Relationship between Family Functioning, Mental Toughness and Coping

Strategies in Young Adults

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ABSTRACT

The current research aimed to explore the predictive relationship between family functioning,

mental toughness, and coping strategies in young adults. For this purpose, a cross-sectional

research design was used and a sample of 160 students was selected by using a convenient

sampling technique. Data collection was done using demographic sheet, the Family

Functioning Scale, the Mental Toughness Questionnaire, and the Measure of Adolescents

Coping Strategies. Results were analyzed using Pearson correlation and simple linear

regression. The study found a significant positive relationship among family functioning,

mental toughness, and coping strategies in young adults; and that mental toughness is a

significant positive predictor of coping strategies. The study concludes with recommendations

for improving family functioning, mental toughness, and coping mechanisms in Pakistan which

requires a holistic approach that blends professional guidance with general education and

awareness sessions.

Keywords: Family Functioning, Mental Toughness, Coping Strategies, Relationship,

Prediction

INTRODUCTION

Family functioning is defined as the frequency of normal family routines, effectiveness of family communication, and ability of families to problem solve (Jones et al., 2002). Additionally, the American Psychological Association, describes "family functioning" as how a family functions as a unit, including how its members interact, reach decisions, and resolve conflicts (APA, 2017). It displays the degree of kinship, help, and adaptability within the family as well as the capacity to control stress and accommodate change. Family functioning is important for students' life skills development during adolescence, and how they manage and cope with life in adult years.

The World Health Organization (WHO, 2006) defines a family as a group of two or more people who are related by blood, marriage, or adoption and who live together, and support each other for survival and wellbeing. This definition demonstrates WHO's recognition of the importance of supporting families in their various forms and roles in fostering health and wellbeing. Family functioning is influenced by the quality of parent-child relationships. For example, parenting practices that are warm, responsive, and consistent are associated with better family functioning, while parenting practices that are harsh, inconsistent, or neglectful can undermine family functioning (Sanders et al., 2005).

Healthy family functioning helps individuals cope with mental toughness and improves their mental health and well-being. Coping strategies refer to the cognitive and behavioral efforts that individuals use to manage the demands of a stressful situation and reduce the negative impact of stress on their psychological and physiological functioning (Compas et al., 2001). Mental toughness is defined as a strong dedication to one's goals as well as the willingness to remain positive in the face of difficulties and obstacles (Gucciardi, 2015). Having mental toughness provides individuals the strength and resilience to deal with different life challenges over their life span. Understanding the connection between family functioning,

mental toughness, and coping strategies is essential for shaping young adults' lives (Vahedi et

al., 2009, Paki et al., 2018). Family functioning also impacts mental health, physical health,

relationship satisfaction, and family resilience. High cohesion and adaptability in the family

lead to positive outcomes for life quality and wellbeing, whereas low levels of family cohesion

may increase stress and conflict vulnerability (Olson et al., 1970).

Theoretical Framework

Parson (1949) contended that families must carry out specific roles to sustain stability and

coherence. He also highlighted the importance of family structure in determining how well a

family functions. According to Parsons, families have a hierarchy of tasks and obligations, with

each family member having a particular responsibility to perform. This idea contends that

families serve four primary purposes: socialization, sexual activity control, financial assistance,

and emotional support. These roles are crucial for preserving societal stability and order, and

families that can successfully play these roles are more likely to be prosperous and cohesive

(Parsons, 1949).

Family systems theory changes the emphasis from the parent-child dyad to the family

as a social system (Parke et al., 2006). A family is thought of as a social system with its own

traits, standards, roles, communication styles, and power structure above and beyond the

individual (Compas et al., 2009). Operating as a system, each family member plays a role in

maintaining stability and balance. In addition, family members are interdependent and

connected, and changes in one member can affect the entire family system or setup. This theory

emphasizes the importance of understanding family dynamics and patterns of interaction to

promote positive family functioning (Bowen, 1978).

