

Explaining Sense of Responsibility with Family Competence: Mediation by Family Conflict and Moderation by Gender

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This study investigated the role of family competence, with mediation by family conflict and moderation by gender, in determining sense of responsibility in young adults. The sample ($N = 606$) consisted of university students (men = 140, women = 433) with age ranging from 19-25 years ($M = 20.70$, $SD = 1.90$). Self-Report Family Inventory II (Beavers & Hampson, 2000) and Personal Responsibility Scale (Mergler, 2016) were used and results indicated a significantly negative relationship between family competence and sense of responsibility, contrary to our hypothesis. However, it was observed that conflict mediates between the effects of family competence on sense of responsibility, and that females score higher on sense of responsibility, both in line with the study's hypotheses. Gender as a moderator for the effect of family conflict on sense of responsibility presented a significant relationship. Furthermore, the interaction between conflict and gender was significant. The regression model showed a significant direct conditional effect at low levels between competence and sense of responsibility, as well as a significant indirect effect at low and medium levels between competence and sense of responsibility, while a mediated effect at high level can also be observed. Findings can be used for parental awareness regarding the psychological needs of our target demographic.

Keywords. Competence, conflict, sense of responsibility, mediation

Sense of responsibility and its implication in various fields has been significant in social narrative (Bickley, 2022). It is seen as something that a person needs to recognize and act upon as they transition from adolescence into adulthood (Defoe et al., 2015). Adults

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are required to be responsible and even though studies prove this by stating that adults are generally more responsible than children (Arnett, 2001; Ryan & Linch, 1989), it is still a worthwhile question to ask what it is that brews responsibility in adults? The pathway from puberty to maturity has many surrounding factors that will determine the sense of responsibility in a grown adult. Family plays a central role in enabling a person to mature, as seen in a meta-analysis conducted by Loeber and Stouthamer-Loeber (1986) highlighting how family is the central and primary unit in socialization process. Families that can properly socialize their child into society will be doing their child a favor when it comes to the child realizing his or her responsibilities. A family, to a great extent, will therefore, decide whether or not a child grows up to be a responsible adult (Loeber & Stouthamer-Loeber, 1986; Settersten & Ray, 2010). The question that comes up now is what sort of family synthesizes a responsible adult?

Families that produce responsible, mature adults are considered *competent* families. According to Beavers and Hampson (1990), competence of a family can be defined as the ability of a family to understand their problems and be able to work around them with effective and thoughtful communication. A competent family is also able to express positive familial feelings which involve conveying their love and affection for one another. Beavers and Hampson (1990) described family competence as trait which allows every member of the household to experience their freedom, respect and individuality, and where each member realizes their responsibility.

A more extensive description of a competent family, in terms of a comparative assessment, was formalized by Beavers and Hampson (2000) when they proposed the Beaver's System Model theory, which explores the relationship between family functions together with the capacity of the family system to withstand strain. Beavers' model separates families into nine hierarchical groups based on the relationship between family functions and strain capacity of the family system, starting from optimal families, to adequate, mid-range, borderline and finally severely dysfunctional families. In the present study, two components family competence and family conflict of his theory are used. High competent families are considered optimal and healthy families. However, high level of conflict indicates unhealthy or pathological families.

This research further explores the relation between competence with sense of responsibility in a person. A healthy family like that belonging to group one of Beaver's model requires individuals in the family to be healthy as well. A person in these families would tend to act in way that is more responsible and acceptable in his or her social

circle, while trying to avoid negative behaviors. According to Bengtson (2018) a responsible individual is a healthy human, refers to a trait a healthy family would require. Different researches have highlighted that family functioning positively relates with all the member's psychological health and development (Bowen, 1978; Kerr & Bowen, 1988; Klever, 2015, 2018; Minuchin, 1974). It has been assumed that healthy and optimal families are effective in a child's positive growth, as it helps them develop the self-independence which ultimately leads with responsibility taking, optimal identities and prevents from futuristic problematic behaviors (Buboltz et al., 2003; Dmitrieva et al., 2004; Johnson & Cassell, 2001; Sabatelli & Bartle-Haring, 2003). Furthermore, research shows that through the passage of time, people that have been through more social experiences will develop a greater sense of responsibility (Lau et al., 2018).

