

## Demographic Comparisons for Family Functioning, Distress Tolerance and Resilience in Adolescent

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### Abstract

**Background:** Family functioning is related to the tolerance level of the individual and resilience from the growth of mental health and well-being. This research was carried out to explore the demographic differences between family functioning, distress tolerance, and resilience in adolescents.

**Method:** Cross-sectional research design was used. A sample of N=663 students (both males and females) from different educational backgrounds was selected using convenience sampling. A Family Assessment Device (FAD: Epstein et al., 1992), Distress Tolerance Scale (DTS; Simons & Gaher, 2005), and Resilience Scale (Anwar et al., 2016) were used and data was collected both online and manually.

**Results:** The findings of the research indicated significant gender differences in family functioning, distress tolerance, and resilience of adolescents. A significant difference was found in the resilience of the firstborn and lastborn. Findings underscore differences across birth order, educational level, family income, and family relationships in family functioning distress tolerance, and resilience, moreover, a significant difference was found in the dimension of family functioning, distress tolerance, and resilience in adolescents.

**Conclusion:** This Study concluded that family income or socioeconomic status also has a great impact on the family functioning in affective control, behaviour response, problem-solving, family roles, and affective response. Distress tolerance with its dimensions that include tolerance, regulation, and absorption is also influenced by the socioeconomic status or family income background. Resilience in the form of emotional regulation was found to be different in adolescents based on the family income low to high. Family system and its application in the domain of family to provide family counselling, couple therapy, and family therapy for assessment and management purposes. This is also implicated in the adaptability and communication in the family functioning and growth of the individual.

**Keywords:** Family functioning, Distress tolerance, Resilience, Appraisal, Self-reliance



## Introduction

Family is the basic unit of our society and it plays an important role in the life of individuals during the crucial period of adolescence in which individuals need great support from the family so that they can function well in the social environment and develop resilience. Family functioning is related to the tolerance level of the individual and resilience from the growth of mental health and well-being (Urbańska-Grosz et al., 2024). Distress tolerance is influenced by the family functioning and the resilient level of the individual. Therefore the focus of the current research will be to explore the differences concerning gender, age, family income, family system, family relation, family function, distress tolerance, and resilience among adolescents.

In the McMaster family functioning theory, a family's basic duty is to provide an individual with an appropriate environment to advance their physical, mental, and social well-being. Dimension of family function presented by Epstein et al., (1987) includes problem-solving, communication, family role, affective or emotional response of the family, affective involvement, and behavioural control. Family functioning also results in the ability to tolerate distress. Distress tolerance is a physical, cognitive, and emotional process that may be understood in terms of emotional states, hence it can be explained as a person's capacity to control unpleasant emotional outbursts (Simon & Gaher, 2005). Adolescents with lower levels of distress tolerance have conduct issues, substance misuse issues, emotional issues such as trauma issues, and trouble avoiding stressful situations (Miller, 2011). According to Hayes et al., (2004), low distress tolerance is a result of a person's inability to tolerate unpleasant emotional experiences in their study evaluating experiential avoidance. This impairment prevents a person from engaging in constructive behaviour in life. A strong theoretical connection exists between experiencing avoidance and distress tolerance. Experiential avoidance happens when a person deliberately distances themselves from their own life experiences. Experiential avoidance is typically associated with low levels of distress tolerance (Buhr & Dugas 2002; Richardson, 2002; Lynam & Miller, 2004; Hayes et al., 2004; Simon & Gaher, 2005; Leyro, 2010).

Fergus and Zimmerman (2005), Suslovic and Lett (2024) presented the resilience theory. According to this notion, a person's resilience depends on their social ability, problem-solving skills, serious awareness, and independence. The resilience of the

teenagers is improved by all of these factors. Resilience, according to Campbell-Sills et al. (2006) and Wang (2024), is a multi-dimensional term with elements like personality and temperament, problem-solving skills, and communication skills. They researched resilience and psychological wellness. The results indicate a considerably positive connection between psychological wellness and resilience. Findings also show a negative correlation between psychological health and anguish, mood disorders, and anxiety disorders.

Masood and Us-Sahar (2014) conducted a descriptive study to comprehend the role of family in the teens of addicts. Questions about their family's communication, routines, and relationships with other families were asked. The results of their study show that emotional expressiveness and family involvement are two crucial elements in family communication. Uzma (2007) studied the accomplishments and academic performance of a sample of pupils. The research's conclusions show there is no connection between postgraduate students' academic success and academic toughness. The study's findings also show that female pupils were tougher than male students.

Research by Ghamari and Khoshnam (2011) on how family functioning affects emotional and behavioural responses. The research's findings show a strong link between pupils' academic success and how well their families are functioning. The social, physical, and emotional health and development of an individual are impacted by family function. Family functioning has a significant impact on how an individual's emotional and behavioural response is modified. Jabeen and Dildar (2023) also reported a significant positive relationship between family functioning, distress tolerance and resilience in adolescents. Bashir et al., (2023) also reported that significant difference in the family functioning of males and females.

