Impact of Parenting Styles on Psychological Flexibility Among Adolescents of Pakistan: A Cross-Sectional Study

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Abstract

The parenting styles and psychological flexibility have been significant variables; however, little empirical work has addressed the impact of parenting in terms of the expansion of psychological flexibility. The present study investigated the impact of different parenting styles as a predictor of psychological flexibility in the adolescent population. A total sample of 100 adolescents (50 boys and 50 girls) whose ages ranged between 12 and 18 years without any previous psychiatric and medical history were recruited from different educational institutes of Pakistan. Results revealed that parenting styles are positively associated with psychological flexibility ($r=0.75, p<0.05$). Moreover, parenting styles significantly predict psychological flexibility among adolescents ($p<0.05$). However, no gender differences were found across both variables among adolescents. These findings have highlighted the significance of parenting styles and psychological flexibility with respect to the mental health of adolescents.

Keywords Parenting Styles · Psychological Flexibility · Adolescents · Gender differences · Pakistan

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Existent literature shows that among a wide range of influences on the development of child, parenting is the most influential factor which determines the childhood psychopathology and child's development. Parenting styles means attitudes and behaviors that parents generally use across different contexts to manage the behavior of their children by exerting affection, receptiveness, control, and punishment. In successful parenting, numerous biological and environmental factors also play major role in determining, whether the child will be able to respond accurately to the internal experiences and environmental demands to achieve their goal, i.e., establishing their psychologically flexibility. Parents hold special importance during the early years of their children's lives. They acts as a guide for their children for experiencing the initial stages of autonomy from the stages of absolute infantile reliance. Their parenting styles could have direct or indirect effects on social, moral and academic development of their children. Parents are required to deal with the challenge of balancing the maturity and disciplinary demands they make to integrate children into family and social system, while keeping an atmosphere of receptiveness and warmth for ensuring the best possible outcome for their children. Children may experience a multitude of adjustment problems when there is an imbalance in provision of care and disciplinary controls from their parents. Therefore, this

study is intended to explore the impact of different parenting styles in the growth of psychological flexibility.

Earlier psychopathologies such as internalizing and externalizing issues have been associated with parenting practices (Davidov & Grusec, 2006; Rodriguez, 2003) and psychological flexibility (Kashdan et al. 2006; Lee et al., 2010). Higher levels of psychological flexibility help in coping with psychological difficulties through acceptance and promotion of desirable behaviors (Fledderus et al., 2010). Parenting styles refer to the pattern of parental behaviors and approaches towards their children and a passionate environment in which parents rear their children (Darling & Steinberg, 1993). There are different parenting styles: parent's control includes restrictive, nursing, and modifying the behavior of the child, while a parent's warmth involves acceptance and love. Darling and Steinberg (1993) made a distinction between parenting styles and parenting practices by referring parenting styles as a parent–child interaction across situations and settings whereas parenting practices are specific to certain situations and domains. Currently, the three parenting styles, i.e., authoritarian, authoritative, and permissive, introduced by Baumrind (1971) are extensively used models of parenting styles. Authoritarian parenting style is represented by a lower level of affection, high control, strict discipline, and unresponsiveness towards the emotional requirements of children (Chipman et al., 2000). While authoritative parenting is represented by higher warmth, control, and responsiveness and is linked with a higher level of self-control and independence in children (Coolahan et al., 2002). Lastly, permissive parenting is characterized by low warmth, control, and expectations, which causes poor self-regulation among children (Chipman et al., 2000). Authoritative parenting refers to the higher-level warmth as well as control and have been found the most effective parenting style (Darling & Toyokawa, 1997).

Psychological flexibility is characterized by the individual's ability to react appropriately to different circumstances and emotional demands in order to achieve one's goals (Kashdan, & Rottenberg, 2010; Landstra et al., 2013). For instance, an individual is supposed to respond immediately and appropriately to unexpected and normal situations. Kashdan and Rottenberg's (2010) defined psychological flexibility in terms of self-control, self-regulation, and emotional regulation (Moilanen et al., 2010). These characteristics are associated with psychological capability, which adolescents need to attain their objective in a complex social setting (Haugstvedt, Wentzel-Larsen, Rokne, & Graue, 2011). According to Hayes et al. (2011), there are six distinctive elements of psychological flexibility: Acceptance (shows readiness to interact with undesirable experiences entirely), Contact with the Present Moment (awareness of one's experience), Self as Context (to keep the view of one-self within one's understanding), Defusion (to deal with

undesirable experiences without getting trapped in them), Committed Action (sustaining attitudes for significant parts of life), and Values (remain linked with course life and direct the behaviors) (Rolffs et al., 2018).

