

**THE ROLES OF PARENT INVOLVEMENT IN THE ACADEMIC
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Abstract

The major purpose of this study was to examine the relationship between three dimensions of parental involvement (to be called PI hereafter) and students' academic achievement in the specific context of Gondar town. The study employed a quantitative method where 196 School children were asked 16 questions about their parent's level of involvement in matters related to their schooling. Seven questions assessed parents' involvement levels in their children's education at home, and five questions assessed parents' involvement levels with their children's education at school. Their academic achievement was measured by report card grades. The analysis was limited to the bivariate relations among three categories of PI measures (Child-parent communication, Home supervision, and School contact and participation) students' academic achievement as well as between selected demographic characteristics of children and of their families and measured levels of PI. Statistical tests were conducted to examine the relationships between each demographic variable to the three dimensions of PI and the relationships between each dimension of PI to students' academic achievement. Results show that family demographic variables were significantly associated with levels of PI, and all the three dimensions of PI in turn were found to be significantly associated with students' academic achievement. Child-parent communication was found to have the strongest positive association with students' academic achievement followed by School contact and participation.

Keywords: Academic achievements, Parent involvement, Gondar town.

Introduction

It is now generally agreed that school, family, and community partnerships are necessary to improve children's chances for success in school. Family

income and parental education are two determinates of child wellbeing rooted in a long tradition of sociological and economic research.

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These resources have been titled human capital and financial capital respectively. James Coleman (1988) suggested a third type of capital that may have equally important effects on child wellbeing, specifically educational achievement. He called such capital as social capital that is defined as a resource inhering in the relations between and among actors.

Coleman (1988) suggested a broader theoretical perspective within which to view the effects of family and other relationships of child wellbeing. He suggested that a connectedness between a child, her family, friends, community, and school could translate into higher academic achievement. This connectedness, a product of social relationships and social involvement, generates social capital. Social capital (the benefits of interactions among people) increases when well-designed partnerships enable families, students, and others in the community to interact in productive ways.

It is an established theory that the way families manage their children's schooling have a major impact on achievement. This was made possible when parents are actively involved, that is when they knew more about their children's progress in school, had more contact with the school and teachers, steered their children toward higher-level courses. Coleman extended the concept of social capital even further by asserting that it serves as a mechanism to transmit the effects of family human capital from parents to children.

Parents with high levels of human capital but low levels of interaction with their children (a source of social capital within families) have fewer opportunities to transmit their human capital to their child than families who have high levels of interaction between parent and their children. This is because human capital is transferred, at least in part, through interaction. Thus, in Coleman's conception, the transmission of human capital from parents to children is contingent upon the level of social capital available within the family.

Social capital may be invested in ways that help students learn, strengthen families, improve schools, and enrich communities. To understand the positive effects of family-school collaboration, Epstein developed a new perspective to show that families, schools, and communities have a common

mission around children's learning and development (Epstein, 1987). This view recognized that home, school, and community act as overlapping spheres of influence on children.

Social capital could be represented by a host of variables so diverse in character that it will be very open for misunderstandings and misinterpretations unless one limits the concept within a certain scope. Among the various ways by which social capital is represented, the writer of this research prefers to limit the essence of the concept to refer to dimensions related to PI in the education of their children. Parent involvement is an important aspect of the interaction between the home and school environments that leads to increased academic performance. Parent involvement has been conceptualized in several ways in the literature. These frameworks have included educational activities parents engage in at home and at school (Epstein, 1990, 1996; Grolnick & Slowiaczek, 1994), the frequency with which parents engage in these academic activities, and the attitudes parents have towards their child's school and education (Kohl, Lengua, & McMahon, 2000; Rimm-Kaufman, Pianta, Cox, & Bradley, 2003).

The Center on Family, School, and Community Partnerships at Johns Hopkins University, have developed a useful framework of six types of parent involvement. Epstein (1990, 1996) proposed six types of parent involvement, mainly focusing on the collaboration between the home and school environments. These six types are the most widely recognized and cited in the literature (Hoover-Dempsey & Sandler, 1995). It shows how parent involvement is frequently broken down and defined. Many researchers used some variation of this framework. Some researchers condensed this list into parent involvement at home and at school, using definitions like engaging in learning activities at home, including helping with reading skills and checking homework, supervising children and monitoring how they spend their time out of school, talking about school and what children are learning, attending school events, going to parent-teacher conferences, and meeting with teachers, and volunteering in the classroom or school (Jeynes, 2003).

