RESEARCH PAPER

Family Characteristic Variables and Their Relationships with Family Cohesion, Adaptability, and Communications among Families in Mettu Town, Southwest Ethiopia: From Adolescents' Viewpoint

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Abstract

This study aimed to investigate the existing family characteristic variables and variations they made in family cohesion, flexibility, and communication among families in Mettu town, Southwest Ethiopia. It must be noted that research-based knowledge of family characteristics and functioning has substantial implications for family interventions. Despite this, evidence shows a dearth of studies in these areas in Ethiopia. Considering this gap, a quantitative study with a cross-sectional design was conducted. For this purpose, questionnaires were administered to a sample of 192 adolescents selected from three high schools based on stratified random sampling. Descriptive statistics, Pearson correlation, MANOVA, and follow-up univariate ANOVAs were computed with SPSS. The finding showed that there were significant variations in cohesion ($F_{(2,189)} = 5.835$, $P<0.01$, $\eta^2 =0.058$), flexibility ($F_{(2,189)} = 4.87$, $p<0.01$, $\eta^2=0.049$), and communication ($F_{(2,189)} = 10.157$, $p<0.01$, $\eta^2=0.097$) as a function of family structure. There were also significant variations in cohesion ($F_{(4,187)} = 2.99$, $P<0.05$, $\eta^2=0.047$), flexibility ($F_{(4, 187)} = 3.08$, $p < 0.05$, $\eta=0.1742$), and communication ($F_{(4, 187)} = 19.356$, $p<0.01$, $\eta^2=0.293$) as a function of family size. However, differences were not observed in the composite of the dependent variables related to economic status ($P > 0.01$). Overall, while nuclear family structure, reasonable family size, and optimum economic status promote health functionality, single parenting, economic stressors, and large family sizes that dilute family resources result in unhealthy functionality. Therefore, policymakers and scholars should further examine family issues and design family interventions.
Keywords: Family, adaptability, cohesion, communication, structure, functioning

Introduction

Throughout historical times, the family as a system has been studied from various perspectives (Zahra and Saleem, 2021) because it is a basic unit of a society that is important for the development of its members (Dai and Wang, 2015). On the other hand, family system scholars posit that the family as a whole or as a system consists of different sub-systems that dynamically affect each other (Olson, 2011). Regarding the within-family-level variables, it is good to scrutinize family characteristic variables, specifically family structure, economic status and size, as they are always dynamic. For instance, with the transformation of social values, family structure became highly varied (Bianchi and Casper, 2000). So, it is important to scrutinize how families are structured in a variety of ways including nuclear, single-parent families, child-headed families, or blended families (i.e., those consisting of previously divorced but now remarried parent couples) (Lin *et al.*, 2019). In a study conducted by Wakgari and Belay (2021), it was observed that the common category of families in terms of structure consists of nuclear, single-parent and extended

families. They also confirm that families vary in terms of economic status and size too.

Family in terms of its functionality is a system representing a condition where communication, interactions, family rules, and ways of sharing roles that are conducive to positive development (Olson *et al.*, 2007). This functionality is seen in terms of various dimensions: cohesion, adaptability, and communication. While cohesion refers to the emotional connection, adaptability or flexibility represents the amount of change in family leadership and relationship roles and rules (Olson, 2010). Adaptability represents the quality of leadership and organization within a family as well as the distribution of roles and rules of relationships (Olson and Gorall, 2006). Family communication represents the expression of thoughts and feelings in an assertive way among the family members while carefully receiving other members' thoughts and feelings (Dursic, 2018).

So, although the functionality of a family in terms of cohesion, adaptability, and communication may depend on several factors, family characteristic variables mainly structure, economic status, and size are considered here. Here, it has been confirmed that there are variations in family functioning across family structures favoring nuclear over non-nuclear families (Villarreal-Zegarra and Paz-Jesus, 2017). Similarly, it was observed in a study that two-parent families (i.e., nuclear) had higher mean scores on family cohesion compared to single-parent families whose mean score on cohesion was relatively lower (Bello *et al.*, 2017). Hence, family structure influences the functionality of a family in the dimensions of cohesion, adaptability, and communication. Family structure had an impact on the adaptability and communication dimensions of family functioning. When it comes to a family's relative economic status, a study conducted by Wakgari and Belay (2021) shows that it had relationships with family functioning mainly cohesion and adaptability. The scholars suggested that there were significant differences in cohesion and adaptability favoring medium economic status over the lower and higher ones.

Scholars believe that poor socio-economic situations negatively impact family functioning and its dimensions. Banovcinova *et al.* (2014), for instance, suggested that a low economic situation disrupts the functioning of the family system. The family economic stress model also outlines that low family income creates economic stresses and pressures that affect parental and within-family relationships (Mistry *et al.* 2008) and the family's functionality.

Nevertheless, the roles that family size has in family cohesion, adaptability and communication have not been studied as far as the researcher's reviews are concerned. Yet one thing that must be noted is that family functioning has something to do with family's resources that have further association with family size. Downey (1995), for instance, suggested that the effect of family size is well explained by the Confluence model justifying that there is a reverse relationship between family size and child outcomes.