Social exchange theory focuses on the idea that a relationship between two people is

formed through a cost-benefit analysis. According to this notion, family members exchange

resources like love, support, and care and family members are driven by self-interest and try to

maximize their advantages while lowering their expenses within the family structure. The theory proposes that maintaining a balance in family interactions and exchange is crucial for fostering healthy family functioning (Zeitlin, 1961). Other researchers, such as Walsh (2012) and Tunnell and colleagues (2003), have argued that family members are impacted by the requirements and capacities of each family member. Thus, the individual and collective interactions between the married couple, adult members within the family, parents and children, and siblings, have an impact on the family group overall.

According to Wirth and Parsons (1949), mothers are most commonly responsible for providing emotional support and managing the home, while fathers are commonly responsible for providing financial support. In this way, social norms and values dictate gender role allocations within the family structure, and families are affected by broader cultural and socioeconomic factors of the community or region. The theory also highlights the significance of stability, equality, and coherence in family functioning and contends that households with more stability and equality are more likely to have successful members.

The McMaster Model of family functioning was presented by Epstein and colleagues (1983) and focuses on six components of the family such as: problems solving, family roles, family communication, affective response, general family functioning, family involvement, and behavior control. The theory argues that these dimensions have the greatest influence on the mental and physical well-being of family members, including mental toughness. Jones and colleagues (2002) proposed the 4Cs model of mental toughness, which argues that mental toughness is made up of the following four elements: challenge, commitment, control, and confidence. Individuals who have high mental toughness have more control over their lives, and show greater perseverance for achieving their goals in life.

Control Value Theory was proposed by Nicholls and colleagues (2017), which proposes that an individual's level of mental toughness is based on their perceptions of their capacity to

one's life.

influence their surroundings and accomplish their objectives. In accordance with this notion, developing mental toughness entails gaining a sense of control over one's surroundings and goals as well as a conviction that one can accomplish those goals. A biological theory presented by Fletcher and Sarkar (2014) contends that a mix of hereditary and environmental factors underlie mental toughness. In this way, this theory focused on the biological role of family and social surroundings which can contribute to mental stability and ability to control

Lazrus and Folkman (1984) defined coping techniques as methods used to regulate, decrease, or endure external and internal pressures that tax or exceed a person's resources. Seeking social support from family, friends, or professionals to manage stress helps a person to develop mental toughness. Coping strategies for managing stress and difficult emotions include problem-focused, emotional-focused, avoidant, proactive, and meaning-focused. Problem-focused coping involves direct action, whereas emotional-focused coping regulates emotional responses. Avoidant coping involves avoiding or denying stress sources, while proactive coping anticipates and prepares for potential stressors. Meaning-focused coping involves finding meaning in stressful situations, using techniques like reframing, seeking social support, and engaging in spiritual practices (Park, 2010; Schwarzer & Knoll, 2007)

Lazarus and Folkman's Transactional Model of Stress and Coping (1984) suggests that stress arises from a transaction between an individual and their environment, and coping strategies involve cognitive and behavioral efforts to manage stressors. Stress is based on cognitive appraisals, with two types: primary appraisal (determining if the stressor poses a threat) and secondary appraisal (evaluating resources and coping strategies). The process of reappraisal is ongoing, continually evaluating the nature of the stressor and available resources for managing it (Lazarus & Folkman's, 1984). Ultimately, the theory also suggests that better

social support and family functioning can help an individual develop appropriate coping

strategies to manage life and its challenges.

LITERATURE REVIEW

The family is the main factor in the emotional and mental formation of a child. In a study on

the family system perspective, Qi and colleagues (2023), explored the role of adolescent mental

toughness as a mediator and family cohesion as a moderator in the relationship between

parental mental toughness and the mental health of children. This study emphasized the

beneficial effects of parent-child mental toughness contagion on young people's mental health

as well as the amplifying role of family togetherness. Additionally, the study found that youth

mental toughness can serve as a mediator to explain the beneficial relationship between

parental mental toughness and children's mental health.