According to Craft (2003), while parent involvement in general has been found to be related

to increased academic performance, the specific mechanisms through which parent involvement exerts its influence on a child's academic performance are not yet fully understood. In addition, it is not clear as to the nature and magnitude of its influence across different contexts. For instance, the writer of this research has never come across a study that documented the issues under discussion in Ethiopian schools. Much of the research conducted so far focused on the impact of family backgrounds such as socio-economic status on students' career aspirations and academic achievements. This situation intrigued the researcher to study the topic further.

Research methods, materials and procedures

Study Design

This quantitative study employed a correlation design to determine the association between the dimensions of PI and academic achievement by taking in to account the differences in parent and/or child characteristics that predict involvement as well as to examine the relationship between levels of PI and a host of parental characteristics (size of household, parental education level, Parental occupation, and family type) and a characteristic of the students-their sex.

Data Sources

Primary data were collected from student questionnaire. The participants completed one-time survey pertaining to their own and their respective parent's demographic characteristics as well as their parent's levels of involvement both at home and at school contexts. Secondary data were obtained from records of students' most recent grades for determining their academic achievement.

Study Participants

The participants consisted of 8th grade students attending elementary schools in the town of Gondar.

Sampling techniques

A two stages stratified random sampling was employed to determine the samples to be included in this study. There are 31 full-cycle public primary schools in Gondar town. Based on the distance of the schools from the centre of the town and from residential areas, the researcher categorized these

schools in to four groups: centre and residential (10 schools), centre non-residential (7 schools), out-skirts residential (8 schools), and out-skirts non-residential (6 schools). From each of the four categories, one school was selected at random. From each school, a complete list of all grade eight students was obtained. 50 (25 girls) students were selected from each school at random. The total sample size was 200 (105 boys and 95 girls) among which four boys didn't complete the survey as required. This makes the final sample size to be 196 (101 boys and 95 girls).

Data collection methods

Whereas students' academic achievement scores were obtained through document analysis of school records, student questionnaire was the sole instrument of data collection. The tool has three sections. The first section requires the respondents to provide information related to their demographic characteristics of interest (age and gender) and their family characteristics (family type, size of household, parental occupation and educational level). The second section deals with levels of parental involvement in their children's schooling. Respondents were asked to rate their parent's level of involvement on three dimensions of PI; School Contact and Participation, Parent-child Communication and Home supervision.

The second section of the Student Questionnaire includes 16 items presented under two sub-sections. The first sub-section has seven items representing one dimension of PI- Contact and Participation. The items included activities of PI at school such as attending school events, volunteering at the school, coming to school to watch them perform, talking to their teacher at school, knowing their teachers, contacting the school, and being contacted by the school. The second sub-section has seven items pertaining to parent involvement at home. Again, home related PI activities were divided in to two each representing the two other dimensions of PI. Thus, the "Communication" aspect of PI was represented by five items covering issues of showing interest in home/school work, checking homework, helping with the homework, finding someone to help with homework, and discussing school progress. Likewise the "Supervision" aspect of PI was represented by four items on such issues as limiting the amount of time the student watches television

or plays games, and make home surroundings conducive to studying. Students reported the extent of their parents' involvement both at home and at school on a four point scale from 0 = Never to 3 = Often.

Since PI is represented in this study by three dimensions and since each of the three dimensions were represented by varying number of items in the survey, there was a need to create composite measures from the seven items pertaining to "Contact and Participation", four items pertaining to "Supervision" and five items pertaining to "Communication".

All survey items were originally written in English by the researcher and then translated into Amharic; a back translation was obtained in English, which was checked by two language experts (one Amharic and the other English) for accuracy.

Data Analysis

The data gathered through the questionnaire and from school records were entered into the SPSS software for quantitative data analysis. With the view of examining internal reliability of the scale items for the three dimensions of PI, Cronbach's alpha scores were calculated for the subscales used in this particular study. That is, a composite reflecting "Communication" was created by combining the five z-scored items, $\alpha = .70$. In the same way, the Cronbach's alpha for the seven items on the "Contact and Participation" subscale and the other four items of the "Home-Supervision" subscale were $\alpha = .91$ and $.86$ respectively indicating adequate internal consistency in both of the subscales intended to measure levels of PI.

The data were then analysed using appropriate statistical techniques including descriptive and inferential statistics. The descriptive aspect of the statistics involved bivariate analysis. That is, Pearson Product correlations between family demographic characteristics and levels of PI were computed. Similarly, the correlations between the PI indicators, both at home and at school, and student's academic achievement were computed to determine the degree of relationship among the groups of variables involved.