Research on the association between family functioning, family income, and children with disabilities was done by Khursheed and Inam (2020). The study's findings show that there is no distinction between the variables. Similarly, Annunziante and Hague (2006) conducted a research to determine the relationship between FF and academic success. Additionally, the findings point to a significant connection between protective factors and family functioning. Moreover, a study on student education and other psychosomatic factors that are involved in the development of skills, experiences, and facts proved that the role of family communication and

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## Hypotheses

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## Method

### Research Design

This study used a Cross-sectional research design to investigate the demographic comparison between family functioning, distress tolerance, and resilience in adolescents.

### Sample

The sample consisted of students  $N=663$  including boys ( $n=332$ ) and girls ( $330$ ) from different education levels Matric ( $n=231$ ), Intermediate ( $n=222$ ), and Undergraduate ( $n=210$ ) were recruited through convince sampling. Participants aged 14 to 22 (Alderman & Breuner 2019) from private and public sector schools and colleges of the Urban area of Lahore were selected. Students or individuals below 13 years of age and above 23 years of age are excluded from the study.

### Assessment Measures

**Demographic Information Sheet.** The demographic sheets consist of gender, age, education, Family Relationship, Family System, Birth Order, No. of Siblings, and Family Income.

**McMaster Family Assessment Device (Epstein et al., 1992).** Epstein (1982) developed this tool, and Khursheed and Inam (2020) translated it into Urdu. It served as a gauge for how well families were functioning. This scale, which has four points and 60 items ranging from strongly disagree=4 to strongly agree=1, is of the Likert type. There were seven subscales of the scale this scale general family functioning, affective response, roles, communication, problem-solving, affective involvement and behavioural control. The actual Cronbach's alpha reliability of the scale ranges from .72 to .92 however, in the current research reliability of the scale was  $\alpha=.83$ . Unhealthy functioning is indicated by high scores on the scales.

**Distress Tolerance Scale (DTS; Simons & Gaher, 2005).** The Distress Tolerance Scale was used to evaluate the person's perception of their capacity for tolerating, accepting, functional interference, and emotional regulation of emotional distress. There are 15 items and 4 subscales (tolerance, appraisal, absorption and emotional regulation) of the distress tolerance scale. Participants must respond on a 5-point Likert-type scale, where 1 means they strongly agree and 5 means they strongly disagree. The Cronbach's alpha reliability of the distress tolerance scale is .92 and in current research  $\alpha=.72$ . A high score on distress tolerance indicates strong and high level of distress of tolerance.

### The Resilience Scale

(Anwar et al., 2016). Anwar et al., (2016) devised the Resilience Scale to measure resilience core. Resilience was assessed through 19 items that were scored on a five-point Likert-type scale. According to the resilience scale's factor analysis, emotional control, boldness, tenacity, and self-reliance are the four main factors. The resilience measure has demonstrated high construct and concurrent validity across a range of participant ages, with a Cronbach's alpha of  $\alpha=.84$  in current research  $\alpha=.88$ . Highest score indicates a higher level of resilience.

### Procedure

Initially, the author's consent was obtained to use the instruments (family assessment device, distress tolerance scale, and resilience scale). Google Forms was built to collect data online after receiving approval. Participants of the research were informed about the purpose of the research, consent was taken and approved by the competent authority. It was made clear to participant that they can withdraw from the research at any time. The confidentiality and privacy of the participant's data was guaranteed. A demographics sheet with the appropriate guidelines was linked to the Google form before each question was added. The form link was sent across several platforms using WhatsApp and other social media. Following data entry into SPSS analysis and preparation of the results.

## Results

The outcomes of the present research are produced for family functioning, distress tolerance, and resilience in adolescents.

Table 1 indicates results of descriptive analysis of the sample using SPSS, result revealed that most of the participants were of age 16(22.9%), 17(17.9%), and 18 (19.2%). While 12.8%, 6.5%, and 6.9% of the students were the age 15, 19 and 20. Moreover, students of age 14, 21, 22, and 23 were 2.1%, 3.6%, 5.4%, and 2.3%. Boys (50.5%) and girls (49.5%) respectively. Education is divided into three categories Matric, intermediate, and undergraduates. The table showed that most students from matric (34.8%), intermediate (33.5%), and undergraduates (31.7%). Family relationship was divided into five categories (extremely satisfied, satisfied, neutral, unsatisfied and extremely unsatisfied). The table indicates satisfied (58.8%), extremely satisfied (30.3%), neutral (10%), unsatisfied (.2%) and extremely unsatisfied (.6%). Family income was divided into five categories and most participants had less than 20,000 (35.17%),

21,000-40,000 (29.7%), 41,000-60,000 (19.6%), and 61,000-80,000 (10.6%). Participants with family income above 80,000 were (5%). The family system

was divided into two categories. Participants from joint families were (36.3%) and nuclear families (63.7%) respectively.