Thus, based on the preceding background research gaps have been observed in creating a suitable family atmosphere and ensuring the well-being of family members particularly in Ethiopia as stated in the Child Right Policy (Federal Democratic Republic of Ethiopia, 2017) tracing need for family studies and interventions. This gap in creating a suitable atmosphere represents existing problems in creating a healthy family (Matejevic *et al.*, 2014) that includes family cohesion, adaptability and communication. Despite the policy statements, empirical evidence that shows the status of family functioning as well as relevant interventions designed to ensure the family's wellbeing seems to be nonexistent on the ground in Ethiopia. To alleviate these problems, the role of empirical evidence on cohesion, adaptability, and communication would have been traced in the policy. Family assessment is also rarely considered by researchers in Ethiopia, despite its importance (Taye, 2021).

On the other hand, family characteristics that have been in constant change become a very important area requiring empirical

examinations. There exists dynamism in family structure because of changing familial and societal arrangements (Sharma, 2013). Because of the prevalence of divorce, there is more single-parent structure today than ever. Hence, it is important to determine the nature of the families in terms of the existing structures in the study contexts. When it comes to family characteristics pertinent to economic status, it was outlined that the economic condition of the family generally influences family functioning (Dai and Wang, 2015). There is also a dearth of studies examining the impacts of family size on family functioning.

So, while the family characteristic variables themselves were matters of study, their roles as factors influencing the cohesion, adaptability and communication dimensions of family functioning became important. Regarding this, studies are showing the role of family structure and family functioning in influencing the well-being of family members (Lang, 2018). However, there is a dearth of studies on whether structure has an impact explicitly on cohesiveness, adaptability, and communication. Empirical work focusing on the impact of a family's economic status and size on patterns of family functioning was also nonexistent in our case. As far as the researcher's reviews and experiences were concerned, the impact of family characteristic variables on cohesion, adaptability, and communication has not been considered by researchers in Ethiopian contexts.

The study has, therefore, been designed to determine the existing family characteristic variables (i.e., family structure, relative economic status, and family size) and the statistical differences they made in the patterns of family functioning among families in Mettu town, Southwest Ethiopia.

Based on the study gaps, this study addressed three leading questions:

1. What were the nature or patterns of family functioning, mainly family cohesion, adaptability/flexibility, and communication in the study contexts?

2. What kinds of relationships were there between family characteristic variables and patterns of family functioning, i.e., cohesion, adaptability/flexibility and communication?

3. Was there a statistically significant difference in patterns of family functioning, i.e., family cohesion, adaptability/flexibility, and communication as the function of family characteristic variables mainly family structure, family's relative economic status, and family sizes?

Materials and methods

Research design

To extract the required data that would address the stated leading questions and to effectively deal with the general objective, the study employed a quantitative approach with a particular design known to be cross-sectional. The design was employed for its appropriateness to examine statistical differences enabling us to measure several variables at one point in time. The design was chosen for it addresses the study goal to statistically determine whether there were variations in family cohesion, adaptability and communication across family characteristic variables. It has to be noted that one of the factors that determines the choice of a research design over the others is the goal of the research (Coolican, 2014).

Study site

The study site is Mettu town, i.e., the main town of Illu Aba Bor Zone of Oromia Regional National State, Southwest Ethiopia, which is nearly 600 km away from Addis Ababa. In Mettu, there are interesting social relationships between the families and the cultural environment. Also, as people of different ethnicities live together, the number of ethnically mixed marriages and interethnic families is high. Thus, the ethnic composition of the population is more diversified, leaving big implications for research in the areas of family functioning. Moreover, as far as the researcher's experiences are concerned, families with different structures and

relationships exist in Mettu. Afan Oromo is a widely spoken language followed by Amharic. Regarding religious composition, many different religions exist in Mettu including Orthodox Christian, Muslim, Protestant, and Waaqeffataa. More importantly, it is not uncommon to find a family member with different religions that might contribute to the complexity of the family which has big implications for family study and interventions, indeed.

In Mettu, there were four high schools (9–12 grade level), three of which were targeted, while the remaining one was omitted for a reason. While this study was conducted, the excluded school (i.e., Mettu University Special High School) was newly established and didn't have all class levels. And, the site was selected for some reasons, including accessibility and the researcher's familiarity with the actual contexts.

Population and sampling

The study population was all students enrolled in high schools (i.e., grades 9–12) in Mettu town whose ages were between 15 to 20 years old. Participants were adolescents attending their education in the 2023 academic year. It was thought that adolescents are the proper participants for some reasons. First, it is thought that they can understand and properly fill out the questionnaire compared to young children. Secondly, because they were in schools, it was not very demanding to get them in person. On the other hand, because it is difficult to visit each family, the researchers decided to study the theme from adolescents' viewpoints.

Regarding sampling, combined procedures were used. In the first place, while Mettu town was selected based on accessibility, three senior high schools (i.e., Mettu High School, Abdi Bori Secondary School, and Hachalu Memorial Secondary School) were considered purposively. The total number of students in the schools was 3728 (i.e., 1250 in Mettu High School, 1643 in Abdi Bori Secondary School, and 835 in Hachalu Memorial Secondary School).