In addition, inferential statistical tests were computed with specific applications. Analysis of Variance (ANOVA) was used to examine the predictive values of the measured parent involvement variables on academic achievement and to identify that dimension of PI that has the strongest effect on academic achievement. Moreover, independent sample t-tests were computed to analyse group differences in levels of PI based on the range of parent and child related demographic variables (e.g., differences in levels of PI across varying family types, parental education levels, parental occupation etc.). Likewise, t-tests were computed to evaluate group differences in academic achievement between students whose parents are highly involved in their schooling and students whose parents are poorly involved in their schooling.

Ethical Considerations

The study was conducted in a way that meets ethical standards. First, the researcher clearly communicated the purpose of the study to all participants. The researcher then informed the participants that (1) participation is fully based on their willingness, (2) the data would be used only for the purpose of the study, and (3) information would be used under anonymity (that is, without the name of the participants). All research participants were informed about their rights not to participate in the study. Overall, consent forms were signed between the researcher and every one of the research participant.

Results and discussions

As reiterated, the major purpose of this study was to examine the relationship between three dimensions of PI and students' academic achievement in the specific context of Gondar town. The researcher examined bivariate relations among the three categories of PI measures, and students' academic achievement as well as between selected demographic characteristics of children and of their families and measured levels of PI. Statistical tests were conducted to examine the relationships between each demographic variable to the three parental involvement indicators and the relationships between each dimension of PI to students' academic achievement. Therefore, the results obtained from the data analysis were the focus in the remainder of this article.

Descriptive Findings

Preliminary analyses were conducted to examine the demographic characteristics of family type, education level, employment status, and occupation of parents as well as sex of the child as well as the

mean values of the variables of interest (levels of PI and academic achievement) across the various demographic characteristics considered. This is shown on Table-1 below.

Table No. 01: Demographic Characteristics and Mean PI and Academic Achievement values

Demographic Variables		Frequency	Percent	Mean Academic Achievement	Composite PI
Family Type	S	29	14.8	60.97	1.45
	D	157	80.1	76.24	1.97
	N	10	5.1	56.00	1.04
	Total	196	100.0		
Sex of the Student	M	101	51.5	80.5248	2.2203
	F	95	48.5	64.8842	1.4471
	Total	196	100.0		
Employment status	YES	177	90.3	73.84	1.89
	NO	19	9.7	64.58	1.40
	Total	196	100.0		
Education Level of parents	illiterate	19	9.7	63.58	1.64
	primary	20	10.2	73.00	1.69
	secondary	4	20.4	61.25	1.34
	tertiary	117	59.7	78.45	2.08
	Total	196	100.0		
Occupation of parent	Teacher	50	25.5	87.20	2.38
	other civ. servant	60	30.6	68.17	1.64
	Merchant	18	9.2	72.33	1.78
	Other	68	34.7	66.84	1.66

As can be shown on Table 1 above, while 101 (51.5%) of the respondents were boys the remaining 95 (48.5%) were girls. On a 100 points scale, boys were found to have performed better (80.5) than girls (64.8). Similarly, considering the overall composite PI score of parents, it was shown that parents appear to have favoured boys. Level of PI was measured on a scale of three units and it was found that while boy's parents were rated to have a score of 2.22, girls' parents were rated as being lower than boy's parents.

It was also shown that the great majority 157 (80.1%) of respondents live in a family type labelled as dual where both the father and the mother live together. While an insignificant

number of children 10 (5.1%) reported to have been living with neither their father nor their mother, the remaining 29 (14.8%) children live with either their mother or their father; they belong to a single parent family type. As to the measures of academic achievement, it was shown that children who lives with both parents have the highest academic achievement score (76.24) compared to the other categories: single parent children scored 60.97 and children who live with neither of their parents scored the least among the groups (56.00). Although it requires other statistical tests to make conclusive remarks (this issue shall be returned to in a later section), the above description seems to be a good indicator of the role of parents involvement in the academic

achievement of children. Similar patterns were also observed regarding the measured level of composite PI across the three categories of family types. That is, when measured on a three points scale, dual parent family types were rated to have the largest PI scale (1.97) whereas neither parent family types were rated to have the least measure of PI (1.04). (See Table 1)

It was also shown on Table 1 that overwhelmingly large proportion 177 (90.3%) of the sample respondents came from a family where their parents are employed. In an attempt to further look in to the type of occupations in which the parents of each child respondent is engaged, children were requested to select the occupation of their parents among teacher, other civil servant, merchant, and others. The findings were up to the initial expectations of the researcher. It was initially expected that public schools serve children from all types of families when it comes to occupations, but civil servants and teachers whose economic conditions are relatively less well-off will want to send their children to public schools where there are no tuition fees like the case of private schools. The result shows this same assumption and civil servants 60 (30.6%), and teachers 50(25.5%) together account for more than half of the student population. Conversely, families who are economically strong, as is the case of merchants in our context, prefer to send their children to private schools. That is why the findings indicated that only 18 (9.2%) of the respondents have merchant parents. When children were compared based on their mean scores of academic achievement and their composite PI scores, children whose parents are employed have better scores (73.84 and 1.89 respectively) than those with unemployed parents

(64.58 and 1.40 respectively). As shown on Table 1 above, the most striking pattern drawn from the data is that children whose parents are teachers reported to have the highest mean values on both academic achievement scale ($M=87.20$) and PI scale (2.38).