Wulandari and colleagues (2022) conducted a study on the association between family

structure and children's emotional and mental health issues. The purpose of this study was to

determine the relationship between children's emotional and mental health issues and family

functioning. The study's findings indicate a strong relationship between children's emotional

and mental health issues and family functioning. In a local study, Ghaus and colleagues (2021)

assessed how modern media affects family life in Pakistan. The conclusions drawn from the

study showed that modern media has detrimental impacts on family functioning by reducing

the intensity and length of intergenerational interaction. Family gatherings have also been

impacted negatively by modern media, such that family members talk less to each other and

engage with media more, reducing the interaction and quality of relations.

Jabeen and Dildar (2023) researched family functioning and distress tolerance to

explore the relationship between these variables. The findings of the research concluded

significant positive relationship between distress tolerance and family functioning, which

indicates that family functioning plays an important role in the tolerance ability and resilience in adolescents. In a study conducted by Kaiseler and colleagues (2009) on a sample of male and female athletes the aim was to explore the relationships between mental toughness, stressor appraisal, coping techniques, and coping effectiveness. Results of the research indicate that higher levels of mental toughness were specifically associated with greater problem-focused coping and less avoidance and emotion-focused coping. The athletes' chosen coping method had an impact on the effectiveness of coping.

Romanová and Martina, (2021) researched male and female school students to find out the relationships between mental toughness, stressor appraisal, coping techniques, and coping effectiveness. The findings showed a strong positive association between mental toughness and coping mechanisms, particularly between confidence (the mental toughness dimension) and several coping mechanisms (handling challenges, maintaining focus, confidence, and maximizing performance under pressure). To analyze the effects of various variables on the athletes' trait anxiety and mental toughness levels, Ceylan (2023) conducted a study to explore the relationship between the trait anxiety levels of national sailing athletes and their levels of mental toughness. It was discovered that male athletes had higher levels of confidence than female athletes and that female athletes had higher levels of control than males. In addition, there was a positive and moderate relationship between the athletes' age and the length of time spent participating in sports and competition.

Aren and Hamamci (2022) studied the influences of conscious coping mechanisms, affective and emotional intelligence, and cognitive (financial literacy) aspects on the degree of financial risk tolerance. Findings of the study revealed that coping mechanisms reduce one's capacity for financial risk. Coping mechanisms serve as protective barriers against disorders like anxiety and depression (Bisschop et al., 2004; Matheny & McCarthy; 2006) and are highly predictive of psychological well-being (Hobfoll, 2002). Other scholarship has contributed that to cope with stressful situations, people need to have access to support systems that exist even before the stressful occurrence, one of which is family support and healthy family functioning (Pearlin & Schooler, 1978).

Yang and colleagues (2022) conducted a study on family functioning and suicide ideation among adolescents. The study's findings revealed pairwise relationships between suicidal ideation, family functioning, failure, and meaning in life. Specifically, family functioning moderated the influence of family functioning on adolescent defeat. Using a strength-based approach, Rasmussen and colleagues (2023) investigated the relationships between patients and family members' protective resources and overall family functioning. The results showed a significant correlation between family functioning and the latent construct of protective resources. Overall, higher protective resources (such as resilience, self-efficacy, and mental health) were positively correlated with family functioning.

Francisco (2015) conducted research that aimed to evaluate the mediating role of coping mechanisms in the link between family functioning and youth maladjustment. The findings revealed an association between the adoption of unhealthy coping mechanisms and psychological maladjustment in young people who had insufficient family functioning. The study showed no gender differences in coping strategies and highlighted the significance of coping mechanisms employed by adolescents to comprehend the connection between family functioning and young people's psychological maladjustment.

Significance of the Study

For young adults, family functioning, mental toughness, and coping mechanisms are crucial factors, which help to increase resilience and determine success in life. The results of this study will be valuable in advising policy for support of young adults in relation to family counselling and interventions to improve family support and cohesion. The objectives of this study include identification of: (i) the relationship between family functioning, mental toughness, and coping

strategies among young adults, (ii) the predictive relationship of family functioning, mental

toughness, and coping strategies, (iii) the gender difference in family functioning, mental

toughness, and coping strategies in young adults, and (iv) the difference in family functioning,

mental toughness and coping strategies in young adults across different age groups.