**Table 1**

*Descriptive of Demographics Variables (N=663).*

Variables	f (%)	M(SD)
1- Age		17.54(2.11)
2- Gender		
Boys	332(50.5)	
Girls	331(49.5)	
3- Education		
Matriculation	231(34.8)	
Intermediate	222(33.5)	
Undergraduates	210(31.7)	
5- Family relation		
Satisfied	390(58.8)	
Extremely satisfied	201(30.3)	
Neutral	66(10)	
Unsatisfied	1(.2)	
Extremely unsatisfied	4(.6)	
6- Birth order		
First Born	181(27.3)	
Middle	242(26.5)	
Last Born	240(36.2)	
7- Family Income		
Less than 20,000	233(35.17)	
21,000-40,000	197(29.7)	
41,000-60,000	130(19.6)	
61,000-80,000	70(10.6)	
Above 80,000	33(5)	
8- Family System		
Joint	241(36.4)	
Nuclear	422(63.7)	

*Note; M = Mean, SD= Standard Deviation, f = frequency, % = percentage.*

Table 2 indicated that there were significant gender differences in family functioning and its subscale. Boys showed high scores in family functioning and its subscales such as affective involvement, general functioning, family roles and affective responsiveness,

distress tolerance, absorption, and Resilience and sub-dimensions of resilience such as adventurousness, determination, and self-reliance boys showed high mean scores as compared to girls in these variables.

**Table 2**

*Independent Sample t-test Comparing Gender Differences among Study Variables (N=663)*

*Note: M= mean, SD= Standard Deviation, LL= lower limit, UL= upper limit, p= significance, \*p< .05, \*\*p< .01,*

Variables	Gender		t	p	Cohen's d
	Boys M(SD)	Girls M(SD)			
1. Family Functioning	123.57(17.46)	119.41(19.61)	2.60	.00	0.22
Affective involvement	15.34(3.79)	14.65(3.90)	2.32	.02	
Behavior control	20.17(3.68)	20.53(4.22)	-1.18	.23	
General functioning	26.47(4.33)	25.40(4.78)	2.9	.00	
Problem-solving	10.38(2.82)	9.32(3.23)	.23	.08	
Communication	15.22(3.97)	14.72(3.55)	1.7	.09	
Roles	22.98(4.85)	21.76(5.89)	3.1	.00	
Affective response	12.50(2.95)	11.95(3.38)	2.3	.02	
2. Distress tolerance	35.20(9.48)	34.63(9.92)	1.38	.16	0.06
Tolerance	7.18(2.7)	7.29(3.08)	-.48	.62	
Regulation	7.04(2.70)	6.86(2.80)	.81	.41	
Appraisal	14.89(4.56)	14.56(4.01)	.88	.37	
Absorption	4.95(1.92)	4.64(2.79)	1.97	.03	
3. Resilience	68.80(8.24)	67.00(9.23)	3.15	.00	0.11
Emotional regulation	21.47(2.97)	21.11(2.89)	1.16	.10	
Adventurousness	18.09(2.44)	17.68(2.50)	2.16	.03	
Determination	14.28(1.97)	13.92(1.99)	2.34	.01	
Self-reliance	14.30(2.08)	13.82(2.15)	2.91	.00	

Table 3 shows a between-group ANOVA analysis was used to explore the effect of Birth Order on levels of family functioning, Distress Tolerance, and resilience. Respondents were divided into 3 groups according to their Birth Order (Firstborn, Middle, and Last Born).

There was a statistically significant difference at the  $p < .05$  level in family functioning, distress tolerance, and resilience scores for the birth order. The actual difference in the mean score of the groups was very small.

**Table 3**

*Mean, Standard Deviation and One-way ANOVA in Family functioning, Distress Tolerance and Resilience*

Measures	Firstborn		Middle		Last Born		F	$\eta^2$
	M	SD	M	SD	M	SD		
Family Functioning	122.25	19.41	121.96	18.64	120.70	18.01	.78	.01
Distress Tolerance	35.52	9.49	35.18	8.28	35.59	9.68	.35	.02
Resilience	68.67	7.42	67.28	6.94	69.29	7.46	3.31*	.03

*Note. FF= Family Functioning, DT=Distress Tolerance, RS= Resilience Scale \*P<.05*

Table 4 indicates that ANOVA was used to explore the effect of education on family functioning, Distress Tolerance, and resilience. Education variable have 3 subscales A significant difference was found at the  $p < .001$  in Resilience and Distress tolerance scores for the three education groups:  $F(2, 660) = 7.06, p = .001$ , and  $F(2, 660) = 3, 50, p = .03$ . Regardless of attaining statistical significance, the actual difference in mean scores between the groups was quite small .01. There was a significant difference at the  $p < .05$  level in the subscale of family functioning such as general functioning score, problem-solving scores, and

affective response score of group 1 (Matric) and group 3 (Undergraduate). There was a statistically significant difference in distress tolerance subscale at the  $p < .05$  level such as tolerance subscale (Mean=7.57 matric; Mean=6.74 intermediate) and appraisal subscale (Mean=15.11 matric; Mean=14.97 undergraduates). In resilience subscales significant difference at the  $p < .05$  level in the adventurousness as individual in grade level matric (M=18.14) scored higher as compared to intermediate (M=18.12) and undergraduates (M=17.39).