Respondents were also asked to label the highest level of education attained by either of their parents. As can be seen on Table 1 above, it was indicated that only 19 (9.7%) of the children reported to have parents who have never been to schools. Not so surprisingly, parents of more than half 117 (59.7%) of the respondents were reported to have attained tertiary level of education, a level of education beyond secondary school. In addition, it was found that the level of education attained by parents have some bearings on the levels of academic achievement and measured PI values. As shown on the same table, although the pattern of relationship was not linear, the highest mean value of academic achievement was scored by children whose parents attained the highest level of education in the scale- tertiary level. This pattern was also repeated in the PI scores of children whose parents have attained varying levels of education; parents with tertiary level of education have the highest PI values (2.08) followed by primary levels (1.69).

Relationship between Demographic characteristics and PI dimensions

The descriptive statistics presented above determined what each variable looks like on its own. In the sections to follow, attempts will be made to test the relationships between the variables involved to investigate if the variables are systematically related.

Table No. 02: Sex of the child with PI dimensions

	Sex of the Student	N	Mean	Std. Deviation	Std. Error Mean	T	Sig
comcom	M	101	2.3465	.53433	.05317	11.799	.000
	F	95	1.4800	.49111	.05039		
supercom	M	101	2.4035	.33349	.03318	13.320	.000
	F	95	1.5737	.52323	.05368		
contacom	M	101	1.9109	.40795	.04059	11.354	.000
	F	95	1.2877	.35683	.03661		

95% Confidence Interval of the Difference as shown in Table 2, there is an association between sex of the child and Home Supervision ($r=-.663$); Contact and Participation ($r=.623$); and Communication ($r=-.649^{**}$). An independent t-test was also computed to evaluate the presence of significant difference between boys and girls in the levels of PI as measured by the three major dimensions. Results revealed that, with 95% confidence interval for differences, parental "Communication" level is higher for boys ($t=11.799$, $p<.001$) than for girls. Similarly, to evaluate differences between boys and girls in their parents' levels of involvement as measured by "Home-Supervision", an independent t-test was conducted with significant results ($t=13.320$, $p<.01$) implying that boys' parents ($M=2.4035$) had higher scores on this dimension of PI than girls' parents ($M=1.5737$).

A similar test regarding "Contact and Participation" revealed a significant difference between the two groups of parents with significant results ($t=11.354$, $p<.001$) implying that boys' parents ($M=1.9109$) had higher scores on this dimension of PI than girls' parents ($M=1.2877$).

The above results indicated that there is a significant difference between boys and girls in the levels of PI as measured by all of the three major dimensions of PI. In a traditional society like ours, parents' expectations from and aspirations for their children and their commitment and willingness to get involved and support their schooling may depend on whether the child is male or female. This finding is consistent with previous findings such as the one conducted by Brinton & Lee (2001) where Japanese mothers were found to be more in favor of boys when it comes to their investments of time, energy and financial resources on issues related to schooling. Several previous studies found that parents were more involved with the education of their sons (Carter and Wojtkiewicz, 2000; Miller, 1988). The findings suggest that parents do not perceive education to be more important for their female children.

However, this finding may also imply that such parental involvement could be less important for girls than for boys when it comes to its contribution for academic achievement. According to Duckworth & Seligman (2006), owing to their mastery oriented character and better levels of self-discipline, girls often excel boys in terms of grades. This in no ways indicate that girls benefit just as much as boys from forms of PI.

Overall, parents' involvement is consistently higher for boys than for girls in all contexts. However, the level of involvement varies across the three dimensions of PI. That is, parents are more involved in the supervision dimension of PI than in the other two dimensions- communication and contact and participation. On one level, the fact that parents give more emphasis to the supervision dimension of PI implies that parents appear to be more concerned about controlling and disciplining their children than helping them improve their academic achievements. Had it been otherwise, parents would have been more involved in the communication and contact and participation aspects of their involvements. This is so mainly because previous research had established the theory that these two dimensions are the strongest predictors of academic achievement (Pomerantez, 2007).

On another level, such gender difference in the levels of PI may be attributed to the social norms that tend to favour boys. Because of differences in social norms across cultures, the level of PI in the education of boys and girls is not expected to be uniform across varying social and cultural contexts.

