

## A Study of Association between Temperament and Perceived Parenting Styles in Middle Childhood

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**Abstract** *This research explored the relationship of children's temperament dimensions with perceived parenting style during middle childhood. It was quantitative research based on correlational design. The sample comprised of 7 to 11 years old children attending mainstream school and their parents selected through convenient sampling from different schools of Lahore. Temperament in Middle Childhood Questionnaire and Parental Perception Questionnaire was used for data collection. The results indicated that authoritative parenting style shared a significant positive relationship with positive temperamental traits like surgency and effortful control, whereas negative affectivity temperamental dimension had a significant positive association with permissive and authoritarian parenting styles. Significant gender differences were witnessed in perceived parenting styles and temperamental dimensions. Findings were discussed in the context of previous research studies.*

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### Introduction

Temperament plays an instrumental role in the development of children (Davison et al., 2019; Pérez-Pereira et al., 2016). The assessment of temperament and its association with development and different dimensions of our lives have experienced a surge of interest (Rettew, McKee, 2005). Temperament is defined as individual differences in behavioral and emotional processes that emerge early in development and are formed through the amalgamation of genetic and environmental factors (Shiner, 2005).

There are many models that describe the structural conceptualization of temperament in detail, Rothbart's model of temperament is generally identified as an important model which has been followed in the present study identifying three core dimensions, namely surgency, effortful control, and negative affectivity (Kotelnikova, 2016). Surgency includes activity level, affect, sociability,

impulsivity, and pleasure expressed in expectation of reward or high-intensity pleasure. Effortful control includes the ability to focus attention, distractibility, satisfaction attained through low-intensity pleasure, and, in middle childhood, to exercise inhibitory control dimensions focus on positive approach tendencies. Whereas negative affectivity, including anger, frustration, sadness, fear, physical discomfort, and soothability, is related more with frustration during social discomfort.

The classical conceptual model of the temperament of Thomas and Chess (1984) signifies that a child's temperament-related demand-based outcomes were specifically dependent on how parents responded to their child. It examines how children's temperament might be dependent on a good match between the child and the environment provided by parents.

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As temperament develops as an outcome of both biological and environmental factors, one of which is parenting styles, the significance of understanding parenting styles in relation to temperament development become pronounced. The process of parenting involves a complex interplay of many practices and approaches that are opted by parents to interact with their children based on many values and beliefs they hold (Harkness & Super, 1992). Parenting styles are generally grouped into four main categories authoritative, authoritarian, permissive, and neglect. The authoritative style is mainly concerned with parents understanding their child's perspective with the imposition of balance between demandingness and responsiveness as it is characterized by high control and warmth and is associated with more positive behavioral outcomes in children. The authoritarian parenting style is comprised of high control and low warmth, and authoritarian parents assert power and make maturity demands that seem inappropriate with the present developmental stage of the child. Due to this aspect, children view their parents as unapproachable. In comparison to these styles, permissive parenting does not exercise a certain limit of control which becomes an active cause of lack of connection between parent and child. Permissive parenting is known for low control and high warmth. Another parenting style practiced is neglected or unengaged, where a child finds him or herself being neglected. Little time is dedicated to interaction or involvement by parents in the identification of their child's problems or daily hassles. Neglectful or uninvolved parenting is comprised of low warmth and control; children of parents using this parenting style are related more with negative behavioral outcomes such as high incident rate of behavioral and psychological problems (Parra et al., 2019).

Somewhat lacking certain control or affection in each parenting style practiced bringing the child face to face with underlying sufferings (Parra, et al., 2019). Parenting styles are believed to have a strong influence on different dimensions of development, including but not restricted to the development of self-concept (D' Souza, & Mendes, 2014), psychopathologies (Asmat et al., 2017), general development (Pérez-Pereira, 2016), behavioral problems (Braza et al., 2013; Calafat et al., 2014), academic

achievement (Pinquart, & Kauser, 2018) and drug abuse (Waterman, & Lefkowitz, 2017).

Literature at large associates authoritative parenting style with positive behavioral outcomes in children, whereas the other three parenting styles are related more with negative behavioral and psychological outcomes in children. However, some research challenged the universality of positive influences of the authoritative style on children's wellbeing. As some other studies also highlighted the positive effects of permissive (Calafat et al., 2014) and authoritarian parenting styles (Chao, 2001).