Recently, there has been a growing interest in examining the association between psychological flexibility, psychological, and social consequences (Brassell et al., 2016). Higher psychological flexibility is linked with positive consequences such as adaptive psychological functioning, higher emotional wellbeing, and quality of life (Bond & Bunce, 2003; Hayes et al., 2006). Contrary, lower psychological flexibility is linked with higher psychopathologies (Tull et al., 2004) and emotional responses (Sloan, 2004). Psychological flexibility is greatly influenced by parenting style (Haugstvedt, Wentzel-Larsen, Rokne, & Graue, 2011; Williams et al., 2012) and the context in which children are raised. However, it is still uncertain how parenting is related to the development of psychological flexibility. Parents spend their time, energies and resources to raise their children (Trivers & Willard, 1973), however, it is unclear whether behavior is influential (Moilanen et al., 2010), or amalgamation of both parental control and warmth is advantageous during late adolescence and early adulthood (Liem et al., 2010). Even though, not a single theory of parenting is comprehensive and absolute, clearly explaining how it shapes the development of children. But still, there is enough evidence supporting that the child's development is significantly influenced by the parenting styles (Thergaonkar & Wadkar, 2007).

With respect to mental health issues, parenting is major factor promoting psychological flexibility among adolescents (Flujas-Contreras, & Gómez, 2018). Alegre (2011) reported in a review study that parenting is associated with several psychological constructs such as emotional intelligence and psychological flexibility (Bhattacharyya, & Pradhan, 2015; Brand et al., 2009). Moreover, evidence from past studies indicated that parenting styles influence the adolescent's self-motivation, self-esteem, and stress cognition (Huver et al., 2007). The adolescents with authoritative parents have a higher level of self-esteem and self-regulation (Milevsky et al., 2007), while parent's authoritarian styles are inversely associated with self-conception and confidence (Chan & Koo, 2011). Moreover, adolescents with authoritative fathers are more determined and persistent regardless of resistances, interruptions, and internal causes of motivations (Padilla-Walker, Day, Dyer & Black, 2013).

In addition, parental practices have been found associated with emotional regulation, adaptability, and impulsiveness (Barros et al., 2015). Parental emotional control impacts the children understanding of emotions and behaviors (Gugliandolo et al., 2014). Adolescents with authoritative parents studying in high schools reported a higher ability to attain their objectives (psychological flexibility)

with respect to the environmental demands (Williams et al., 2012). In comparison, adolescents with authoritarian parents indicated lower levels of psychological flexibility. Supportive and responsive parenting have also been associated with empathetic behaviors in the adolescent samples (Laible & Carlo, 2004). Previously, numerous studies have examined the association between these two variables in Western countries (Moyer, & Sandoz, 2015; Williams et al., 2012). But to the best knowledge of researcher, the association between these constructs and gender differences has not still studied in Pakistan, specifically in the adolescent population who experience a higher number of psychological difficulties due to the growing and demanding age (Bibi, Blackwell & Margraf, 2019; Bibi, Lin, Zhang & Margraf, 2020).

Socio-cultural factors and socialization practices also impact parenting approaches. Parents encourage autonomy, self-reliance, competitiveness, and self-expression in Western cultures (Keller & Otto, 2009), while parents in Asian culture normally have authoritarian parenting styles to control and shape the behavior of the child (Mousavi, Low, and Hashim, 2016), therefore, it is important to contemplate the cultural context. This study aimed to fill this gap by advancing the present literature related to parenting practices and psychological flexibility of Pakistani adolescent population.