Sample size varies depending on different factors including the purpose of the study and the nature of the population under scrutiny. Yet, the general truth that must be considered is that the larger the sample size, the better the representation will be (Cohen *et al.*, 2000).

When it comes to sampling, therefore, about 210 students were elected with the help of stratified random sampling. The selection was made based on the stratification of various types. With the help of proportional stratified random sampling (i.e., a sample of adolescents in proportion to the number of students in each school), a sample of 91 adolescents (M = 45, F = 46) from Abdi Bori High School, 71 adolescents (M = 35, F = 36) from Mettu High School, and 48 adolescents (i.e., M = 24, F = 24) from Hacalu Memorial High School were selected. Gender-based stratification was made based on an equal allocation approach in that the number of boys and girls was nearly equal. So, from the sample, while only 192 students (i.e., F = 98, M = 96) were considered for the final analysis, the remaining ones were omitted for not filling out the questionnaire properly.

Tools of data collection

Measures of demographic and family characteristic variables

Here personal variables mainly age, gender and family characteristic variables mainly a family structure, relative economic status, and size were assessed. These family characteristic variables were assessed with close-ended demographic variable questions prepared by the researcher based on various literatures. Of course, measuring a family's socioeconomic status is not an easy job. Were *et al.* (2022) stated that for there is an association between SES and family's well-being, there is a need to assess methods of classification of families into SES strata as low, middle and high. To measure these variables, Howe *et al.* (2010) who used a subjective measure of a family's socioeconomic status in an African country was based. Indicators were condensed to have three key measures of family's SES: perceived adequacy of income, perceived adequacy of basic needs and services and perceived relative

economic positions. Then respondents were made to rate the key indicators as low/less than adequate, medium/adequate, and high/more than adequate).

The measure of family cohesion, adaptability/flexibility and communication

To measure family cohesion, a self-report scale that was originally developed as part of the Family Adaptability and Cohesion Evaluation Scale (FACES) in the Circumplex Model of Marital and Family Systems (Olson, 2010) and later validated and adapted to the local contexts by Wakgari and Belay (2021) was used. The scale has three sub-constructs: one balanced (i.e., "balanced cohesion") and two unbalanced (i.e., "enmeshed "and "disengaged". The Family Cohesion Scale has a total of 19 items, i.e., 7 items for "enmeshed," 7 items for "balanced cohesion," and 5 items for "disengaged" dimensions (Wakgari and Belay, 2021). Concerning the psychometric features of these scales, Wakgari and Belay (2021) found that the alpha reliability was 0.841 for "enmeshed," 0.923 for "balanced cohesion," and 0.934 for the "disengaged" one.

In measuring family adaptability, the self-report scale that was developed as part of FACES-IV in the Circumplex Model of Marital and Family System (Olson *et al.*, 1979) and later validated and adopted to the local contexts by Wakgari and Belay (2021) was used. The scale has also three sub-constructs: one balanced (i.e., balanced flexibility/adaptability) and two unbalanced (i.e., "chaotic" and "rigid") sub-scales. The family flexibility scale also has a total of 19 items, i.e., 7 items for "chaotic",7 items for "balanced flexibility" and 5 items for the "rigid" (Wakgari and Belay, 2021). Regarding the psychometric features of the scales, Alpha reliability was examined to be 0.95 for the "chaotic," 0.918 for the "balanced flexibility," and 0.665 for the "rigid" scale (Wakgari and Belay, 2021).

Family communication was measured by the Family Communication Scale which was originally developed as part of FACES-IV of the Circumplex Model of Marital and Family

Systems as a validation scale by Olson *et al.* (2007) with 10 items. Its initial alpha reliability was 0.93. However, the newly validated FCS had an alpha reliability of 0.97 (Wakgari and Belay, 2021).

Data analysis

For the analysis, first, descriptive statistics (mean and standard deviations) were used to determine the portion of families that fall into different family characteristic variables and to identify the pattern and nature of family cohesion, adaptability and communication. Descriptive statistics were employed to address the research question that says, "What was the nature or patterns of family functioning mainly family cohesion, adaptability, and communication in the study contexts?". Secondly, Pearson's correlation was used to compute whether there were statistically significant relationships between family characteristic variables and family cohesion, adaptability, and communication to address the question stated as "What kinds of relationships were there between family characteristic variables and patterns of family functioning, i.e., cohesion, adaptability and communication?". Lastly, as the research design was cross-sectional, a one-way ANOVA was believed to be appropriate to determine whether there were statistically significant differences in family cohesion and adaptability as a function of family characteristic variables. Therefore, because all the family characteristic variables treated in the study had more than two levels and because there was a need to test several outcome variables at a time, MANOVA along with follow-up univariate ANOVA was computed to address the research question stated as "Was there a statistically significant difference in patterns of family functioning, i.e., family cohesion, adaptability, and communication as the function of family characteristic variables mainly family structure, family's relative economic status, and family sizes?". Conducting separate ANOVA for each dependent variable may result in the loss of important information regarding any relationship between the variables. Hence, by including all dependent variables in MANOVA in the same analysis, we can determine further

relationships between several variables at a time (Fields, 2013). In this case, since we have three independent variables (i.e., family size, SES, and structure) and three dependent variables (i.e., family cohesion, adaptability and communication), it was believed that MANOVA along with follow-up ANOVA is appropriate. Generally, all the statistical analysis were carried out with SPSS-25.