Now that we have established how responsibility and competence of a family are highly correlated, we can explore how inside a family, we can observe the influence of gender on the development of sense of responsibility. A study was conducted to examine corporate social responsibility with regard to gender. The findings depicted that gender differences were found out as women relatively having stronger perception towards corporate social responsibly (Alonso-Almeida et al., 2017; Hur et al., 2015; Williams, 2003).

Another study was conducted to assess the relationship among responsibility, cohesion and discipline in the students. The significance of relatedness and intimacy in the formation and development of responsible behavior was highlighted. The findings of the study showed that high level of affiliation is positively related to the responsible behavior of the members. The study findings also revealed that females score comparatively higher than male members while measuring responsibility (Cesur & Ertas, 2013; Lewis, 2001).

Finally, to present as a comparison between the mediating and moderating roles of conflict and gender, we see that it is clear, according to Beavers and Hampson (2003), a higher level of conflict in family members is detrimental to family cohesion, which in turn will negatively relate competence and sense of responsibility. Pakistan is a collectivistic culture (Abbasi et al., 2021; Zaman, 2014) and in such cultures, young adults are mostly dependent on their parents (Moriceau et al., 2010). Over-involvement or negligence by parents cause negative outcomes in child's growth (Cyr et al., 2010; Erikson & Egeland, 2002; Kim & Cicchetti, 2006, 2010). So, frequent dynamic behavioral patterns of parents cause disorganized attachment in the child (Fearon et al., 2010). Ultimately, such factors cause young adults have least sense of autonomy and leads to poor family

functioning (Fatima et al., 2021). Due to the mal-family functioning and culture, the child's sense of responsibility is not appropriately developed (Bejanyan et al., 2015). Even till adulthood, they are unable take responsibility in their personal and professional life. Hence, research investigating the role of family functioning in developing sense of responsibility particularly in Eastern cultures like Pakistan will have significant contribution in the existing literature.

Similarly, Beavers and Hampson (2000) presented a model in which they mentioned that family competence describes the family's health. Better competence makes a family mentally stable and healthy. The present study is designed to test a dimension of healthy family functioning that is, sense of responsibility as an outcome of family competence. It is assumed that lack of competence leads to a lack in sense of responsibility. So, it would be significant to study these variables in Pakistani cultural context which may contribute in developing guidelines for family's psychological health in Pakistan. Along with, this empirical evidence also suggests that females have comparatively high sense of responsibility (Alonso-Almeida et al., 2017; Hur et al., 2015; Kahreh et al., 2014; Williams, 2003) however, gender as a moderator between sense of responsibility and family competence was not found in the existing literature and is explored in this research.

Keeping in view the existing literature, this study aimed to determine the impact of family competence on sense of responsibility in young adults. We will investigate the mediating role of conflict between competence and sense of responsibility. Further, the study also aimed to determine the moderating role of gender for the relationship between family competence and sense of responsibility. Following hypotheses were formulated:

Hypotheses

1. Family competence is positively related to a sense of responsibility in young adults.
2. Conflict positively mediates the effect of family competence on sense of responsibility in young adults.
3. Female young adults score higher on responsibility scale than male young adult.

Method

The research used a quantitative cross-sectional design. Self-reported questionnaires were used to collect data from the students at

different universities in Rawalpindi and Islamabad. Non-probability convenient sampling technique was used to collect the data.

Sample

The sample for the present study consisted of 606 university students from Islamabad and Rawalpindi. Data was collected from both males ($n = 140$), and females ($n = 432$) students. All participants were unmarried young adults age range 19-25 years with mean age ($M = 20.70$; $SD = 1.90$). To collect the data from target population, non-probability convenient sampling technique was used.

Instruments

Personal Responsibility Scale for Adolescents

The scale was developed by Mergler and Shield (2016) to measure the sense of responsibility. This has 15 items and three subscales named as Personal Accountability (item no. 1, 2, 3, 4, 5, 6, 7), Behavioral and Emotional Control (item no. 8, 9, 10, 11), and lastly Cognitive Control (item no. 12, 13, 14, 15). The scale is 4 Likert point (1 is labelled as *strongly disagree* and 4 is labelled as *strongly agree*). The score range in this scale was 15-60 where 15 is the least score indicating poor responsibility and 60 is extreme score showing highly responsible behavior (Mergler & Shield, 2016). Cronbach alpha coefficient for subscales ranged from .70 to .93 (Jowkar et al., 2019).