Similarly, gender differences in psychological flexibility (Azevedo & Matos, 2015) and parenting styles in terms of mental health have been rarely investigated. Therefore, it would be noteworthy to examine gender differences in perceived parenting styles and psychological flexibility in the socio-cultural context of Pakistan, where adolescent girls are encouraged to spend their time at home, whereas boys are encouraged to stay outside and involve in social activities. Barnhart et al. (2013) explained that fathers are considered as authoritarian and mothers are considered as more authoritative and occasionally more permissive in Asian cultures. However, the parenting practices are transforming in recent years and fathers are equally getting involved in the parenting practices (Bhattacharyya & Pradhan, 2015). In Asian culture, boys and girls have different social roles, therefore parenting vary for both genders. In the culture of Pakistan, girls are expected to be more passive, dependent and submissive with respect to their gender roles (Bibi et al., 2018), while boys are expected be aggressive, dominant and independent. However, parenting practices are changing with time due to increased industrialization, modernization, awareness, and financial progress. Likewise, expectations and needs of children are also changing with the passage of time. Therefore, the current study also intended to explore role of gender in association between parenting styles and psychological flexibility.

Keeping in view of the aims of the study, it was hypothesized that:

1. Parenting styles such as permissive parenting style, authoritarian parenting style, authoritative parenting style will significantly predict multidimensionally psychological flexibility such as acceptance, present moment awareness, self as context, defusion, values, committed action among adolescents.
2. Authoritative and permissive parenting styles would be positively, and Authoritarian parenting style would be negatively associated with psychological flexibility.
3. Gender would moderate the relationship between parenting styles and psychological flexibility among adolescents.

Method

Participants

This study employed a cross-sectional study design. Convenient purposive sampling technique was applied to collect the data from 50 males and 50 females having a mean age of ($M = 15.35$) and standard deviation ($SD = 1.76$) from different educational institutes. Inclusion criteria included obtaining informed consent and including adolescents with ages ranging between 12 to 18 years with no previous psychiatric or medical history. English versions of all the questionnaires were used as English is the official language of Pakistan. Moreover, the medium of instruction in educational institution is also English in Pakistan. Participants took 25 min to complete the survey. The participant's demographic characteristics are presented in Table 1.

Table 1 Demographic characteristics of adolescents ($N = 100$)

Description of characteristics	Categories	Frequency	Frequency percentage (%)
Age	12–14 years	35	30.7
	15–17 years	48	42.1
	Above 18 years		31.3
Gender	Male	50	43.9
	Female	50	43.9
Education	Matric	41	3.16
	Intermediate	59	51.8
	Missing	14	12.3
Socioeconomic status	Upper class	27	23.7
	Middle Class	45	39.5
	Lower Class	28	24.0

This table shows the demographic characteristics of adolescents

Instruments

Demographic Data

Demographic data of participants was collected in terms of age, gender, educational level, and socioeconomic status.

The Parental Authoritative Questionnaire (PAQ)

The PAQ was developed by Buri (1991) to measure the parenting styles from the perspective of adolescents. It consists of 30 items and three subscales such as Permissive (e.g., 1, *While I was growing up my mother felt that in a well-run home the children should have their way in the family as often as the parents do*; items 1, 6, 10, 13, 14, 17, 19, 21, 24 and 28), Authoritarian (e.g., 2, *Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right*; items 2, 3, 7, 9, 12, 16, 18, 25, 26 and 29), and Authoritative/flexible (e.g., *As I was growing up, once family policy had been established, my mother discussed the reasoning behind the policy with the children in the family*; items 4, 5, 8, 11, 15, 20, 22, 23, 27, and 30). Participant responded on these items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores on each subscale ranged from 10 to 50. High scores on each subscale indicate a higher perception of the presence of the parental prototype measured. Cronbach's alpha reliability coefficients for all the subscales were reported above 0.77 (Buri, 1991). In our sample, Cronbach alpha of PAQ was 0.87 (Excellent).

The Multidimensional Psychological Flexibility Inventory (MPFI)

MPFI developed by Rolffs et al., (2016) was used to assess the different dimensions of the psychological flexibility of participants. It consists of 60 items and twelve subscales. The first six subscales measure psychological flexibility, and the next six subscales measure psychological inflexibility. Only, first six subscales measuring psychological flexibility were employed in the current study. The subscale are as follows: Acceptance (e.g., *"I was receptive to observing unpleasant thoughts and feelings without interfering with them."*), Present Moment Awareness (e.g., *"I was attentive and aware of my emotions"*), Self as context (e.g., *"Even when I felt hurt or upset, I tried to maintain a broader perspective"*), Defusion (e.g., *"I was able to let negative feelings come and go without getting caught up in them"*), Values (e.g., *"I was very in touch with what is important to me and my life"*), Committed Action (e.g., *"Even when I stumbled in my efforts, I didn't quit working toward what is important"*). Participants responded on a 6-point Likert scale ranging from 1 (*never true*) to 6 (*always true*). Higher scores on each subscale show a higher level of the specific

dimension being evaluated. In our sample, the Cronbach alpha of MPFI was 0.88 (Excellent).