Ethical considerations

Ethical concerns in research are something that addresses the required standards of professional conduct in research works that are under the control of the researcher (Neuman, 2007). With this understanding, different ethical issues were considered throughout this study. Thus, obtaining informed consent, administering the questionnaire at times that were convenient to the respondents, respecting confidentiality and participants' rights to privacy, and enshrining anonymity were few among many ethics.

Results

Personal and family characteristic variables

Descriptive statistics show that the age range of the respondents was 15-20, with a mean age of 17.5. In terms of gender, while girls account for 51%, boys account for about 49%. When it comes to family structure, most of the respondents were from nuclear families (n = 122, 63.5%). This proportion was followed by those adolescents from extended families (n = 52, 27.1%) and those from single-parent families (n = 18, 9.4%) appearing last. Regarding the relative economic status, most of the respondents were reported to be from families with a medium economic level (n = 112, 58.3%), followed by those from lower economic levels (n = 60, 31.3%). And only a few (n = 20, 10.4%) of them were from families with higher economic status. Regarding family size, there were families with a minimum of three to those with a maximum of eight members.

Nature and patterns of family functioning (i.e., cohesion, adaptability and communication)

Table 1 as follows presents descriptive statistics showing the mean, standard deviation, and percentile scores on the cohesion, adaptability, and communication.

As observed in Table 1, in the cohesion dimension a higher proportion of families fall into enmeshed (40.1%), followed by disengaged (33.9%), and balanced cohesion (26.0%). It was also observed that the mean score on cohesion which was 62.96 fall in the percentile range of 25 to 50 implying that the families had a generally moderate level of family cohesion. This interpretation was given based on Olson's (2010) guideline presented in the Family Adaptability and Cohesion Evaluation Scale manual, whereby a percentile rank for the cohesion dimension that falls between 36 and 65 represents a connected (moderately cohesive) family, while the one that falls between 65 and 85 represents a well-cohesive family.

In adaptability dimension, although majority of the families fall into the rigid dimension followed by balanced flexibility, it was generally determined that the mean score (M = 60.69) and the percentile rank show that the families fall into a moderately flexible level. The mean score for communication (M = 32.32) falls in the 50th percentile rank implying that the families had a good (moderately high) level of communication.

Table 1: Descriptive statistics showing the nature of family cohesion, adaptability/flexibility and communication

Dimensions		Descriptive statistics					Percentile and corresponding scores						
		N (%)	Min.	Max.	Mean	Std. Deviation	5	10	25	50	75	90	95
Cohesion	Disengaged	65(33.9)	43.00	51.00	46.446	1.750							
	Enmeshed	77(40.1)	67.00	78.00	72.052	2.175							
	Balanced	50(26.0)	68.00	75.00	70.440	1.579							
	Total	192(100)	43.00	78.00	62.963	12.013	45.00	45.00	47.25	70.00	72.00	74.00	75.00
Adaptability/ Flexibility	Rigid	83(43.2)	41.00	72.00	50.156	7.873							
	Chaotic	54(28.1)	65.00	74.00	70.074	2.036							
	Balanced	55(28.6)	44.00	73.00	67.381	6.355							
	Total	192(100)	41.00	74.00	60.692	11.188	44.00	45.00	47.25	68.00	70.00	71.00	72.00
Communication	Comm.	192(100)	23.00	47.00	32.322	6.115	24.00	25.00	28.00	31.00	36.75	42.00	44.00

Correlation between family characteristic variables and family cohesion, adaptability and communication

The following correlation shows the degree and direction of relationships that existed between family characteristic variables and family cohesion, adaptability and communication.

Table 2. Correlation matrix showing the relationships between family characteristic variables and family cohesion, adaptability and communication

	FS	FSTR	FEcon	FCoh	FFLX	FCOM
Family Size (FS)	1					
Family Structure (FSTR)	-0.253**	1				
Family Econ Status (FEcon)	-0.292**	0.064	1			
Family Cohesion (FCoh)	-0.279**	0.322**	0.176*	1		
Family adaptability (FFLX)	-0.258**	0.276**	0.132	0.789**	1	
Family Communication (FCOM)	-0.406**	0.286**	0.127	0.703**	0.587**	1

Table 2 shows that there were significant negative correlations between family characteristics pertaining to size and cohesion, adaptability and communication ($p<0.01$) implying that the larger the family size the lower the cohesion, adaptability and communication would be. However, family characteristics variable pertinent to structure had statistically positive correlation with cohesion, adaptability and communication ($p<0.01$). Concerning the relationships that SES had with the patterns of family functioning mixed results were observed. Thus, while family characteristic variable pertaining to SES had significant positive correlation with cohesion ($r=0.176$, $p<0.05$), it showed positive but not significant relations with adaptability and communication.

Patterns of family functioning in families with different characteristics

In this sub-section, different statistical analyses were used to determine whether the patterns of family functioning differ by family characteristic variables (size, structure, and relative economic status). Hence, whether there were variations in cohesion, adaptability and communication aspects of functioning across family structure, economic status and size were checked using MANOVA coupled by follow-up univariate ANOVA.