**Table 4**

Measures	Matric		Intermediate		Undergraduates		F	$\eta^2$
	M	SD	M	SD	M	SD		
Family Functioning	123.05	18.58	121.90	17.27	120.09	19.94	1.42	.24
Distress Tolerance	35.91	8.363	34.00	7.847	35.90	9.845	3.50*	.03
Resilience	68.63	6.349	68.62	7.245	66.40	7.808	7.06**	.00
AI	15.16	3.90	14.94	3.59	14.87	4.08	.34	.24
BC	20.70	4.19	20.13	3.86	20.21	3.80	1.35	.03
GF	26.52	4.55	26.01	4.39	25.25	4.81	4.33*	.00
PS	10.71	2.96	10.44	2.86	9.89	3.22	4.26*	.01
C	14.78	3.69	15.29	3.71	14.84	3.91	1.21	.01
R	22.74	5.16	22.40	4.69	21.97	5.23	1.31	.02
AR	11.78	3.24	12.41	3.05	12.46	3.22	3.10*	.02
Tolerance	7.57	2.75	6.74	2.79	7.39	3.09	4.99*	.24
Regulation	7.23	3.03	6.83	2.39	6.79	2.77	1.76	.03
Appraisal	15.11	4.57	14.08	4.31	14.97	5.39	2.97*	.00
Absorption	4.72	1.95	4.63	2.00	5.03	2.06	2.39	.02
Emotional Regulation	21.12	2.70	21.57	3.00	21.18	3.09	1.50	.01
Adventurousness	18.14	2.19	18.12	2.39	17.39	2.76	6.55*	.03
Determination	14.11	1.71	14.24	1.88	13.95	2.32	1.23	.02
Self-reliance	14.26	1.99	14.11	2.07	13.82	2.29	2.49	.01

*Mean, Standard Deviation and One-Way ANOVA in Family functioning, Distress Tolerance and Resilience*

*Note.* M= mean, SD= standard deviation,  $\eta^2$ = Eta square, AI= Affective Involvement, GF= General Functioning, PS=Problem Solving, C=Communication, R=Roles and AR= Affective Response \* $P < .05$ , \*\* $p < .01$

Table 5 indicates the results of one-way between-groups ANOVA to explore the difference of the family relationship in Family functioning, distress tolerance, Resilience and in their subscales. There was a statistically significant difference at the  $p < .05$  level in mean score of satisfied family relationship ( $M=128$ ) and unsatisfied ( $M=123.31$ ). This indicates higher the satisfied family relationship, the higher will be the family functioning, distress tolerance e resilience of the individual. The difference was found at the significant level  $p < .05$  level in the mean score of general functioning mean score, problem-solving scores, and affective response. Table 5 also reported results for difference in distress tolerance subscales. Results showed a difference at the significant level  $p < .05$  level in tolerance, regulation, and appraisal subscale Furthermore, In table 5 a significant difference at the  $p < .05$  level in resilience subscales such as determination and self-reliance was found in extremely satisfied family relationship and unsatisfied Family relationships.

**Table 5***Mean, Standard Deviation and One-way ANOVA in Family Functioning Subscale, Distress Tolerance Subscales and Resilience Subscales*