Procedure

The current study was ethically approved by the National University of Modern languages, Islamabad. After ethical approval, permission was taken from the respective higher authorities of the educational institutions for data collection. Data was collected from the different institutions that were in easy approach of the researcher. After obtaining permission, participants were approached in their classrooms. They were briefed about the study and their ethical rights. They were instructed to approach the researcher in case of any ambiguity while completing the questionnaires. Then, participants were presented with the questionnaire and were guided about the instruction of the questionnaire. Participants completed the questionnaire in 20 – 25 min. In the end, participants were thanked for their participation.

Data Analysis

Statistical Package for Social Sciences (SPSS) version 25 was used to analyze the data of the present study. Descriptive statistics were obtained for all of the study variables. Spearman's Rank-order correlation was applied to study the link between parenting styles and psychological flexibility. Multiple regression analysis was applied to predict psychological flexibility. Moderation analysis was done through Process Macro to investigate the effect of gender on parenting style and psychological flexibility among adolescents. All variables which were included in linear Regression were continuous except the sociodemographic variable such as Gender. It was coded as 1 for males and 2 for females in moderation analysis. Moreover, the robustness of the analyses with respect to collinearity was checked through the examination of Tolerance/Variance Inflation Factors and Cook's D values with the help of statistician (Clark-Carter, 2018).

Results

Descriptive Analysis

The values of skewness and kurtosis were within cutoff criteria, indicating the normal distribution of variables. Internal consistency of parenting styles and psychological flexibility was satisfactory (Except the reliability of subscale of psychological flexibility was lower ranging from 0.22 to 0.46). Mean, standard deviation, minimum, maximum, kurtosis, and skewness of both variables are presented in Table 2.

Table 2 Descriptive statistics of study variables

Variables	M	SD	N	A	Range	Actual potential	Skewness	Kurtosis
Parental authority questionnaire	89.32	16.55	30	0.87	1–5	30–150	0.220	1.096
Permissive parenting style	29.67	6.71	10	0.78	1–5	10–50	0.136	−0.550
Authoritarian parenting style	29.90	7.01	10	0.61	1–5	10–50	0.009	−0.359
Authoritative parenting style	29.75	6.96	10	0.76	1–5	10–50	0.220	0.201
MPFI	89.05	16.86	30	0.88	1–6	30–180	0.211	0.734
Acceptance	14.50	3.59	5	0.31	1–6	5–30	0.183	−0.834
Present moment awareness	15.07	3.27	5	0.23	1–6	5–30	−0.127	−0.135
Self as context	14.74	3.12	5	0.24	1–6	5–30	0.302	0.633
Defusion	14.74	3.50	5	0.22	1–6	5–30	0.109	−0.380
Values	15.01	3.64	5	0.31	1–6	5–30	0.196	−0.853
Committed Actions	14.99	4.21	5	0.46	1–6	5–30	−0.330	−0.466

N = 100

Correlations

Correlation between composite scores of parenting style and multidimensional psychological flexibility was computed. Results indicated that parenting styles are positively associated with psychological flexibility ($r = 0.75$, $(2,98)$ $p < 0.01$) (see Table 3).

Regression Analysis

Multiple regression analysis of psychological flexibility with composite scores as well as subscales such as Acceptance, Present Moment, Self as Content, Defusion, Values, Committed Actions as dependent variables and parenting styles such as Permissive, Authoritarian and Authoritative parenting style as independent variables showed significant results

($R^2 = 0.63$, $F(3,96) = 56.61$, $p < 0.001$), (see Table 4). The value of R-Square shows that 63% of variance in dependent variable (psychological flexibility) can be predicted from the independent variable (parenting styles).