Self-Report Family Inventory-II (SFI)

To measure the functioning of the family including their competence and family styles, SFI-II (Beavers & Hampson, 2000) has been used. It assesses how a family operates their routine tasks. This scale consists of 36 and has 5 subscales named as Competence/ Health (item no. 2, 3, 4, 6, 12, 15, 16, 18R, 19R, 20, 21, 24R, 25R, 27R, 28, 33, 35 & 36), Family Conflict (item no. 5R, 6, 7, 8R, 10R, 14R, 18R, 24R, 25R, 30R, 31R & 34), Family Cohesion (item no. 2, 15, 19R, 27R & 3 6), Family Expressiveness (item no. 1, 9, 13R, 20 & 22) and Family Leadership (8R, 16 & 32) with Cronbach alpha .91, .86, .66, .81 and .26 respectively. The alpha coefficient of the overall SFI II scale was .94 (Vicente et al., 2021). The R in this scale represents the reverse coding of the items before summation.

The scoring of SFI-II uses a Likert scale. The family that represents as *best fit family* scores on 1 and the *least fit family* score on

5 on all the items except last two. The total score is summed by adding all the responses. The range of the scores in SFI-II is from 36 to 180. The least score represents the best and healthy family whereas the highest score depicts unhealthy family. In the present research, two subscales competence and conflict were used.

Procedure

To approach the sample, different universities from Islamabad and Rawalpindi were formally contacted, with permission from the relevant authorities. Participants were briefed about the research and ethical considerations. After ensuring confidentiality, they signed informed consent. The required details about the participant were collected in demographic sheet. The questionnaire booklet was given to each of the participants. The booklets provided to them included informed consent, demographic sheet and all the items with their responses. They filled the booklet individually. They had the right to withdraw anytime. A relaxed environment and flexibility in time was provided. When the questionnaire was completed by all the participants, they were acknowledged for their time and participation.

Results

The study performed both descriptive and inferential analyses. The descriptive analyses included frequency, percentage, mean, standard-deviation, skewness, kurtosis, and correlation. The inferential analysis included regression, mediation and moderation, *t*-tests, and ANOVA.

Table 1

Descriptive Statistics and Alpha Coefficients for Study Variables (N = 606)

Variables	Items	α	<i>M</i>	<i>SD</i>	Range		Skewness	Kurtosis
					Actual	Potential		
SFI II	36	.89	79.96	18.86	39-156	1-180	.67	.30
COMP	18	.83	40.19	10.35	18-86	18-90	.72	.53
CONF	12	.79	28.14	8.17	12-53	12-70	.46	-.34
RESP	15	.80	44.55	6.61	15-60	15-60	-1.31	3.02
ACC	7	.77	21.96	4.08	7-28	7-28	-1.14	1.52
BEH	4	.76	10.78	2.45	4-16	4-16	-.26	-.07
COG	4	.78	11.82	2.41	4-16	4-16	-.70	.83

Note. SFI II = Self Report Inventory II; COMP = competence; RESP = Personal Responsibility Scale; ACC = Personal Accountability; BEH = Emotional and Behavioral Control; COG = Cognitive Control.

Preliminary analyses included psychometric evaluation of the instruments. Table 1 illustrates alpha coefficients of all the scales and subscales with .76 to .89 which is acceptable. All the reported variables are found to be normally distributed.