That is why research finding on this issue do not agree. For instance this finding is not in agreement with a study result conducted in Ghana which asserted that parents are more involved at home than at school for female children and more involved at school than at home for male children (Macro, 2010). The researcher further noted that such difference may be a consequence of social norms that long favoured active participation in school for boys and at-home schooling for girls.

Table No. 03: Family Type and dimensions of PI

		N	Mean	Std. Deviation	F-Value	Sig
Comcom	Neither	10	.8000	.00000	35.38	.000
	Single	29	1.4414	.52476		
	Dual	157	2.0879	.60270		
	Total	196	1.9265	.67171		
supercom	Neither	10	1.5000	.00000	12.540	.000
	Single	29	1.6293	.77235		
	Dual	157	2.1019	.54151		
	Total	196	2.0013	.60155		
contacom	Neither	10	.8333	.00000	30.055	.000
	Single	29	1.2701	.32248		
	Dual	157	1.7208	.46272		
	Total	196	1.6088	.49418		

95% confidence level

Since a disproportionately small number of children in this study live with their mother or their father (10 out of 196 children), these group of children were not considered separately in a comparison of means. Therefore, children were split into two groups based on family type: Single parent family type (29 children) and Dual parent family type (157 children).

As shown in Table 3, an independent t-test was conducted to evaluate if parent involvement differed based upon family type. Regarding "Communication" as a measure of PI, the test was significant indicating that children from a Dual parent family type had higher scores on "Communication" subscale (M =2.0879) than children from Single parent family type (M =1.4414). As shown on the same table, an independent t-test was conducted to evaluate if PI as represented by "Contact and Participation" differed based upon family type. The test was significant indicating that children from a Dual parent family type had higher scores on "Contact and Participation" subscale (M =1.7208) than children from Single parent family type

(M=1.2701). Similarly, an independent t-test was conducted to evaluate if "Home-Supervision" as a measure of PI levels differed based upon family type. As can be seen on Table 3, the test was significant. This indicates that children from a Dual parent family type had higher scores on "Home-Supervision" subscale (M =2.1019) than children from Single parent family type (M=1.6293).

Generally, this finding is consistent with other findings. For instance, Hoover-Dempsey et al., (2005) found that married parents are more likely to be involved in their children's education than single parents. These researchers reported that among the 1,270 single parents, 38.7% assist their children with homework, but 44.8% of the 3,291 married parents provide more direct assistance with homework.

The observed differences in the levels of PI may be attributed to the considerable difference in workloads both at home and outside home in favor of dual parent family types. That is, single headed families do not have the luxury of spending more time on their children's schooling given all family responsibilities are shouldered single handedly.

Table No. 04: Relationship between parental education level and dimensions of PI

		N	Mean	Std. Deviation	Maximum	F-Value	Sig
Comcom	Illiterate	19	1.6737	.51299	2.20	45.739	.000
	Primary	20	1.9000	.10260	2.00		
	Secondary	40	1.1500	.26312	1.40		
	Tertiary	117	2.2376	.61360	3.00		
	Total	196	1.9265	.67171	3.00		
supercom	Illiterate	19	1.8289	.89773	2.75	7.307	.000
	Primary	20	1.7500	.25649	2.00		
	Secondary	40	1.7500	.40032	2.25		
	Tertiary	117	2.1581	.59687	3.00		
	Total	196	2.0013	.60155	3.00		
contacom	Illiterate	19	1.4123	.08550	1.50	35.648	.000
	Primary	20	1.4167	.25649	1.67		
	Secondary	40	1.1250	.34540	1.67		
	Tertiary	117	1.8390	.46006	2.33		
	Total	196	1.6088	.49418	2.33		

95% Confidence Interval for Mean

To evaluate differences between educated and not educated parents in their levels of involvement, ANOVA was conducted. As shown on Table 4, there was a significant positive correlation between Parental education level and all of the three dimensions of PI: "Communication, "Contact and Participation", and Home-Supervision with significant results. The implication is that children reported that parents with the highest level of educational attainment had the highest scores on all dimensions of PI: Communication (M =2.2376); Home-Supervision (M= 2.1581); and Contact and Participation(M=1.8390); than illiterate parents: Communication (M =1.6737); Contact and Participation(M= 1.4123); and Home-Supervision (M= 1.8289). The above findings are in agreement with other findings. For instance it was found out that parents with a tertiary level education were found to communicate to their children about what they learn in school more often(M =1.6737) than those who have completed secondary school (1.1500); completed primary school (M=1.9000), or have no formal education (M=1.6737). It was

also found that parents with a tertiary level education have higher school contacts and participation in children's school events more regularly (M=1.8390) than those who have completed secondary school (M=1.1250); completed primary school (M= 1.4167), or have no formal education (M= 1.4123). Similarly, parents with a tertiary level education have higher rates of home supervision (M=2.1581) than those who have completed secondary school (M=1.7500); completed primary school (M= 1.7500), or have no formal education (M= 1.8289).