Result indicated that permissive parenting style predicted significantly subscale of psychological flexibility such as Acceptance ($R^2 = 0.53$, $F(3,96) = 36.79$, $p < 0.001$), Present Moment ($R^2 = 0.53$, $F(3,96) = 36.08$, $p < 0.001$), Self as Content ($R^2 = 0.554$, $F(3,96) = 39.79$, $p < 0.001$), Defusion ($R^2 = 0.47$, $F(3,96) = 28.59$, $p < 0.001$), Values ($R^2 = 0.467$, $F(3,96) = 28.01$, $p < 0.001$), Committed Actions ($R^2 = 0.24$, $F(3,96) = 10.12$, $p < 0.001$), whereas authoritative parenting style predicted significantly Self as Content and Defusion. Moreover, Authoritarian parenting style also predicted acceptance subscale of psychological flexibility among the adolescent sample.

Table 3 Correlation between parenting styles and psychological flexibility

Variables	PAQ	PPS	ATPS	APS	MPFI	A	PMA	SAC	D	V	CA
PAQ	—	0.668**	0.883**	0.844**	0.753**	0.700**	0.623**	0.738**	0.681**	0.528**	0.368**
PPS		—	0.360**	0.264**	0.701**	0.553**	0.695**	0.518**	0.438**	0.673**	0.466**
ATPS			—	0.747**	0.595**	0.646**	0.449**	0.611**	0.578**	0.313*	0.280**
APS				—	0.517**	0.482**	0.358**	0.641**	0.614**	0.292**	0.143
MPFI					—	0.751**	0.774**	0.825**	0.750**	0.840**	0.803**
A						—	0.421**	0.527**	0.571**	0.630**	0.419**
PMA							—	0.651**	0.432**	0.674**	0.540**
SAC								—	0.615**	0.600**	0.576**
D									—	0.412**	0.538**
V										—	0.653**
CA											—

N = 100

PAQ Parental Authority Questionnaire, PPS Permissive Parenting Style, ATPS Authoritarian Parenting Style, APS Authoritative Parenting Style, MPFI Multidimensional Psychological Flexibility Inventory, A Acceptance, PMA Present Moment Awareness, SAC Self as Context, D Defusion, V Values, CA Committed Action

** $p < .01$

Table 4 Multiple regression analysis with parenting styles such as permissive, authoritarian and authoritative parenting style as an independent variables and present moment, self as content, defusion, values, committed actions as dependent variables

	R^2	B	SE	95%CL	P
Psychological flexibility	0.639				
Permissive parenting		0.560	0.165	1.080, 1.736	0.000
Authoritarian parenting		0.266	0.229	0.184, 1.095	0.006
Authoritative parenting		0.171	0.223	-0.029, 0.857	0.067
Acceptance	0.535				
Permissive parenting		0.368	0.040	0.118, 0.276	0.000
Authoritarian parenting		0.511	0.055	0.152, 0.372	0.000
Authoritative parenting		0.003	0.054	-0.106, .109	0.978
Present moment awareness	0.530				
Permissive parenting		0.613	0.037	0.226, 0.371	0.000
Authoritarian parenting		0.184	0.051	-0.015, 0.187	0.094
Authoritative parenting		0.059	0.049	-0.070, 0.126	0.575
Self as context	0.554				
Permissive parenting		0.345	0.034	0.093, 0.228	0.000
Authoritarian parenting		0.171	0.047	-0.018, 0.170	0.110
Authoritative parenting		0.423	0.046	0.098, 0.281	0.000
Defusion	0.472				
Permissive parenting		0.267	0.041	0.057, 0.222	0.001
Authoritarian parenting		0.172	0.058	-0.028, 0.200	0.138
Authoritative parenting		0.415	0.056	0.097, 0.320	0.000
Values	0.467				
Permissive parenting		0.644	0.043	0.263, .435	0.000
Authoritarian parenting		-0.023	0.060	-0.131, 0.107	0.840
Authoritative parenting		0.140	0.059	-0.043, 0.189	0.215
Committed actions	0.240				
Permissive parenting		0.418	0.060	0.144, 0.382	0.000
Authoritarian parenting		0.236	0.083	-0.023, 0.307	0.091
Authoritative parenting		-0.143	0.081	-0.247, 0.074	0.287

 $N = 100$ **Table 5** Moderating Effect of gender on the Relationship between Parenting styles and Psychological flexibility in Adolescents ($N = 100$)

Predictors	Psychological flexibility		
	B	95% CI	
		LL	UL
Constant	-120.18***	-145.99	-94.37
Parenting styles	2.37***	2.08	2.65
Gender	120.62***	99.79	141.44
Parenting styles $\times$ Gender	-1.37***	-1.60	-1.14
R^2	0.82		
ΔR^2	0.25		
F	148.69***		
ΔF	137.59		