Patterns of family functioning (cohesion, adaptability and communication) across family structure

The study used preliminary test statistic on variations in cohesion, adaptability and communications across family structure. Then, ANOVA and MANOVA were employed to examine differences across family structure. As shown in Table 3, the preliminary test statistics in MANOVA showed that there were variations on the composite of the three dependent variables in association to the independent variable.

Table 3. Preliminary test on variations in patterns of family functioning across family structure

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	0.964	1656.259[b]	3.000	187.000	0.000
	Wilks' Lambda	0.036	1656.259[b]	3.000	187.000	0.000
	Hotelling's Trace	26.571	1656.259[b]	3.000	187.000	0.000
	Roy's Largest Root	26.571	1656.259[b]	3.000	187.000	0.000
Family structure	Pillai's Trace	0.119	3.952	6.000	376.000	0.001
	Wilks' Lambda	0.881	4.058[b]	6.000	374.000	0.001
	Hotelling's Trace	0.134	4.163	6.000	372.000	0.000
	Roy's Largest Root	0.133	8.340[c]	3.000	188.000	0.000

Thus, Table 3 indicates that all the possible test statistics were significant (Pillai's Trace F (6, 376) =3.952, $p<0.01$; Wilks' Lambda F (6, 374) =4.058, $p<0.01$; Hotelling's Trace F (6, 372)=4.163, $p<0.01$; and Roy's Largest Root F (3, 188) =8.340, $p<0.01$), indicating that the individual independent variables should be subjected to follow-up univariate ANOVA presented below.

Table 4. Tests of between-subject effects of family structure on family cohesion, adaptability and communication

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	Cohesion	402522.499	1	402522.499	2930.13	.000	.939
	Flexibility	377725.047	1	377725.047	3139.629	.000	.943
	Comm.	105050.325	1	105050.325	3077.904	.000	.942
Family structure	Cohesion	1603.206	2	801.603	5.835	.003	.058
	Flexibility	1172.502	2	586.251	4.87	.009	.049
	Comm.	693.319	2	346.660	10.157	.000	.097
Error	Cohesion	25963.538	189	137.373			
	Flexibility	22738.368	189	120.309			
	Comm.	6450.660	189	34.130			
Total	Cohesion	788733.000	192				
	Flexibility	731163.000	192				
	Comm.	207740.000	192				
Corrected Total	Cohesion	27566.745	191				
	Flexibility	23910.870	191				
	Comm.	7143.979	191				

Note: R Squared =0 .105 (Adjusted R Squared = 0.096); R Squared =0 .078 (Adjusted R Squared = 0.068); R Squared = 0.097 (Adjusted R Squared = .087)

There were significant variations in cohesion (F $(2,189) = 5.835$, P<0.01, $\eta^2 = 0.058$), flexibility (F $(2,189) = 4.87$, p<0.01, $\eta^2 = 0.049$), and communication (F $(2,189) = 10.157$, p<0.01, $\eta^2 = 0.097$) across family structure. Proportion of multivariate variance of dependent variables (η^2) related to structure were 5.8%, 4.9%, and 9.7% whereby communication and cohesion took precedence (See Table 4). Positive communication, cohesion, and flexibility were features of nuclear families.

Table 5. Post-hoc test of multiple mean comparisons on the role of family structure on family cohesion, adaptability and communication

Dep. Variable	(I) Family structure.	(J) Family structure.	Mean Diff. (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Cohesion	Single	Extended	-1.52	3.20	.883	-9.09	6.05
		Nuclear	-7.07*	2.96	.037	-14.06	-.08
	Extended	Single	1.52	3.20	.883	-6.05	9.09
		Nuclear	-5.55*	1.94	.013	-10.13	-.97
	Nuclear	Single	7.07*	2.96	.047	.085	14.06
		Extended	5.55*	1.94	.013	.97	10.14
Adaptability /Flexibility	Single	Extended	-.82	2.99	.960	-7.91	6.26
		Nuclear	-5.72	2.77	.100	-12.26	.82
	Extended	Single	.82	2.99	.960	-6.26	7.91
		Nuclear	-4.90*	1.82	.021	-9.19	-.61
	Nuclear	Single	5.72	2.77	.100	-.82	12.26
		Extended	4.91*	1.82	.021	.61	9.19
Comm.	Single	Extended	-.05	1.59	.999	-3.82	3.7
		Nuclear	-3.98*	1.47	.021	-7.45	-.49
	Extended	Single	.05	1.59	.999	-3.73	3.82
		Nuclear	-3.94*	.97	.000	-6.2	-1.65
	Nuclear	Single	3.98*	1.47	.021	.49	7.47
		Extended	3.94*	.97	.000	1.65	6.22

With Table 5 it was observed through a post-hoc test of multiple mean comparisons that, in cohesion dimension, when nuclear families were compared to single-parent homes and extended families, the mean differences were positive and statistically significant (p<0.05). When single-parent families were compared to nuclear, the difference was negative and statistically significant (P<0.05) implying that better cohesion was associated more with nuclear structure followed by extended and single-parent homes. In flexibility dimension, when a single-parent family was compared to an extended family, the mean difference was negative but not statistically significant (P > 0.05). When compared to the nuclear family, the difference was also negative and not significant (P > 0.05). But when nuclear families were compared to single-parent and extended families, the mean differences were positive in both cases implying that nuclear families had a higher mean score in flexibility, whereas extended families or single-parent homes did not. Also in communication, when

nuclear families were compared to single-parent and extended, the differences were positive and significant (p<0.05) that positive communication characterizes nuclear families than it does for the remaining ones.