Measures	Extremely. Satisfied		Satisfied		Neutral		Unsatisfied		Extremely .unsatisfied		F	$\eta^2$
	M	SD	M	SD	M	SD	M	SD	M	SD		
FF	121.90	15.98	128.00	17.72	120.05	18.66	123.31	17.36	120.53	19.54	2.31*	.01
DT	36.75	8.04	38.34	7.57	35.94	8.22	35.27	9.12	34.22	8.98	3.48*	.02
R	68.90	8.63	69.68	5.98	69.32	6.78	67.55	6.46	66.98	7.42	3.64*	.03
AI	16.27	4.62	14.76	3.82	14.66	3.52	15.05	3.89	14.59	3.47	2.02*	.01
BC	21.73	3.86	21.18	4.08	19.96	4.25	19.96	3.81	20.22	3.54	4.11*	.02
GF	27.88	4.28	26.47	4.84	24.90	4.31	25.79	4.54	25.80	4.81	4.49*	.03
PS	10.57	3.05	10.90	3.17	9.90	2.97	10.29	3.00	10.25	2.91	1.72	.01
.C	15.13	4.28	14.71	3.29	14.97	3.89	15.05	3.83	14.88	3.73	.21	.01
R	22.96	5.09	22.11	4.97	22.23	5.09	22.26	5.03	23.22	5.08	.75	.00
AR	12.70	3.19	12.00	3.24	12.51	2.96	11.98	3.31	12.81	2.65	1.66	.02
Tolerance	8.41	2.41	7.20	2.80	7.37	2.96	7.02	2.99	7.12	2.67	2.85*	.01
Regulation	7.88	3.19	7.00	2.73	7.58	2.77	6.54	2.71	6.92	2.12	4.91*	.02
Appraisal	16.38	4.35	14.45	5.06	15.20	4.69	14.15	4.69	15.90	4.83	4.14*	.03
Absorption	5.14	2.00	4.62	2.02	4.75	1.94	4.75	2.04	5.14	1.92	1.11	.01
Emotional												
Regulation	21.43	2.93	21.28	2.78	21.66	3.03	21.06	2.85	21.69	3.43	1.26	.01
Adventurousness	17.71	2.57	17.89	2.54	18.23	2.24	17.70	2.48	18.34	2.62	1.57	.02
Determination	14.39	2.08	14.19	1.83	14.37	2.13	13.83	1.99	14.56	1.68	3.17*	.03
Self-reliance	14.36	1.98	13.86	2.21	14.55	1.85	13.89	2.14	14.22	2.37	2.69*	.01

*Note. M= mean, SD= standard deviation,  $\eta^2$ = Eta square, FF= Family Functioning, DT=Distress Tolerance, R= Resilience , AI= Affective Involvement, GF= General Functioning, PS=Problem Solving, C=Communication, R=Roles and AR= Affective Response \* $P<.05$ , \*\* $p<.01$*



Table 6 indicates that ANOVA between groups was carried out to explore the difference of family income in study variables and their subscales. Significant difference at the  $p < .05$  level in family functioning and distress tolerance and resilience. The result indicated that the higher the family income is the higher the family functioning, distress tolerance and resilience in the individual. There was a statistically significant difference at the  $p < .05$  level in Affective

involvement, behaviour control, problem-solving, roles, and affective response subscale of family functioning. Furthermore, Findings indicate a significant difference at the  $p < .05$  level in tolerance, regulation, and absorption subscale of distress tolerance. Moreover, significant difference at the  $p < .05$  level in the emotional regulation subscale of resilience.

**Table 6**

*Mean, Standard Deviation and One-way ANOVA in Family Functioning and its Subscales, Distress Tolerance and its Subscales and Resilience and its Subscales*

Variables	Less than 20,000		21,000-40,000		41,000-60,000		61,000-80,000		Above 80,000		F	$\eta^2$
	M	SD	M	SD	M	SD	M	SD	M	SD		
FF	119.05	18.29	121.22	17.78	123.31	19.81	126.93	18.08	125.79	20.08	3.26*	.02
DT	34.89	7.70	33.96	9.20	36.07	8.79	38.16	9.75	36.70	9.282	3.66*	.02
Resilience	67.75	7.27	67.44	6.96	68.69	7.27	67.86	7.29	68.45	7.94	.66	.03
AI	14.14	3.45	14.97	3.94	15.75	4.14	16.10	3.82	15.82	3.94	6.07*	.02
BC	19.85	4.07	20.32	3.96	20.55	3.62	21.33	3.70	21.21	4.57	2.49*	.02
GF	25.79	4.58	25.89	4.64	25.85	4.64	26.57	4.28	26.15	5.27	.42	.03
PS	10.51	3.01	10.17	3.06	9.96	2.84	10.57	3.15	11.42	3.28	2.00*	.03
C	14.92	3.56	14.78	3.85	15.13	3.77	14.59	3.69	16.58	4.64	1.87	.02
R	21.69	4.74	22.25	5.22	22.84	5.14	24.26	4.72	22.09	5.32	3.92*	.01
AR	11.75	3.10	12.14	3.23	12.51	3.27	13.30	2.77	12.39	3.42	3.64*	.02
Tolerance	6.91	2.75	7.03	2.87	7.87	3.07	7.73	2.89	7.27	3.07	3.07*	.02
Regulation	6.86	2.67	6.68	2.89	7.27	2.64	7.13	2.67	7.64	2.93	1.59*	.02
Appraisal	14.79	4.52	14.62	4.96	14.22	4.76	15.91	5.39	14.36	4.21	1.52	.03
Absorption	4.60	1.86	4.66	2.15	5.00	1.96	5.27	1.85	5.12	2.44	2.29*	.02
Emotional Regulation	21.11	2.91	20.98	2.88	22.01	3.01	21.33	2.98	21.52	2.76	2.79*	.02
Adventurousness	17.95	2.43	17.95	2.41	17.75	2.63	17.54	2.63	18.30	2.33	.72	.02
Determination	13.96	1.86	13.99	1.94	14.41	1.96	14.23	2.15	14.24	2.68	1.32	.03
Self-Reliance	14.21	2.18	13.97	2.05	14.04	2.25	13.91	2.01	14.00	1.87	.45	.02

