difficulties are not experienced with minimized chances of behaviour problems (Dhillon, 2014; Ferguson, Miguel, Garza, & Jerabeck, 2012 ; Natarajan, 2013).

The model proposed in this research highlights the importance of adolescence in the development of emotional autonomy and the role of gender based specific developmental needs of this age group. The culturally specific results reveal how different types of behavior problems emerge among boys and girls. It also reveals that inadequate developmental accomplishment of detachment from parents and assuming new roles can lead to various problems. The physical and psychological health of a growing mind should be of paramount

significance because healthy adolescents grow up to establish a healthy society. Proper guidance of parents and care takers is required so that an awareness is generated regarding the developmental needs of adolescents particularly girls.

This research also highlights that further research needs to be done in the domain of adolescent health and development because of limited amount of available literature specific to this cultural set-up and the concepts, used in this research, need to be studied further from other perspectives in order to gain a comprehensive understanding of the adolescent issues.

Limitations

The research comprised of sample acquired using convenient sampling technique as thus the generated results are from specific regions only due to lack of resources and time constraint. Another constraint was the reluctance of heads of various educational institutions to let their students participate in the research process. One of the questionnaires used in this research was in English. This could have posed problems in comprehension for the adolescents, however, very few students reported such difficulty. These limitations account for a restricted generalizability of the research and provide opportunity for further research in this area.

Conclusion

The research was designed in order to examine the moderation by gender of the effect of emotional autonomy on behavior problems among adolescents. The research shows that a direct relationship exists between emotional autonomy and behavior problems comprising of both internalizing and externalizing behavior problems. Results also show that boys have scored high on emotional autonomy whereas girls have a higher tendency towards internalizing behavior problems. The adolescents belonging to government sector institutions have high emotional autonomy. Another significant result generated by this research reveals that gender moderates the effect of emotional autonomy on externalizing behavior problems. The support of research evidence for the theoretical model presented in this research highlights the importance of adolescence as a developmental stage.

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