Patterns of family functioning (cohesion, adaptability/flexibility and communication) across the family's economic status

To determine patterns of family functioning: cohesion, adaptability and communication, preliminary test statistics (MANOVA) were computed as shown in Table 6.

Table 6: Preliminary test statistics (MANOVA) on variations in patterns of family functioning across family's economic status

	Effect	Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.965	1717.864[b]	3.000	187.000	0.000
	Wilks' Lambda	.035	1717.864[b]	3.000	187.000	0.000
	Hotelling's Trace	27.559	1717.864[b]	3.000	187.000	0.000
	Roy's Largest Root	27.559	1717.864[b]	3.000	187.000	0.000
Economic status	Pillai's Trace	.055	1.770	6.000	376.000	0.104
	Wilks' Lambda	.945	1.783[b]	6.000	374.000	0.101
	Hotelling's Trace	.058	1.796	6.000	372.000	0.099
	Roy's Largest Root	.056	3.523[c]	3.000	188.000	0.016

It was observed from the preliminary analysis of MANOVA that a family's economic status had no significant impacts on dimensions of family functioning with no significant F-ratio on the possible test statistics including Pillai's Trace (F (6, 376) =1.770, p = 0.104), Wilks' Lambda (F (6, 374) =1.783, p = 0.101), and Hotelling's Trace (F (6.372) =1.796, p = 0.099) (see Table 6). This implies that there were no differences in the composite of the dependent variables related to economic status indicating that there was no need to perform a follow-up univariate ANOVA. Despite this, computing a follow-up ANOVA was necessary to have a picture of the actual trends in variation of dependent variable across the independent variable. Hence, the follow-up univariate ANOVA drawn out of MANOVA has been presented in Table 7 as follows.

Table 7. Tests of between-subject effects (i.e., of family economic status on family cohesion, flexibility, and communications)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	Family cohesion	461975.600	1	461975.600	3186.435	.000	.944
	Family flexibility	428476.544	1	428476.544	3409.021	.000	.947
	Family comm.	116912.316	1	116912.316	3265.849	.000	.945
Family economic status	Family cohesion	165.154	2	82.577	.570	.567	.006
	Family flexibility	155.645	2	77.823	.619	.539	.007
	Family comm.	378.072	2	189.036	5.281	.006	.053
Error	Family cohesion	27401.590	189	144.982			
	Family flexibility	23755.224	189	125.689			
	Family comm.	6765.907	189	35.798			
Total	Family cohesion	788733.000	192				
	Family flexibility	731163.000	192				
	Family comm.	207740.000	192				
Corrected Total	Family cohesion	27566.745	191				
	Family flexibility	23910.870	191				
	Family comm.	7143.979	191				

Note: a. R Squared = .021 (Adjusted R Squared = .010), b. R Squared = .014 (Adjusted R Squared = .003), c. R Squared = .053 (Adjusted R Squared = .043)

So, Table 7 above shows that while there were no statistically significant variations in family cohesion ($F_{(2,189)}$ =0.57, p=0.567, η^2=0.006) and flexibility ($F_{(2,189)}$ =0.619, p=0.539, η^2=0.007) as the function of family's economic status, significant differences in communication were observed as the function of family's economic status ($F_{(2,189)}$ =5.281, p<0.05, η^2=0.053). The proportion of multivariate variance (η^2) of family cohesion, flexibility, and communication that were associated with the family's economic status were 0.6%, 0.7%, and 5.3% respectively.

It was generally observed, however, that higher mean scores in cohesion, flexibility, and communication were observed in families with medium economic status than they were in families with lower or higher economic status

Family functioning patterns (cohesion, adaptability and communication) across family size

The follow-up univariate ANOVA was drawn to present whether there were significant variations in cohesion, flexibility, and communication across family size. See MANOVA showing effect of family size on cohesion, flexibility, and communication as follows:

MANOVA in Table 8 shows that family size had significant impacts on all dimensions of family functioning with a significant F-ratio on all the possible test statistics (Pillai's Trace $F_{(12,561)}$ = 5.69, p<0.01; Wilks' Lambda $F_{(12,489)}$ = 6.37, p<0.01; Hotelling's Trace $F_{(12,551)}$ = 7.00, p<0.01; and Roy's Largest Root $F_{(4, 187)}$ = 20.29, p<0.01). The result generally showed that there were differences in the composite of the dependent variables related to family size. This result led the individual dependent variables to be subjected to follow-up univariate ANOVA to assess whether the dependent variables: cohesion, flexibility, and communication showed similar trends in their variations across family size

Table 8: Preliminary test statistics (MANOVA) on variations in patterns of family functioning across family size