Note. M= mean, SD= standard deviation,  $\eta^2$ = Eta square, AI= Affective Involvement, GF= General Functioning, PS= Problem Solving, C= Communication, R= Roles and AR= Affective Response

### Discussion

The current research aimed to investigate the demographic comparison between family functioning, distress tolerance and resilience in adolescents. The results suggest statistically significant gender differences in affective involvement, general family functioning, family roles, and affective response. The mean score of males was found significantly high as compared to females. Additionally, the results show a significant

difference in the resilience's adventurousness and self-reliance subscales as well as the resilience's absorption subscale of distress tolerance. The findings are linked with previous studies on gender disparities in resilience and distress (Masood & Sahar, 2016). Furthermore, males showed greater resilience in adventurousness, determination, and self-reliance, previous studies stated that males have higher distress acceptance than females (Ko et al., 2008; Cornor et al., 2020). A significant difference

was found in the resilience of the firstborn and lastborn. In Pakistani culture, the results reflect the gender role and expectations where males are expected to be more independent and assertive in terms of dealing with distress showing resilience. There was found to be a notable difference in resilience among the various birth order orders. The first-born born scored have a high mean score in family functioning and the last-born have a high mean score in resilience. These results were also aligned with Ergüner-Tekinalp and Terzi (2014) who also reported that the birth order of the youngest and older Children also affects resilience, additionally, birth order predicts resilience of adolescents. These results in Pakistani culture also support the concept of where first born are expected to be more responsible, stand strong, be more adaptive and have leadership qualities.

This study also showed a significant difference in distress tolerance (tolerance and appraisal subscale) and resilience (adventurousness subscale) across grade levels. Moreover, a significant difference was found in the dimensions of family functioning such as general functioning, problem-solving, and affective involvement. Pedrini et al., (2021) in research on the emotional regulation of teenagers, reported that distress tolerance is also different according to the grade level. In reference to the culture perspective, these indicate the competitive nature of the education system that challenges influencing distress tolerance and resilience.

Significant difference in the family relationship of adolescents related to family functioning (affective involvement, behavior control, and general functioning), distress tolerance (tolerance, regulation, and appraisal), and resilience (determination and self-reliance) were identified. These results aligned with the research conducted by Holmes (2006) indicate that resilience of the adolescents is influenced by the relationships of the family, Moreover, it also reports that the affective response of the individual and depressive symptoms are also affected by the family relationship. Lastly, the findings of the study also indicated significant differences in the family functioning (affective involvement, behaviour control, problem-solving,

family roles, and affective response) and distress tolerance (tolerance, regulation, and absorption) of low and high-income families. In the dimension of resilience such as emotional regulation significant difference was found in family income. Burno et al., (2023) reported in their research that family income can also affect the resilience of parents and children. Family income was also related to depression and its association with distress in children and adolescents.

## Conclusion

The findings of the study revealed that more family functioning and distress tolerance will help to build resilience. The results of the present study depict that positive family functioning and distress tolerance are central to acquiring constructive resilience. So, those adolescents who encounter issues in the development of resilience can be facilitated by improving distress tolerance and understanding family functioning. This was also indicated in the results that family functioning, affective involvement, general functioning, problem-solving, family roles, and affective response are different in males and females. Family functioning, distress tolerance, and resilience in term also differ in the area of education level. These findings will help teachers, psychologists, and counsellors design interventions and plan according to grade level for the betterment of family functioning of the adolescents that will also help them to use specific strategies to increase the level of resilience in the adolescents. Family functioning in terms of general functioning, problem-solving, and affective response, and distress tolerance in terms of tolerance, regulation, and appraisal additionally resilience in terms of determination and self-reliance varies in adolescents who belong to satisfied family relationships and unsatisfied family relationships. From the results of the study, it can also be concluded that family income or socio-economic status also has a great impact on the family functioning in affective control, behavior response, problem-solving, family roles, and affective response. Distress tolerance with its dimensions that include tolerance, regulation, and absorption is also influenced by the socioeconomic status or family income background. Resilience in the form of emotional regulation was found to be

different in adolescents based on the family income low to high.

### **Limitation and Suggestion**

For further research in Pakistan, the results of study are also beneficial. Research should be conducted free from culture when it comes to the ethnic issues. A total of 14-22 years of age, adolescents were the Respondents of research. Others of school age were not included. The results of the study cannot not be applied to the population in general due to these. Thus, the ability of findings of research is another sample that must be used in order to generalize achievement of the population. Research on adolescents' family functioning, distress tolerance and resilience in Pakistan is very negligible. Therefore, these variables should be further research. We need to see how more about family functioning and distress tolerance and resilience in adolescents.