Table shows that gender moderates the relationship between parenting styles and psychological flexibility in adolescents. The interaction term of Parenting styles and gender significantly moderates this relationship ($\beta = -1.37$, $p < .05$)

CI confidence interval, UL upper limit, LL lower limit

*** $p < .001$

Moderating Effect of Gender on Parenting and Psychological Flexibility

Moderating effect of gender on the association between these two variables was investigated. The result indicated that gender moderates the association between parenting styles and psychological flexibility in adolescents. The interaction term of parenting styles and gender significantly moderates this relationship ($\beta = -1.37$, $p < 0.05$) (see Table 5).

Gender Differences in Parenting and Psychological Flexibility

The multivariate analysis (MANOVA) was applied to inspect whether the male and female adolescents differ on parenting styles and psychological flexibility. Initial postulation testing was performed to calculate the linearity, normality, univariate and multivariate outliers, with no serious desecrations, noted. We completed Wilks' Lambda test which showed non-significant. Results = 0.928, $F(9, 90) = 0.77$, $p > 0.05$, indicating that male and female adolescents have a similar parenting style and psychological flexibility (see Table 6).

Discussion

This study examined the impact of parenting styles on psychological flexibility among adolescents of Pakistan. Consistent with the proposed hypothesis, parenting styles significantly predicted psychological flexibility in this study.

Table 6 Gender comparisons of parenting styles and psychological flexibility among male and female adolescents

Variables	Male (n = 50)		Female (n = 50)		F	p	η^2
	M	SD	M	SD			
Parenting styles	89.88	21.437	88.76	9.667	0.113	0.737	0.001
Permissive parenting	30.14	8.347	29.20	4.562	0.488	0.486	0.005
Authoritarian parenting	30.10	7.215	29.70	6.867	0.081	0.777	0.001
Authoritative parenting	29.64	8.542	29.86	4.998	0.025	0.875	0.000
Psychological flexibility	90.12	21.664	87.98	10.145	0.400	0.528	0.004
Self-acceptance	15.00	3.974	14.00	3.117	1.960	0.165	0.020
Present moment awareness	15.12	3.783	15.02	2.699	0.023	0.879	0.000
Self as context	14.98	3.815	14.50	2.243	0.588	0.445	0.006
Defusion	14.90	3.721	14.58	3.296	0.207	0.650	0.002
Values	15.00	3.974	15.02	3.304	0.001	0.978	0.000
Committed actions	15.12	3.783	14.86	4.638	0.094	0.759	0.001

N = 100

MANOVA multivariate analysis of variance; M Mean, SD Standard Deviation, p significance

** $p < .01$ *** $p < .001$

Parenting styles such as permissive, authoritarian, and authoritative were significantly associated with psychological flexibility. Moreover, it was found that gender moderates the association between these variables. However, inconsistent with our hypothesis, gender differences in parenting patterns and psychological flexibility were non-significant. Additionally, it was found that parenting styles have strong relevance for psychological flexibility in adolescent samples.

Furthermore, results indicated that the permissive parenting style significantly predicted acceptance, present moment, self as content, defusion, values, committed actions subscale of psychological flexibility among the adolescent sample, indicating that adolescents of permissive parents have better emotional regulation and values due to parental cooperative, understanding and warmth behavior. Moreover, authoritarian parenting style predicted acceptance subscale of psychological flexibility. It could be due to higher expectations, demands and strictness of the parents, which are acceptable in Pakistani culture due to societal norms. The authoritative parenting style also significantly predicted psychological flexibility such as self as content, and defusion among the adolescent sample. It could be because parents' attitudes and practices have a direct influence on adolescents. These results are in line with existent literature, which reported that adolescents with the authoritative parents seems to be more famous, empathetic and socially acceptable (Sahithya et al., 2019; Steinberg et al., 1994). Contrary, adolescents who recognize their parents as controlling and aggressive are more likely to indulge in criminal behavior, have poor social skills (Brand et al., 2009; McElhaney & Allen, 2001) and lower psychological flexibility.