However, unlike previous study findings where there was an important trend in the relationship between parent education level and parent involvement at school, there was no such trend in this study. That is, an increase in parent involvement does not necessarily entail an increase in parent education level. A significant gain in involvement was observed when comparing those parents who did not have any schooling themselves with those attained the highest level of education-tertiary level. In addition, parental level of

education seems to have the strongest relationship with the communication dimension of PI and the weakest relationship with the contact and participation dimension of PI.

In line with the above findings, Lee and Bowen (2006) found that educated parents are more involved in the educational activities of their children particularly at the school than are uneducated parents. However, there are some research suggests that uneducated parents engage in certain aspects of parent involvement as frequently as their uneducated counterparts. In this study also it was found out that parents who were more highly educated were more involved in children's activities at home (communication) , compared to their levels of involvements in school contexts (contact and participation).

According to Yamamoto (2006) mothers with a college degree believed that it was important to "cultivate" a child's skills, whereas less-educated mothers believed in letting children play and develop in a natural manner.

The same may be true of children growing up in poor, uneducated families. There is also evidence that parents' involvement plays a particularly large role in the achievement of children with relatively uneducated parents.

In another study, the comparison of parents' educational level and involvement in their children's education shows that parents are more engaged when their own educational level exceeds their children's current level of education. However, parents less educated than their children are more engaged within their children's school environment than parents who have a level of education equivalent to or greater than their children's. Less educated parents are more involved perhaps because many would like to see their children attain higher education than they did. Similarly, parents more educated than their children are more engaged at home than those whose education is equivalent to or lower than that of their children.

Previous studies documented that less educated parents have several barriers that prevent these parents from participating in school events or communicating with the teachers at school (Simon, 2001). On the other hand, those parents who have higher levels of education are more likely to interact with teachers, volunteer at school, and attend school events because such parents feel more comfortable and affiliated with educators (Lareau, 2003).

Table No. 05: Relationship between Size of House hold and dimensions of PI

	Mean	Std. Deviation	r	Sig
Size of House hold	5.6020	2.04684		
Comcom	1.9265	.67171	.020	.777
Supercom	2.0013	.60155	-.287**	.000
Contacom	1.6088	.49418	-.167*	.020

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

As can be seen on Table 5, the number of children at home is not significantly related to the communication dimension of PI as well as to the extent of parental contact and participation in school activities. This is not consistent with previous findings which asserted that parents with more children would be less likely to get involved

with the education of their children than those with fewer children. Since larger families also require a greater investment of time, parents with more children would have less time to engage in activities at the school site and would be less likely to become involved in day-to-day interactions with the child at home.

Table No. 06: Relationship between Parental employment status and dimensions of PI

	Employment status	N	Mean	Std. Deviation	Std. Error Mean	t	df	sig
Comcom	YES	177	1.9853	.66845	.05024	3.871	194	.000
	NO	19	1.3789	.41039	.09415			
supercom	YES	177	2.0184	.59652	.04484	1.215	194	.226
	NO	19	1.8421	.64124	.14711			
contacom	YES	177	1.6751	.47116	.03541	6.271	194	.000
	NO	19	.9912	.17100	.03923			

As shown on Table 6, parental employment status has a relationship with the levels of parental involvement as represented by all of the three major dimensions. Employed parents are more involved in matters of supervising their children at home ($M=2.0184$) than in communicating to their children about school related activities ($M=1.9853$) and in establishing contacts with the school as well as in participating in school events ($M=1.6751$). The independent t-test result revealed that there was no significant difference between employed and unemployed parents particularly on the issue of supervision. Both types of parents tend to have no significant variations in setting rules at home regarding the amount of time children have to spend watching television, playing and studying. According to some previous findings, parent's employment status was not associated with the level of parental involvement. On the other hand, the type of job parents has seemed to have an impact on their levels of involvement. The obvious finding regarding this was that teachers have the highest levels of PI in all of the three major dimensions: communication (2.6400); Supervision (2.3000); and contact and participation (2.2000). In addition, the ANOVA conducted to measure group differences among the various categories of occupations revealed that the observed differences were all significant. (See Table 7).