METHODOLOGY

Research Design

The present study used a cross-sectional research design.

Ethical Considerations

Research approval was taken from the departmental committee at Government Islamia

Graduate College for Women, Cooper Road, as well as from the Department of Applied

Psychology, Lahore College for Women University. Participants were informed about the

purpose of the research, confidentiality and anonymity, and that they could withdraw from the

research at any time. Moreover, no incentives were offered to the participants during the

research.

Sample and Sampling Strategy

The present study recruited a sample of 160 undergraduate University students (Male, n = 63,

Female, n= 97) with age ranging from 18-25 years using a convenience sampling technique.

Assessment Measures

Demographic Sheet

A demographic sheet was used to collect basic demographic information such as age,

education, gender, family system, family relationship, and family income.

Family Functioning Scale

The Family Functioning Scale developed by Noller (1988), was used to measure family

functioning. This scale consists of 30 items and has three subscales that measure intimacy in

family functioning, parenting style, and conflict in the family. Participants were asked to rate

each item using a 5-point Likert scale (strongly agree to strongly disagree).

Mental Toughness Questionnaire

The Mental Toughness Questionnaire (MTQ-18) was used to assess mental toughness (Dagnal

et al., 2019). The 18-item Mental Toughness Questionnaire (MTQ18) is a brief, commonly

used test of mental toughness. It consists of four interconnected components (Challenge,

Commitment, Control, and Confidence). Items are presented as statements (such as "I generally

feel in control"), and respondents' rate how much they agree or disagree with each item on a

five-point Likert-type scale (strongly agree to strongly disagree).

Measure of Adolescents Coping Strategies

The Measure of Adolescents Coping Strategies (Sveinbjornsdottir & Thorsteinsson, 2008) was

used to assess the coping strategies in young adults. This scale consists of 34 items with two

subscales, namely maladaptive coping responses and adaptive coping responses. The scale is a

4-point Likert scale (I did not use to I used almost all the time).

Data Collection

Students were approached both online and in-person. Data was collected from February 2023

to June 2023.

Data Analysis

The results of the study were analyzed using SPSS. In the first step descriptive and

psychometric properties of the scale were analyzed. In the second step, Pearson product-

moment correlation analysis was used to explore the relationship between the study variable

and simple linear regression analysis was used to explore the predictive relationship of family

functioning, mental toughness, and coping strategies. In the third step independent sample t-

tests were used to analyze the difference between the study variables. The hypotheses of the

study were:

H1. There is a relationship among family functioning, mental toughness, and coping strategies in young adults.

H2. Family functioning is a predictor of mental toughness and coping strategies in young adults.

H3. There is a gender difference between family functioning, mental toughness, and coping strategies in young adults.

H4. There is a difference in family functioning, mental toughness, and coping strategies in young adults across different age groups.

Reliability Analysis

Table 1 presents the result of the reliability analysis. The Cronbach's alpha reliability of family functioning scale had an alpha value of α =.87 which was good, mental toughness had an alpha value of α =.72 that was acceptable, and the scale of coping strategies had an alpha value of α =.89 that was also good.

Table 1Reliability Analyses of Assessment Measures (N=160)

Measures	M	SD	Ranges	Cornbach's α
Family functioning Scale	124.5	17.3	47-153	.87
Mental toughness Questionnaire	80.0	07.7	28-90	.72
Coping strategies Scale	43.9	13.9	18-99	.89

Note- α =reliability coefficient, M= Mean, SD=Standard Deviation

RESULTS

Demographic Results

Table 2 presents the results of descriptive analysis conducted on various demographic variables. The sample consisted of 60.6% females and 39.4% males. The study included two age groups- 40.0% fell between 18-20 years, and 55.0% between 21-25 years. The family system variable indicated that 55.6% of participants lived in joint families, while 44.4% lived in nuclear families.