Psychological flexibility supports the individual in embracing the aversive emotional situations (Hayes et al.,

2006). The psychological flexibility model is equally applicable to the functioning of adolescents as well as their parents (Greco & Hayes, 2008). Awareness and acceptance of the emotional experience influence mental health and decreased psychopathologies (Ciarrochi et al., 2011) such as depression (Hayes et al., 2011) and anxiety (Semple et al., 2005). Positive parenting have good impacts on adolescent's social and communication skills (Betts et al., 2013), and supports interpersonal ties such as close relationships (Drózd & Pokorski, 2007). In conclusion, authoritative parenting, and family connections have been related to the increased level of optimism and hope among adolescents and children (Holder & Coleman, 2009). Authoritativeness also appears to influence the optimism which moderates self-esteem, parenting, and psychopathologies such as depression, (Jackson, Pratt & Pancer, 2005).

Additionally, it was also found that gender moderates the association between understudied variables. Interaction effects of moderation show that psychological flexibility in boys increases with more parental authority, while psychological flexibility in girls decreases with increasing parental authority. The possible explanation could be that boys are given more autonomy in their decisions but when parents keep control of their activities and guide them about different life situations, they become psychologically more flexible. Girls are overprotected, dependent and are not supposed to decide for the career, marriage, and work in Asian cultures due to higher parental control. Consequently, their psychological flexibility decreases with increasing parental authority.

Regarding the gender differences no gender differences were observed in different styles of parenting and psychological flexibility among girls' and boys' adolescents. Our

findings are not in line with the Azevedo and Matos's (2015) study, who reported that male adolescents have higher psychological flexibility than female adolescents. Considering the importance and complex role of psychological flexibility in health, it was assumed that psychological flexibility is likewise important for both boys and girls and protect them from mental health issues (Azevedo & Matos, 2015). Results indicate that parents equally invest their time, energies, and resources to treat their offspring regardless of their gender, as a result, they develop the same level of psychological flexibility. Moreover, during this stage, patterns of psychological functioning are not very rigid. One possible explanation could be that it is possibly due to growing interest of boys and girls in education, career approaches, therefore, they need equal attention of their parents, in turn, parents provide them all those resources and means which they required for their optimal development and progress.

The present study has diverse implications for mental health professionals, educationists and social workers who can contribute significantly to the psychological wellbeing of adolescents by educating appropriate parenting. Policy-makers should develop policies to address poor psychological wellbeing and increased psychological distress in the context of family. The outcome of the study indicates that a program for adolescents may also include skills for parents aimed at improving their parenting styles as well as psychological flexibility, as parents will learn about adaptive parenting styles. Thus, the outcome of the current study supports the advantages of adaptive parenting styles which leads to higher psychological flexibility and lower psychological issues (Brassell, 2016).

The present study holds a great significance in terms of culture. In Pakistan, priority is given to family and society over the individualistic needs. Moreover, parents are fully responsible for the rearing and training their children. Daughters are closely supervised and cared till their marriage as compared to sons. Obedience is much valued in Pakistani culture and acceptance for dominance and control is more likely to be greater. Apart from social and cultural factors, religion has a major influence on the parenting practices; parents are given a status of 'second only to God' leading to compliance, respect and obedience to authority are encouraged. Hence, parental supervision and control is considered acceptable in Pakistan. This explains the positive relationship between authoritarian parenting style and the composite Psychological Flexibility score in Pakistani adolescents. Therefore, this study contributed significantly in understanding that how psychological flexibility of children can be influenced from parenting styles in Pakistani cultures.

The current study also has some limitations. Firstly, a small sample collected from a few cities of Pakistan could limit the generalization of study findings. Secondly, the cross-sectional research design raises the issue of causality

of effects, which are addressed by a longitudinal research design. Future studies investigating a similar hypothesis should employ longitudinal research plan to examine long term effects. Thirdly, self-report measures were used which could lead to biased responses. Fourthly, regardless of the association of psychological flexibility with psychopathologies such as depression, anxiety (Fischer et al., 2016) and other health issues, we did not measure these psychological constructs which could confirm the findings of our study. Moreover, we also did not measure the psychological flexibility of parents, which could also influence their parenting styles and children's psychological flexibility (William, Ciarrochi, & Heaven, 2012). So, we recommend that future studies should include these measures assessing internalizing, externalizing, and health issues of adolescents.

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Data Availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Conflict of interest The authors declare that they have no competing interests.

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