Table 2

Correlation Coefficients of Study Variables (N = 606)

S No.	Variables	1	2	3	4	5	6	7
1	Competence	-	.77**	-.08	-.13**	-.21**	.12**	-.12**
2	Conflict		-	-.12**	-.17**	-.24**	.13**	-.19**
3	Gender			-	.17**	.22**	.02	.07
4	Responsibility				-	.88**	.54**	.69**
5	Accountability					-	.24**	.49**
6	Behavioral control						-	.05
7	Cognitive Control							-

Note. Male = 1, Female = 2

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

Table 2 shows Pearson's bivariate correlation among study variables. Results indicate that competence is positively correlated with conflict and behavioral control and negatively correlated with gender, responsibility, accountability, and cognitive control. Similarly, it also shows that conflict positively correlates with behavioral control and negatively correlates with gender, sense of responsibility, accountability, and cognitive control. Furthermore, gender is positively related with sense of responsibility and accountability suggesting that being woman is associated with higher levels of sense of responsibility. Moreover, responsibility is positively related with accountability, behavioral and cognitive control. Furthermore, accountability is positively related with behavioral and cognitive control.

In the Table 3 comparison between male and female participants is estimated. Result shows that the men have comparatively more competence, report high family cohesion, expressiveness, and more leadership abilities than women.

Table 3
Gender Differences on Study Variables (N = 606)

Measures	Men (n = 140)		Women (n = 432)		t(590)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
	SFI II	82.53	17.73	78.69			19.35	2.08	
COMP	41.46	9.39	39.64	10.83	1.71	.087	-.27	3.91	.17
Conflict	29.94	7.76	27.18	8.15	3.46	.000	1.19	4.33	.34
RESP	42.00	8.26	45.14	5.94	-4.91	.000	-4.40	-1.89	.48
ACC	20.10	4.89	22.40	3.69	-5.87	.000	-3.06	-1.53	.57
BEH	10.62	2.67	10.74	2.38	-0.50	.617	-.59	.35	.05
COG	11.27	2.64	12.00	2.38	-3.06	.004	-1.20	-.26	.30

Note. SFI II = Self Report Inventory II; COMP = competence; RESP = Personal Responsibility Scale; ACC = Accountability; BEH = Behavioral Control; COG = Cognitive Control. CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit.

Table 4
Conditional Direct and Indirect Effect of Competence of Sense of Responsibility through Conflict Moderated by Gender (N = 606)

Predictors	Mediator Conflict			Dependent Responsibility		
	B	95% CI		B	95% CI	
		LL	UL		LL	UL
Constant	-5.38	-15.27	4.51	43.20**	30.19	56.20
Age	0.24	0.00	0.48	0.26	-0.04	0.57
Year of Education	0.37*	0.02	0.70	0.27	-0.14	0.69
Number of siblings	0.04	-0.21	0.28	-0.23	-0.54	0.08
Residential Place	-0.79	-2.18	0.61	-0.52	-2.26	1.22
Competence	0.63**	0.45	0.81	0.38	0.04	0.72
Gender	-0.22	-3.95	3.51	-1.45	-6.65	3.75
Conflict				-0.85**	-1.35	-0.36
COMP*Gender				-0.01	-0.11	0.08
CONF*Gender				0.37**	0.10	0.64
R2	.55			.64		
F	110.06**			4.98**		
ΔR2				.09		

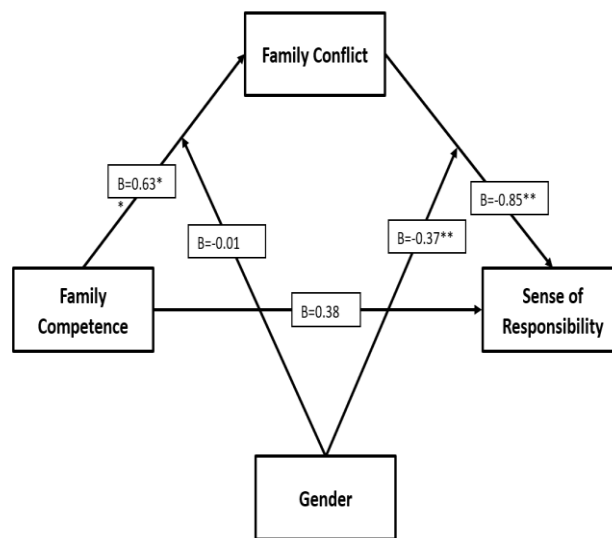
Note. COMP = Competence, CONF = Conflict, CI= Confidence Interval, LL= Lower Limit, UL = Upper Limit.