Forman Journal of Social Sciences- 2023- Vol. 3, Issue 2 (Dec)

DOI: 10.32368/FJSS.20230215

Table 2

Demographics Characteristics of the Participant (N= 160)

Variables	F	%
Gender		
Female	97	60.6
Male	63	39.4
Age		
18- 20	72	45.0
21- 25	88	55.0
Family system		
Joint	89	55.6
Nuclear	71	44.4
Family relationship		
Unsatisfactory	09	05.6
Neutral	47	29.4
Satisfactory	104	65.0
Monthly income (PKR)		
10,000 - 14,999	23	14.4
15,000 - 24,999	33	20.6
25,000 - 34,999	25	15.6
35,000 – 44,999	28	17.5
50,000+	51	31.9

Correlation Analysis

The correlation coefficient of r = .24** between the Family Functioning and Mental Toughness indicates a positive and moderately strong relationship between these two variables (Table 3). The positive correlation suggests that as family functioning improves, mental toughness increases as well.

Table 3 Pearson's Correlation of Study Variables (N=160)

Variables	n	M	SD	1	2	3
Family Functioning	160	124.5	17.3	-	.24**	.06
Mental Toughness	160	60.1	07.7		-	.15*
Coping Strategies	160	43.9	13.4			-

Note: M= Mean, SD=Standard Deviation, p> .05

Results for Simple Linear Regression

The results in Table 4 show that family functioning and mental toughness are significant predictors of coping strategies, with the significance level of family functioning standing at p = .04 and mental toughness at p = .05.

Table 4Family Functioning and Mental Toughness as Predictor of Coping Strategy (N=160)

Variables	В	SE	В	p	T
Constant	25.00	10.15			2.46
Family functioning	.02	.06	.03	.04	0.37
Mental toughness	.26	.14	.15	.05	1.86
R	.16				
R2	.02				

Note: β = *standardized coefficient, SE*=*standard error,*

Results for Independent Sample t-test

Table 5 results show that there is a significant gender difference between family functioning, mental toughness, and coping strategies. The mean score of family functioning of females is higher than that of males (F=126.0, M=122.3), and females also have higher scores on mental toughness as compared to males (F=60.3, M=59.8). However, females scored lower on coping strategies compared to males (F=43.4, M=44.6).

Table 5Comparison of Scores of Family Functioning, Mental Toughness, and Coping Strategy in female and male young adults (N=160)

Variables	Female		Male		T	p	Cohen's d
	M	SD	M	SD	_		
Family Functioning	126.0	14.6	122.3	20.8	1.32	.05	.20
Mental Toughness	60.3	7.7	59.8	7.6	.36	.02	.06
Coping Strategies	43.4	13.3	44.6	13.7	57	.03	.08

Note: M = Mean, SD = Standard Deviation, p > .05

Results for Independent Sample t-test

Table 6 shows the results for independent sample t-test for mean comparison between age groups. There is a significant difference in mean scores for: (i) family functioning of 18-20 year olds versus 21-25 year olds (18-20 years =121.1, 21-25 years= 126.5); (ii) mental toughness of 18-20 year olds versus 21-25 year olds (18-20 years =48.4, 21-25 years= 57.5); and (iii) coping strategies of 18-20 year olds versus 21-25 year olds (18-20 years =41.7, 21-25 years= 44.0). This suggests that the 21-25 year age group has more effective family functioning, higher level of mental toughness and coping strategies compared to students between 18-20 years.

Table 6Comparison of Scores of Family Functioning, Mental Toughness and Coping Strategy in two age groups of young adults (N=160)

Measure	18-20 year		21-25 year		t	p	Cohen's d
	M	SD	M	SD			
Family Functioning	121.1	16.8	126.5	18.4	-1.9	.05	.30
Mental Toughness	48.4	9.1	57.5	6.2	.7	.03	.11
Coping Strategies	41.7	14.6	44.0	12.6	-1.0	.01	.16

Note: M = Mean, SD = Standard Deviation, p > .05

DISCUSSION

Family functioning plays a vital role in developing good mental toughness and coping strategies in young adults. This study aimed to explore and predict the relationship between family functioning, mental toughness, and coping strategies in young adults. The results of the current study indicate a significant positive relationship between family functioning, mental toughness, and coping strategies in young adults. Previous research findings are in line with these results (Qi et al., 2023; Martínez and Montilla, 2017), which argue that family functioning creates effective coping strategies for handling various situations. Furthermore, family support

can provide efficient coping strategies for addressing challenging and distressing situations in adult life (Karami et al., 2019).