Both temperament and parenting styles are said to be very sensitive towards social and cultural beliefs, and practices as literature report noteworthy variations (Parra et al., 2019) in parenting styles across cultural and social reference groups (Sorkhabi, 2005; Steinberg et al., 1992).

The present study attempts to understand the relationship between temperament and parenting styles. This study will make important contributions to the existing literature as prior studies emphasized more on exploring temperament in infancy and adolescence rather than middle childhood. Very few researches have been conducted in Pakistan to study parenting styles in relation to temperamental dimensions, so findings of the present study will provide future researchers to better understand child's temperament and perceived parenting style practiced in Pakistan and its distinctive features against western culture. The present study was thus based on following objectives.

- To study the relationship between a child's temperament and perceived parenting style.
- To explore the difference in perception of parenting styles and temperament across gender groups.

## Methodology

The present research used correlational design from quantitative study designs.

## Participants

A convenient sampling method was employed to select a group of 150 children age ranging from 7 to 11 years ( $Mean= 9.70$ ,  $SD= 1.29$ ). Children were approached in mainstream public and private schools situated in Lahore city. Sample

comprised of both boys ( $n= 77$ ) and girls ( $n=73$ ) and their parents.

### Instruments

The instruments used to collect information in this study included demographic information form, Temperament in Middle Childhood Questionnaire (MCQ), and Parental Perception Question (PPQ-20).

### Demographic Form

This included some important questions about parents, children, and households. Personal information with regards to children consisted of questions about age, gender, birth order, siblings' grade, etc. Similarly, for parents, marital status, parental education, and occupation, monthly income of the family and family setting was requested.

Temperament in Middle Childhood Questionnaire (TMCQ) originally developed by (Simonds & Rothbart, 2004), Urdu translation and standardization by Nazim and Khalid (2016) prescribed for the range of 7 to 11 years was used for the assessment of temperament. The instrument consisted of 157 statements and used 5-point Likert scale ratings from 'Almost always true to 'untrue of this child' with an additional option of 'not-applicable' labeled as '0' to be used when specified behavior had not been observed. MCQ measures three core domains of self-regulation, effortful control, and negative affectivity divided into 17 sub temperamental domains. The present study only included three core domains. Psychometric features of both original and Urdu versions fell in the acceptable to excellent range.

Parental Perception Questionnaire Urdu Translated Version (PPQ-20) was a short version of 20 items based on PPQ original consisting of 189 items distributed into three main factors: Acknowledgement/rejection, psychological autonomy/psychological control, and firm control/lax control. The short version of PPQ-20 (Pasquali, 2012) translated into Urdu by Majeed and Malik (2017) was used in this study to assess the children's perception of parenting styles. PPQ had two versions, each composed of 20 items used separately for girls (PPQ20-F) and

boys (PPQ20-M). The children responded on a five-point Likert type scale ranging from '0 = not applicable' to '4= totally applicable' to describe their parent's child-rearing styles. The measure revealed robust psychometric parameters ranging from 0.73 to 0.86 (Pasquali, 2012).

### Procedure

The research proposal of the present study was approved by the departmental review committee and Institutional Review Board of Forman Christian College (A Chartered University) after a thorough review. After ethical approval, permission for using TMCQ and PPQ-20 was sought from both original and authors of Urdu translated versions. Then permission was taken from administrations of different schools to collect data. After sorting permission from educational institutions, an informed consent form along with a copy of the demographic form and TMCQ were sent to parents in homework diaries to get them filled. Simultaneously, the initial few minutes were spent with children to answer their questions and then assent was obtained. Then the scale of parental perception was administered on each child individually. In case the parents were illiterate, forms were filled through the participant's elder siblings or the researcher provided them assistance. After data collection, children were verbally thanked for their participation and given a small reinforcer. Data were processed through Statistical Package for Social Sciences (SPSS- 20.0). A blend of both descriptive and inferential statistics was used for data cleansing, organization, and analysis.

### Results

The mean age of the sample was 9.70 ( $SD=1.29$ ) years. The minimum family income was 7000 and maximum 500000; however, the mode was recorded as 50000. There were 49 percent girls and 51 percent boys in the sample, with the majority of the participants living in a nuclear family system (53 %) with most parents educated till intermediate level (12<sup>th</sup> grade) of education. Most of the fathers were doing office-related jobs, whereas a significantly large majority of mothers were housewives.