Correlations between Academic Achievement and Dimensions of PI

In this section, the relations between indicators of PI and children's academic achievement were examined. Table 8 below depicts these bivariate

correlations between the variables of interest. The relation between the levels of PI across the three dimensions and children's academic achievement scores were examined to determine which variables were significantly related to each other.

As shown in Table 11, there was a significant positive correlation between the "Communication" dimension of PI ($r=.900$, $p<.001$) and children's academic achievement. This result indicated that higher levels of child to parent communication were associated with better scores on school subjects. There was also a significant positive correlation between "Contact and Participation" ($r=.717$, $p<.001$) and the child's academic achievement score. This result indicate that as the level of PI, as measured by the mean of the items on the "Contact and Participation" subscale of the PI scale and as manifested through the frequency of parental contact with and participation in school, increased, the child's academic achievement score, as measured by their grade point averages on all school subjects, increased.

Similarly, there was a significant positive correlations between "Home-Supervision" and the child's academic achievement score ($r = .560$, $p < .001$). This result indicate that as parents became more and more strict with their children on matters of setting rules and limiting time for various activities at home, the child's academic achievement score, as measured by their overall grade point averages on all school subjects, increased.

Table No. 07: Relationship between Parental Occupation and dimensions of PI

		N	Mean	Std. Deviation	Std. Error	F	Sig.
comcom	Teacher	50	2.6400	.15119	.02138	40.727	.000
	other civ.servant	60	1.7000	.50422	.06509		
	Merchant	18	1.6444	.40905	.09641		
	Other	68	1.6765	.72072	.08740		
	Total	196	1.9265	.67171	.04798		
supercom	Teacher	50	2.3000	.29451	.04165	8.844	.000
	other civ.servant	60	1.7917	.57151	.07378		
	Merchant	18	2.2222	.25565	.06026		
	Other	68	1.9081	.74676	.09056		
	Total	196	2.0013	.60155	.04297		
contacom	Teacher	50	2.2000	.12599	.01782	62.666	.000
	other civ.servant	60	1.4167	.28704	.03706		
	Merchant	18	1.4630	.34087	.08034		
	Other	68	1.3824	.49547	.06008		
	Total	196	1.6088	.49418	.03530		

Table No. 08: Correlations between Academic Achievement and dimensions of PI

Parental Involvement	Academic Achievement	
	r	Sig.
Communication	r	.900**
	Sig.	.000
	N	196
Supervision	r	.560**
	Sig.	.000
	Sig.	.000
	N	196
Contact and Participation	r	.717**
	Sig.	.000

** Correlation is significant at the 0.01 level (2-tailed).

Based on the findings, parent involvement remains an important multidimensional factor with fairly strong associations to students' academic achievement. The findings from the present study demonstrated that parent involvement was significantly related to increased academic achievement, based on a more general measure of performance. That is, higher parent involvement

was associated with the child's increased academic achievement. This finding further adds to existing research that found an association between parent involvement and a child's academic achievement.

Most empirical studies show children perform better in school when parents are involved (Fantuzzo, McWayne, Perry, & Childs, 2004;

Nyarko&Vorgelegt, 2007; Toper, Keane, Shelton, & Calkins, 2010), but a few show that parental involvement may not always be associated significantly and positively with children's educational performance (Izzo& colleagues, 1999). In the Youth Save Ghana Experiment baseline data, most measures of parental involvement are not associated statistically with high achievement in math and English.

Overall, more parental involvement is not associated significantly with better math performance. Students whose parents make sure homework is done perform slightly worse in math than students whose parents do not. Similarly, children whose parents interact with teachers and school counsellors perform worse in math than those whose parents do not. However this finding was explained from a different perspective. It is possible parents are engaging with school authorities because they are concerned about their children's already poor academic performance.

The Communication variable refers to that dimension of PI that represents home based parental activities and on-going conversations between parents and their children concerning school related activities, programs, near- and long-term school plans, and other academic issues. As was this case for this particular study, this variable frequently yields the strongest positive association with academic achievement. According to McNeal, the only dimension of parental involvement that was associated with improved achievement and reduced problematic behaviour was parent-child discussion.

Previous studies also documented the important roles other variables had on the association between these two variables. In this regard, Pomeramntez (2007) asserted that for a child to have discussions about school with his/her mother is positively associated with academic achievement. But the association between discussing with one's father and academic achievement may depend on and also on whether the child or parent is reporting and on another variable. Furthermore, talking with one's father shows no correlation to academic achievement when data are collapsed across education level of parents, and is negatively related to achievement

for children with large household size (Fan and Chen, 2001).

Parents checking child's homework, has shown a positive association with academic achievement in some studies. For instance, Keith et al. (2001) found that students whose parents were involved in checking their homework showed higher achievement than students whose parents were not involved in checking homework.