The second hypothesis of the study was that family functioning will be an effective predictor of mental toughness and coping strategies in young adults. We found that positive family functioning was associated with higher levels of mental toughness and coping strategies. Other research corroborates our results (Johnson and Wahl, 2011), and further suggests that a nurturing family environment can contribute to mental toughness and effective coping strategies. Najafi, and colleagues (2018) also suggest that positive family functioning, characterized by open communication, warmth, and support, is positively correlated with the use of adaptive coping strategies and greater psychological well-being.

The third hypothesis of the study predicted that there would be a gender difference between family functioning, mental toughness, and coping strategies. Results of the current study indicates significant gender differences in females having higher family functioning and mental toughness, whereas males have greater coping strategies. Previous research is in line with our findings (Scout et al., 2011; Gregory, 2014), which shows that young females show higher family cohesion and mental toughness. Local research confirms that women in Pakistan show lower coping strategies, and this is because they have less emotional support and agency or independence to cope with life's problems (Shaikh et al., 2004).

The last hypothesis of the study suggested that there will be a difference in family functioning, mental toughness, and coping strategies across different age groups. Our findings of the present research indicate that the higher the age group, the better the family functioning, mental toughness, and coping strategies. Other research supports our findings (Lin et al., 2017; Zalewska et al., 2019) and shows that the older the population group, the better they are able to negotiate family relations, develop mental toughness, and adopt coping strategies to deal with life's challenges. This is due to a combination of maturity, experience, and improved understanding about life and relationships that a person gains with time and age.

CONCLUDING RECOMMENDATIONS

This research concludes that family functioning is an effective predictor of good mental toughness and coping strategies. We recommend that interventions must be introduced in Pakistan to support family functioning, which includes mandatory community-level family therapy (Puffer, 2020). This therapy for the family unit must include components for life skills training, developing coping mechanisms, stress management, decision-making, communication, and problem-solving skills. School and University Counsellors must also be integrated into the plan to improve support for family functioning. The Counselors at academic settings will be able to detect problems in the family unit and invite family members in an external setting from the household to deliver specific training for improving family functioning.

Similarly, partner interventions must be planned in the community and at academic settings to improve mental toughness in young adults, especially those who do not have family members living or family members in vicinity, such as students living in dorms. For interventions to improve mental toughness, resilience training is recommended, along with developing support linkages with peer groups in educational institutes. To improve mental toughness in male's cognitive restructuring, problem solving, goal setting, and multi-session motivational interviewing programmers are recommended (Sansom-Daly, 2011). To develop coping strategies in young adults it is recommended for campus counsellors to use cognitive behavioral therapy (CBT), dialectical behavior therapy (DBT), and mindfulness-based interventions. Furthermore, Social Protection Workers roles can be expanded to provide social and psychological support in addition to addressing economic problems. By guaranteeing that

their training includes family dynamics and mental health, Social Protection Workers can turn into invaluable assets for families who are at risk. Moreover, an indigenous scale for family functioning must be developed according to the culture of Pakistan. To sum up, improving family functioning, mental toughness, and coping mechanisms in Pakistan needs an accurate, holistic approach that blends professional guidance with general education and public

Conflict of interest statement

awareness sessions.

The authors declare no conflict of interest.

Funding

This research has not received funding.

Ethics and Permission

The present study was approved by the Department Research Ethics Committee at Government Islamia Graduate College for Women, Cooper Road and by the Lahore College for Women University, Lahore

Author Contributions Statement

TB conceptualized and conducted the study under the supervision of MJ and TK. All the authors drafted and approved the final version of the manuscript.

Data sharing and availability statement

Data is available from the corresponding author based on request.

Acknowledgement

The authors acknowledge participants who participated in the research.

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