### **Conflict of interest statement**

The authors declare no conflict of interest.

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### **Data sharing and availability statement**

Data is available from the corresponding author based on request.

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### **References**

- Annunziata, D., Hogue, A., Faw, L., & Liddle, H. A. (2006). Family functioning and school success in at-risk, inner-city adolescents. *Journal of Youth and Adolescence*, 35(1), 100-108. <https://doi.org/10.1007/s10964-005-9016-3>
- Bashir, T., Jabeen, M., & Kausar, T. (2023). Relationship between family functioning, mental toughness and coping strategies in young adults. *Forman Journal of Social Sciences*, 3(2). DOI: 10.32368/FJSS.20230215
- Burno, W., Dehnel, R., & Al-Delaimy, W. (2023). The impact of family income and parental factors on children's resilience and mental well-being. *Journal of Community Psychology*, 51(5), 2052-2064. <https://doi.org/10.1002/jcop.22995>
- Campbell-Sills, L., Barlow, D. H., Brown, T. A., & Hofmann, S. G. (2006). Acceptability and suppression of negative emotion in anxiety and mood disorders. *Emotion*, 6(4), 587-595. <https://doi.org/10.1037/1528-3542.6.4.587>
- Daughters, S. B., Reynolds, E. K., MacPherson, L., Kahler, C. W., Danielson, C. K., Zvolensky, M., & Lejuez, C. (2009). Distress tolerance and early adolescent externalizing and internalizing symptoms: The moderating role of gender and ethnicity. *Behavior Research and Therapy*, 47(3), 198-205. <https://doi.org/10.1016/j.brat.2008.12.001>
- Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy*, 9(2), 171-180. <https://doi.org/10.1111/j.1752-0606.1983.tb01497.x>
- Ergüner-Tekinalp, B., & Terzi, Ş. (2014). Coping, social interest, and psychological birth order as predictors of resilience in Turkey. *Applied Research in Quality of Life*, 11(2), 509-524. <https://doi.org/10.1007/s11482-014-9378-3>
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review Public Health*, 26, 399-419.
- Hayes, S. C., Strosahl, K., Wilson, K. G., Bisset, R. T., Pistorello, J., Toaramino, D., & McCurry, S. M. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record*, 54, 553-578
- Holmes, K. (2006). Adolescent resilience: The influence of family relationships and their impact on resilient outcomes. *ETD Collection for Fordham University*. AAI3223401
- Khurshheed, F., & Inam, A. (2020). Children of farming communities with autism; risk factors involved in their family functioning. *J Agric. Res*, 58(3), 215-219.
- Ko, J. Y., Wang, P. W., Liu, T. L., Yen, C. F., & Yen, J. Y. (2018). Gender differences in distress tolerance: The mediating effect of depressive