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.975	2432.805[b]	3.000	185.000	.000
	Wilks' Lambda	.025	2432.805[b]	3.000	185.000	.000
	Hotelling's Trace	39.451	2432.805[b]	3.000	185.000	.000
	Roy's Largest Root	39.451	2432.805[b]	3.000	185.000	.000
Family size	Pillai's Trace	.326	5.693	12.000	561.000	.000
	Wilks' Lambda	.681	6.371	12.000	489.755	.000
	Hotelling's Trace	.458	7.004	12.000	551.000	.000
	Roy's Largest Root	.434	20.299[c]	4.000	187.000	.000

Table 9. Tests of between-subject effects of family size on cohesion, flexibility, and communications

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	Cohesion	511891.977	1	511891.977	3643.158	.000	.951
	Flexibility	483998.411	1	483998.411	4034.960	.000	.956
	Comm.	132935.336	1	132935.336	4920.385	.000	.963
Family size	Cohesion	1291.793	4	322.948	2.998	.041	.047
	Flexibility	1479.989	4	369.997	3.085	.017	.062
	Comm.	2091.750	4	522.938	19.356	.000	.293
Error	Cohesion	26274.952	187	140.508			
	Flexibility	22430.881	187	119.951			
	Comm.	5052.229	187	27.017			
Total	Cohesion	788733.000	192				
	Flexibility	731163.000	192				
	Comm.	207740.000	192				
Corrected Total	Cohesion	27566.745	191				
	Flexibility	23910.870	191				
	Comm.	7143.979	191				

Note: a. R Squared = .199 (Adjusted R Squared = .182), b. R Squared = .174 (Adjusted R Squared = .156), c. R Squared = .293 (Adjusted R Squared = .278)

The follow-up univariate ANOVAs shown in Table 9 indicated that all the dependent variables were significantly different for families with different sizes: $F_{(4,187)} = 2.99$, $P<0.05$, $\eta2=0.047$; $F_{(4, 187)} = 3.08$, $p < 0.05$, $\eta2 =0.174$; and $F_{(4, 187)} = 19.356$, $p<0.01$, $\eta2= 0.293$, respectively. The multivariate eta-squared (η^2) values showed that the proportion of multivariate variance of family cohesion, flexibility, and communication that were associated with family size was 4.7%, 6.2%, and 29.3% respectively whereby communication took precedence followed by cohesion and adaptability. This implies that family size is an important determinant of the functionality of a family in different dimensions.

Discussions

It is generally believed that family functioning is all about how a family functions, communicates and interacts in a goal-directed and dynamic manner (Garst *et al.*, 2013). For this reason, as suggested by Wakgari *et al.* (2023) it has long been believed that family functioning, including the nature of cohesion and communication, has paramount importance in many respects. Hence, the writers believe that to achieve a family's wellbeing, researchers should shift their attention to dealing with the family characteristics and functioning: cohesion, adaptability and communication. For this reason, it has been recognized that healthy family functioning: cohesion, adaptability and communication varies across several factors. Among those factors that determine the health of the family's functionality, this study emphasized on family characteristic variables pertaining to structure, size and relative economic status. The study therefore had a goal of determining whether there were significant variations in family functioning: cohesion, adaptability and communication across family characteristic variables.

To this end, it was observed that in all patterns of family functioning, families had a moderate level of functionality. The mean scores in cohesion, flexibility, and communication fall in percentile ranks that show a moderate level of functionality in almost all aspects. This interpretation was given based on a guideline (Olson, 2011).

The study showed that while family characteristic variables pertaining to size had a reverse relationship with cohesion, adaptability and communication, family's economic status showed a mixed result. Relationships among the major variables of the study were also examined. Hence, all the patterns of family functioning had significantly positive relationships with each other implying that the more cohesive a family was the more flexible it would be and the more positive communication it had. Of course, positive communication plays a mainstay role in bringing about a cohesive-flexible home environment (Olson, 2011). The study showed that there were variations in the composite of patterns of family functioning in association with family structures. There were significant variations in family cohesion, adaptability, and communication as a function of family structure. Thus, family structure plays a prominent role in cohesion and communication. It was generally determined that high family cohesion, positive communication, and a higher level of flexibility were the features of nuclear families than they were for single-parent and extended families in Mettu. It can be concluded that this finding goes in line with other empirical evidence that nuclear families are associated with relatively healthy functioning mainly in terms of cohesion and communication than single parents or extended families (Bello *et al.*, 2017).

It has also been confirmed in the relevant literature that there are variations in family functioning across family structures, favoring nuclear over non-nuclear families (Villarreal-Zegarra and Paz-Jesus, 2017). It was observed, for example, in an empirical study that nuclear families had higher mean scores on family functioning like cohesion compared to single-parent families whose mean score on this functioning pattern was relatively lower (Bello et al., 2017). So family structure influences functionality of a family (Dai and Wang, 2015).

Regarding the roles of economic status, while no substantial differences in cohesion and flexibility were observed, differences were observed in communication whereby better communication was associated with medium economic status than it was for the lower and higher ones implying that while SES had no significant role in cohesion and flexibility, it showed significant effects on family communication. Nevertheless, it was observed that families with a medium economic level had a better level of functionality in all aspects. Meaning, those families whose economic status was medium had relatively healthier kinds of cohesion, flexibility, and communication relative to those families whose economic levels were reported to be lower or higher.