**Table 1.** Correlation of Temperamental Domains with Perceived Parenting Styles (N= 150)

S.No	Variables	1	2	3	4	5	6	7	Mean	(SD)
1.	Surgency								19.55	(6.53)

S. No	Variables	1	2	3	4	5	6	7	Mean	(SD)
2.	Effortful Control	.76**							17.96	(8.16)
3.	Negative Affectivity	.71**	.82**						26.69	(8.09)
4.	Authoritative	.41*	.37*	-.29*					32.31	(47.82)
5.	Authoritarian	-.25*	-.42**	.31*	-.23**				18.99	(34.70)
6.	Permissive	-.36*	-.29*	.47*	.20**	-.28**			17.18	(33.56)
7.	Uninvolved	-.34*	-.40*	.33*	-.49**	.32**	-.13		24.27	(33.08)

Urgency dimension of temperament was found to be positively associated ( $p < 0.05$ ) with authoritative parenting styles and shared significant inverse relationship ( $p < 0.05$ ) with the three other styles of parenting. Effortful control interestingly shared the most significant positive association ( $p < 0.05$ ) with authoritarian parenting

styles and was noted to have an inverse association with permissive and uninvolved parenting styles. The negative affectivity dimension of temperament was observed to be positively associated ( $p < 0.05$ ) with all parenting styles but authoritative parenting styles.

**Table 2.** Gender differences in Temperamental Domains (N= 150)

Variables	Girls (n=73)		Boys (n=77)		T	P	95% CI LL-UL	Cohen's d
	Mean	SD	Mean	SD				
Effortful Control	20.60	3.98	14.89	5.87	6.94	0.0001	4.08–7.34	1.14
Negative Affectivity	17.53	7.39	24.91	12.57	4.36	0.0001	-10.73-4.03	0.72
Surgency	24.12	6.86	22.14	8.81	1.53	0.1281	-0.58-45	0.25

Note. CI= Class Interval; LL= lower limits; UL=Upper limits.

On the effortful control dimension of temperament, girls had significantly higher ( $p < 0.05$ ) scores than boys. However, boys significantly ( $p < 0.05$ ) outperformed girls on

negative affectivity. Girls scored relatively higher on surgency, but the difference was not statistically significant.

**Table 3.** Gender differences in Perceived Parenting Styles (N= 150)

Variables	Girls (n=73)		Boys (n=77)		T	P	95% CI	Cohen's d
	Mean	SD	Mean	SD				
Authoritative	48.75	13.52	9.16	44.21	2.42	0.0168	0.83-8.25	0.39
uthoritarian	35.17	10.67	11.40	30.40	2.64	0.0091	1.20-8.34	0.43
Permissive	30.26	8.78	12.29	35.86	3.19	0.0017	-9.06-2.14	0.52
Uninvolved	32.92	6.57	33.47	13.95	0.31	0.7559	-4.09 -2.99	0.05

Note. CI= Class Interval; LL= lower limits; UL=Upper limits.

The gender difference was also studied with reference to the perception of parenting styles. Boys perceived their parents to be significantly more permissive compared to girls. Girls, on the other hand, perceived their parents to be significantly more authoritative and authoritarian than boys. Boys perceived their parents to be relatively more involved than girls, but the differences were observed to be non-significant.

### Discussion

The purpose of the study was to examine the association between temperament and perceived parenting styles in middle childhood. Objectives related to these were accomplished by considering the hypotheses in a sample of 7 to 11 years old children attending mainstream schools. Studying the first object yielded some interesting findings. Present research studied three core temperamental dimensions, including

surgency, effortful control, and negative affectivity.