Fairly consistent associations between home supervision and academic achievement were found in this study. Home supervision and rules, refers to moderate levels of parental support, and when combined with appropriate monitoring of home-related behaviors (such as television viewing) has shown positive associations with academic achievement. Children of parents who closely monitor their activities spend less time watching television and more time on school-related activities, which in turn shows a positive relationship with academic achievement. More specifically, Baker and Soden (2003) note that high aspirations/ expectations, coupled with an effective parenting style (i.e., moderate levels of parental support and supervision) are positively related to academic achievement. Similarly, Kurdek et al. (2006) examined the relationship between parental supervision (measured via student report) and sixth grade students' academic achievement, where the highest levels of achievement (measured by grade point average) were associated with moderate levels of parental supervision, while worse achievement related to both low and high levels of supervision respectively.

From the findings of this particular study, it was found that contact and participation at the school, which refers to participation in parent-teacher organizations or associations (PTAs), community involvement, volunteer work, and so on, has shown a positive association with academic achievement. This finding is consistent with previous findings. For instance, Adeyemo (2001) examined the effects of different parental involvement dimensions on academic achievement for 250 secondary school students and found that parental involvement in their child's school environment significantly affected students' academic achievement.

Conversely, Izzo et al. (1999) reported that an increase in the parents school activities was associated with worsening achievement and classroom behavior. This result was attributed to the fact that the frequency of behaviors, such as number of parent-teacher contacts, was related to behavior problems in the classroom. Specifically, it was believed that the number of parent-teacher contacts was associated with a child's existing behavior problem, rather than the number of parent-teacher contacts leading children to behave poorly.

Conclusion and recommendations

The major purpose of this study was to examine the relationship between three dimensions of PI and students' academic achievement in the specific context of Gondar town. The researcher examined bivariate relations among the three categories of PI measures, and students' academic achievement as well as between selected demographic characteristics of children and of their families and measured levels of PI. Statistical tests were conducted to examine the relationships between each demographic variable to the three parental involvement indicators and the relationships between each dimension of PI to students' academic achievement.

This study yielded several important findings. It was indicated that there is a significant difference between boys and girls in the levels of PI as measured by all of the three major dimensions of PI. In a traditional society like ours, parents' expectations from and aspirations for their children and their commitment and willingness to get involved and support their schooling may depend on whether the child is male or female. It was also found that children from a dual parent family type had higher scores on all of the three subscales (Communication, Contact and Participation, and Supervision) representing PI than children from Single parent family type. Likewise, there was a significant positive correlation between Parental education level and all of the three dimensions of PI. The implication is that children reported that parents with the highest level of educational attainment had the highest scores on all dimensions of PI. However, the number of children at home is not significantly related to the communication dimension of PI as well as to the extent of parental contact and participation in school activities.

Moreover, employed parents were rated to be more involved in matters of supervising their children at home than in communicating to their children about school related activities and in establishing contacts with the school as well as in participating in school events. On the other hand, the type of job parents has seem to have an impact on their levels of involvement. Particularly, teachers have the highest levels of PI in all of the three major dimensions. Regarding the associations between levels of PI and student's academic achievement the result indicated that higher levels of child to parent communication was associated with better scores on school subjects. There was also a significant positive correlation between Contact and Participation and the child's academic achievement score. This result indicated that as the level of PI, as measured by the mean of the items on the Contact and Participation subscale of the PI scale and as manifested through the frequency of parental contact with and participation in school, increased, the child's academic achievement score, as measured by their grade point averages on all school subjects also increased.

Similarly, there was a significant positive correlation between Home-Supervision and the child's academic achievement score. This result indicate that as parents became more and more strict with their children on matters of setting rules and limiting time for various activities at home, the child's academic achievement score, as measured by their overall grade point averages on all school subjects also increased.

Based on the findings, parent involvement remains to be an important multidimensional factor with fairly strong associations to students' academic achievement. The findings from the present study demonstrated that parent involvement was significantly related to increased academic achievement, based on a more general measure of performance. That is, higher parent involvement was associated with the child's increased academic achievement. This finding further adds to existing research that found an association between parent involvement and a child's academic achievement. Based on the above findings, the following recommendations were forewarded:

- Schools need to find strategies through which they could encourage parents to get more involved to the education of their children both at home and at school settings.

- School based systems such as the Parent Teacher Associations need to be empowered so that it could shift its attention to creating an enabling environment so that all parents (not just PTA members only) are more involved in the day to day function of schools where their children are learning.
- Concerned bodies should make efforts to further investigate reasons for differences in parent involvement and consider ways to encourage parent involvement in school with a special focus on those groups who are not fully involved.

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