- symptoms among Taiwanese college students. *Journal of Affective Disorders*, 238, 583-589.
- Leyro T. M., Zvolensky M. J., Bernstein A. (2010). Distress tolerance and psychopathological symptoms and disorders: a review of the empirical literature among adults. *Psychological Bulletin*, 136(4): 576-600
- Lynam, D. R., & Miller, J. D. (2004). Personality Pathways to Impulsive Behavior and Their Relations to Deviance: Results from Three Samples. *Journal of Quantitative Criminology*, 20(4), 319-341. <https://doi.org/10.1007/s10940-004-5867-0>
- Luthar, S. S. (1991). Annotation: Methodological and conceptual issues in the study of resilience. *Journal of Child Psychology and Psychiatry*, 34, 441 – 453
- Lu, C., Yuan, L., Lin, W., Zhou, Y., & Pan, S. (2017). Depression and resilience mediate the effect of family function on the quality of life of the elderly. *Archives of Gerontology and Geriatrics*, 71, 34-42. <https://doi.org/10.1016/j.archger.2017.02.011>
- Ma, C., Lin, K., Chen, T., Yu, Y., Chien, H., & Huang, W. (2020). Specific personality traits and associated psychosocial distress among individuals with heroin or methamphetamine use disorder in Taiwan. *Journal of the Formosan Medical Association*, 119(3), 735-742. <https://doi.org/10.1016/j.jfma.2019.08.026>
- Masood, S., & Us, Sahar, N. (2014). An exploratory research on the role of family in youth's drug addiction. *Health Psychology and Behavioral Medicine*, 2(1), 820-832. <https://doi.org/10.1080/21642850.2014.939088>
- Nrugham, L., Holen, A., & Sund, A.M. (2010). Associations between attempted suicide, violent life events, depressive symptoms, and resilience in adolescents and young adults. *Journal of Nervous and Mental Disease*, 198, 131-136. <http://dx.doi.org/10.1097/NMD.0b013e3181cc43a2>
- McCubbin, H. I., & McCubbin, M. A. (1988). Typologies of resilient families: Emerging roles of social class and ethnicity. *Journal of Family Relations*, 37(2), 247 – 254.
- Mealer, M., Jones, J., & Moss, M. (2012). A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive Care Medicine*, 38(1), 1445-1451. doi:10.1007/s00134-012-2600-6
- Miller M. O. (2011). Posttraumatic stress and marijuana use coping motives: The mediating role of distress tolerance. *Journal of Anxiety Disorders*, 25: 437-443
- Ouyang, M., & Wang, Z. (2015). Resilience Assessment of Interdependent Infrastructure Systems: With a Focus on Joint Restoration Modeling and Analysis. *Reliability Engineering & System Safety*, 141, 74-82. <http://dx.doi.org/10.1016/j.ress.2015.03.011>
- Ovaska-Stafford, N., Maltby, J., & Dale, M. (2019). Literature review: Psychological resilience factors in people with neurodegenerative diseases. *Archives of Clinical Neuropsychology*, 36(2), 283-306. <https://doi.org/10.1093/arclin/acz063>
- Pedrini, L., Rossi, R., Magni, L. R., Lanfredi, M., Meloni, S., Ferrari, C., Macis, A., Lopizzo, N., Zonca, V., & Cattaneo, A. (2021). Emotional regulation in teens and improvement of constructive skills (Emoticons): Study protocol for a randomized controlled trial. <https://doi.org/10.21203/rs.3.rs-543777/v1>
- Pérez-Fuentes, M., Molero Jurado, M., Barragán Martín, A., & Gázquez Linares, J. (2019). Family functioning, emotional intelligence, and values: Analysis of the relationship with aggressive behavior in adolescents. *International Journal of Environmental Research and Public Health*, 16(3), 478. <https://doi.org/10.3390/ijerph16030478>
- Safdar, F., (2020). Work-Family spillover and family functioning in married working women. *Pakistan Journal of Psychological Research*, 34. 773-786. Doi:10.33824/PJPR.2019.34.4.42.
- Shi, M., Liu, L., Wang, Z.Y., Wang, L., (2015). The mediating role of resilience in the

- relationship between big five personality and anxiety among Chinese medical students: a cross-sectional study. *PLOS ONE* 10(3), e0119916
- Simons, J. S., Gaher, R. M. (2005). The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and Emotion*, 29, 83-102. <http://dx.doi.org/10.1007/s11031-005-7955-3>
- Sullivan, M. B., Erb, M., Schmalzl, L., Moonaz, S., Noggle Taylor, J., & Porges, S. W. (2018). Yoga therapy and poly vagal theory: The convergence of traditional wisdom and contemporary neuroscience for self-regulation and resilience. *Frontiers in Human Neuroscience*, 12, 67. <https://doi.org/10.3389/fnhum.2018.00067>
- Urbańska-Grosz, J., Sitek, E. J., Pakalska, A., Pietraszczyk-Kędziora, B., Skwarska, K., & Walkiewicz, M. (2024). Family functioning, maternal depression, and adolescent cognitive flexibility and its associations with adolescent depression: A cross-sectional study. *Children*, 11(1), 131.
- Yaakob, D., Yahya, D., Isha, M. A., Hajar, S. M. Y., Kamaruddin, K., & Shukri, Z. (2017). Family functionality among youths in Malaysia. *Malaysian Journal of Youth Studies*, 17(1), 1-17
- Zvolemky, M. J., Leyro, T. M., Bernstein, A., & Vujanovic, A. A., (2011). Historical perspectives, theory, and measurement of distress tolerance. *Distress tolerance: Theory, research, and clinical applications*, 3–27. The Guilford Press.
- Zvolensky, M. J., Vujanovic, A. A., Bernstein, A., & Leyro, T. (2010). Distress tolerance. *Current Directions in Psychological Science*, 19(6), 406-410. <https://doi.org/10.1177/0963721410388642>
- Alderman, E. M., & Breuner, C. C. (2019). Unique needs of the adolescent. *Pediatric Collections: Adolescent Health Part 1: Promoting Wellness*, 5-16. <https://doi.org/10.1542/9781610027052-part01-unique>
- Ghamari, M., & Khoshnam, A. (2011). The relationship of original family function and quality of life among students. *Journal of Family Research*, 7(3), 343-354.
- Suslovic, B., & Lett, E. (2024). Resilience is an adverse event: A critical discussion of resilience theory in health services research and public health. *Community Health Equity Research & Policy*, 44(3), 339-343.
- Wang, Y., Qiu, Y., Ren, L., Jiang, H., Chen, M., & Dong, C. (2024). Social support, family resilience and psychological resilience among maintenance hemodialysis patients: a longitudinal study. *BMC psychiatry*, 24(1), 76.