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

Table 4 shows the result of moderated mediation analysis when using conflict as a mediator and gender as a moderator in the

relationship between family competence and sense of responsibility. The findings demonstrate that there is a significant mediating role of conflict between years of formal education and sense of responsibility. Likewise, there is a significant mediating role in conflict between competence and sense of responsibility. However, only the interaction between conflict and gender is significant. F model is highly significant and the change this mediator brings is 55%. There is a significant direct conditional effect at low levels between competence and sense of responsibility. Similarly, there is a significant indirect effect at low and medium levels between competence and sense of responsibility whereas non indirect or mediated effect at high level can be observed.

Figure 1
Conceptual Model of Family Competence and Sense of Responsibility with Mediating Role of Family Conflict and Moderating Role of Gender



Discussion

The purpose of the present study was threefold. At first, it aimed to find out the relation between family competence and sense of responsibility (Otaboevich, 2021; O’Neal et al., 2020). Second, to assess the mediating role of conflict between competence and sense of responsibility. And finally, the third objective was to explore the moderating role of gender between family competence and sense of responsibly.

Numerous studies show the positive relation between competence and responsibility behavior (Buboltz et al., 2003; Dmitrieva et al., 2004; Johnson et al., 2001; Sabatelli & Bartle-Haring, 2003), on which a positive relationship between family competence and sense of responsibility was assumed (see hypothesis 1). Our results, however, were contradictory, showing a significantly negative relation between family competence and sense of responsibility. These findings may be justified as families with high level of competence have high level of cohesion as well (Beavers & Hampson, 2000), which is related to lack of responsibility because they are too involved in the family that they don't have separate identities and responsibilities.

In hypothesis no. 2, it has been illustrated that conflict positively mediates the effect of family competence on sense of responsibility. It is considered that if there is a negative relation between family competence and conflict, there would be positive association between conflict and sense of responsibility. For instance, if the family is competent then the family members may have less conflicts (Geerts-Perry et al., 2021). Following this, with less conflicts among each other, members of the family may have a higher sense of responsibility. The findings were in-line with the assumptions showing that conflict positively mediates the effect of family competence on sense of responsibility.

In the next hypothesis demonstrated that women score higher on sense of responsibility as compared to men. The findings are in line with the literature which also supports that women show more responsibly than their male counterparts (Kahreh et al., 2014). Men are usually dependent on family members till adulthood while women are expected to take the responsibility at earliest. These practices lead women to be more responsible (Alonso-Almeida et al., 2017; Hur et al., 2015; Kahreh et al., 2014; Williams, 2003).

The research also examined the moderating role of gender for the effect of family competence on sense of responsibility. However, the findings of the present study showed nonsignificant relation. Fifth argument states that gender negatively moderates the effect of conflict on sense of responsibility. Contrary to this, the result of the current study explains that gender positively moderates the effect of conflict on sense of responsibility.

Implications

Family is the basic element in the development of nations. If a family functions in an ideal way, then children in the family will own their responsibilities and will act responsibly. The more family

competence the more developed is the sense of responsibility in the children. The findings of the study have the following implication to enhance family function. Firstly, this study will contribute to the existing literature regarding family competence and responsibility. Furthermore, it may also contribute in developing guidelines for family's psychological health in Pakistan. Additionally, low level of family conflict strengthens sense of responsibility, it will be an asset in the family counselling and guidance program. Finally, as results showed female being more responsible than males, it will highlight the importance of gender equality specifically women empowerment.

Limitations and Suggestions

The present study has some limitations in methodology which could affect the results. At first, all the scales were self-report measures which may have resulted in self-presentational bias. Additionally, in such these measures, the quantitative research method involves structured questionnaire with close ended questions. It results in limited outcomes outlined within the research proposal and the results cannot always represent the occurring, in a much-generalized form. Secondly, though the study consisted large enough sample, yet it comprised of educated people, non-educated people were not part of this study and it was collected from some of cities not all over Pakistan so it isn't representative of Pakistan therefore we cannot generalize our findings. An important limitation of relativity study designs is that they cannot be used to determine and establish the causal nature of the relationship between the measured variables. Correlation research restricts causal inferences which can be drawn from result. The study may result in more precise and generalizable results while considering diversity in sample.

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