Surgency is generally believed to represent positive temperamental traits and revealed positive association only with authoritative parenting style in the present sample. This is in line with [Weis et al. \(2016\)](#), who reported a strong positive relationship between better self-regulation, which is one of the subdimensions of surgency. Authoritative parenting style, on the other hand, is marked with emotional and behavioral warmth and support and known to use an effective blend of responsivity and demandingness, which previous research has associated with less externalized problems and positive behaviors in children ([Eisenberg et al., 2005](#)). As parents practicing authoritative parenting styles, discipline children while using non punitive ways and set logical limits, and remains supportive and available to children when needed. Thus, they generally encourage children to use positive emotions when relating with others and encourage them to be more involved in high intensity pleasure activities based on positive emotions while learning to keep impulses under control. Whereas, parents using uninvolved and authoritarian parenting are very unresponsive towards the emotional and physical needs of children, and this does not help children learn these two significant dimensions of functioning. Consequently, children fail to learn even the basic social norms and behavioral and social responsivity.

Effortful control was observed to have a positive association only with authoritative parenting practices. This finding is gets support from results reported by [Parra et al. \(2019\)](#) that authoritative parenting practices promoted wellbeing and positive temperament traits like effortful control. As this parenting styles warmth, responsiveness which offers support in difficult times, provide guidance, and set clear goals and boundaries for children.

As far as negative affectivity was concerned, it showed positive association with authoritarian, uninvolved and permissive styles. This was relatable with findings of [Lee et al. \(2013\)](#), who examined the relationship between temperament and parenting styles of 6 to 9 years old Chinese children. They concluded that authoritarian parenting showed high anger frustration and other traits of negative affectivity and lower effortful control in the children. Negative parenting styles generally involve

inconsistent discipline practices and associated highly with fearfulness and irritability ([Lengua, & Kovacs, 2005](#)).

Many researchers have previously related permissiveness more with negative temperament dimensions ([Sahithya, & Raman, 2021](#)). The findings of the present study also support this as permissive parenting style found to have inverse association with both urgency and effortful control and related positively with negative affectivity. This was consistent with findings of previous studies (Asma et al., 2017; [Hennessy et al., 2010](#)) which emphasized that lenient behavior of parents in terms of increased responsiveness replaces control that led to incongruities in child's actions. Permissive parenting involves high responsiveness, but this is not practiced with adequate discipline, this responsiveness becomes a source of reinforcement for negative temperamental domains ([Berkein et. al. 2012](#)). As was described by [Asmat et al. \(2017\)](#) who conducted a study in Karachi and recorded that permissive parenting practices positively correlated with child's psychopathology.

Findings of the study revealed some significant differences in temperamental dimensions and perception of parental styles across gender. On temperament girls showed to have significantly higher effortful control, whereas, boys were observed to be stronger on negative affectivity. These differences can be supported by findings of some other studies reporting differences in temperament dimension scores across gender and age cohorts ([Slobodskaya, & Kornienko, 2021](#)). Literature has reported that boys are likely to have significantly higher scores on negative temperamental traits even when the other dimensions do not show any significant difference across gender ([Cosentino-Rocha, & Linhares, 2013](#); [Yoleri, 2014](#)). This might be due to the fact that girls are generally disciplined more strictly and are discouraged to show negative emotions like aggression freely.

Females are reported to have relatively more likely to perceive parenting practices as positive compared to boys ([Brand et al., 2011](#)). Girls in our study perceived their parents to be more authoritative and permissive than boys which is in line with previous studies conducted in Pakistan ([Kausar, Shafique, 2008](#)) and abroad ([Brand et al., 2011](#)) reporting the same perceptual trend. This might be a result that

parental practices used to implement discipline at times differ significantly across child and parental gender ([Carter, & Woitkiewicz, 2000](#); [Porter et al., 2005](#)) which is likely to lead to differences in perception of parental practices. As most of the times, children perceive their mothers as less controlling and being more nurturing, involved and caring than fathers. Many at times, parents are more involved in the decision making of girls and relatively more strict towards girls ([Beyers, & Goossens, 2008](#)).

### Limitations

There were some important limitations involved in the current study especially in terms of time constraint which led to use convenient sampling. A sample selected through systematic random

sampling technique would have been more suitable to increase the technical strengths of the study. Though the sample size reflected the good data expectations, a larger data set would have strengthened the findings and be helpful to increase the generalizability.

### Conclusion

Parenting practices and dimensions of temperament shared a strong association during middle childhood. Positive temperament dimensions were inversely related with negative and somewhat more demanding parenting practices. Girls and boys showed pertinent differences in terms of their score on temperamental domains and perception of parenting styles.



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