In line with this, a study conducted by Wakgari and Belay (2021) revealed that there were significant differences in scores on healthy dimensions of cohesion and flexibility (i.e., balanced cohesion and flexibility) and family communication across families' relative economic status favoring medium economic status over lower or higher ones. On the other hand, a study conducted by Booysen et al. (2021) revealed that poor or unhealthy family function was associated with lower economic status. So, tracing that there is a need for further empirical examinations to explain the nature of association that exists between patterns of family functioning and the family's relative economic status, Wakgari and Belay (2021) enlightened that while the healthy or functional aspects of cohesion and adaptability were associated with optimum economic status, the unhealthy or dysfunctional ones characterized families with low or high SES. These authors justify that this happens just because families with lower economic status have lots of worries and stresses that spoil the functionality of the family. On the other hand, families with high economic levels might have quite different kinds of factors like spending time and effort on other matters and businesses at the expense of family time that deterring functionality of the family. The scholars therefore pointed out that while the economic stresses seem to have ruined cohesiveness and adaptability in families with low economic status, it can be assumed that priorities might have been given to other issues than they did to the family issues in families with high economic status affecting the functionality of the family. The other assumption can be the fact that those families who fall into the medium economic status and whose children label their families as medium ones may be government employees who are educated. As a result, these families have better cohesion, flexibility, and positive communication than the rest portion of the community.

As far as patterns of family functioning across family size were concerned, it was observed that family size had substantial roles in regulating the functionality of a family. Thus, it was recognized that there were differences in the composite of patterns of family functioning related to family size implying that patterns of family functioning, i.e., cohesion, adaptability, and communication were significantly different for families with different numbers of members. More importantly, the impact of family size on family communication was much more substantial.

Limitations of the study

This study had various limitations, for example, data was collected from adolescents in that they filled out the questionnaire representing their families. Although they are mature enough to report the family characteristic variables accurately, their perceived responses on family functioning may not be accurate as such. There was also a challenge like reluctance and lack of interest among the respondents. Finally, though there are many factors associated with family functioning, this study was limited to selected variables; hence, a comprehensive family studies that include some more factors must be designed by future researchers.

Conclusions

Evidence reveals that family characteristic variables such as family structure, size, and economic status are some of the within-family-level variables affecting functionality of family. Here, it was observed that family characteristics pertinent to structure and size had substantial impacts on cohesiveness,

flexibility, and communication in that they had strong association with nuclear family arrangements than single-parent homes. On the other hand, dysfunctional patterns of functionality were associated with single-parent and extended families. Regarding a family's economic status, health functionality was more associated with a medium economic status than with a lower or higher economic status. While economic stress that results in the dilution of resources affects the functionality of a family in the case of families with lower economic status, it was assumed that priorities might be given to various issues than family issues affecting the health of the family in families with higher economic status.

It was determined that family size was an important determinant for the functionality of a family. Above all, the impact of family characteristic variables on family communication surpasses the impacts they had on cohesion and flexibility. This conclusively implies that nuclear family structure, optimum economic status, and reasonable family size promote positive family communication that further improves cohesiveness and flexibility.

On the other hand, it must be noted that with the transformation of social values and with the changing technology, these family characteristic variables become varied thus affecting the functionality of the family. For example, there have been variations in family structure and economic situations in the last few decades. For this reason, there are more single-parent homes today than ever before. Economic situations have also put families under stress. Nevertheless, there has been a dearth of studies dealing with family characteristic variables and the impacts they have on family functioning in Ethiopia. Moreover, there has been a dearth of family support programs leaving big implications for policies and strategies, research, and family interventions.

Recommendations

Today many factors determine the functionality of a family as understood by this and other studies. Family characteristic variables are some of the factors determining the health of a family's functionality in terms of cohesion, adaptability and communication. On the other hand, it must be noted that these family characteristic variables become highly varied thus affecting the state of functionality of the family. For example, there have been variations in family structure and economic situations in the last few decades. There are more single-parent homes today than ever before. The economic situation has also put many families under stress. Therefore, to build a healthy family, efforts must be made to deal with the governing factors like family characteristic variables from the sides of professionals and relevant bodies. Responsible bodies should mainstream the family issues in their project plans in one way or the other. Evidence also reveals that family characteristic variables pertinent to family size is one of the within-family-level variables affecting family cohesion, adaptability, and communication tracing that managing family size needs to be reconsidered via different means among family planners, and family policy makers. On the other hand, family cohesion, adaptability and communication not only determine the wellbeing of the family but also have further impacts on the individual family members, relevantly children and adolescents. Thus, practitioners must move with the understanding that the goal of family-related intervention is the wellbeing of the family members relevantly children and adolescents. Moreover, there has been a dearth of studies dealing with family characteristic variables and their impacts on family functioning that future researchers should shift their attention towards these areas in Ethiopia. There has also been a dearth of family support programs in our context leaving big implications to family therapy. Finally, as this study has some alerting parts for policymakers, family policy makers should re-examine the existing documents and make efforts for their effective implementations.

target school communities, directors, vice directors and some teachers. Finally, friends and families who directly or indirectly made various supports deserve wholehearted thanks.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

No funding was available for this study.

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