

CHAPTER V

CONCLUSION, DISCUSSIONS AND RECOMMENDATIONS

This chapter presents a summary and discussion of the study. Furthermore, it includes recommendations and suggestions for future research.

Conclusion

The conclusion of the research presents the study on factors of parent and family involvement in school and student academic performance in the urban primary schools of Bhutan. The objective of this study was;

1. To identify the factors of parent and family involvement and student academic performance in urban primary schools of Bhutan
2. To study the multiple relationship between six factors of parent and family involvement in school and student academic performance in urban primary schools of Bhutan
3. To construct the best predictive equation to predict student academic performance by using the six factors of parent and family involvement in urban primary schools of Bhutan

The data analysis was operated through SPSS program to study the objective of the study. To identify the factors of parent and family involvement in school, document analysis on the topic was done and six factors of parent and family involvement were identified from Epstein's model, namely, parenting, communication, volunteering, learning at home, decision making and collaboration with community. Then, the Mean (\bar{X}) and Standard Deviation (SD) for parent and family level of agreement on factors of parent and family involvement was analyzed with reference to 5-point rating scale [69].

The Mean (\bar{X}) and Standard Deviation (SD) of the student's academic performance in average percentage for 2013 was analyzed. The Pearson Product Moment Correlation (r) and Enter Method of Multiple Regression analysis was employed to study the multiple relationships between six factors of parent and family involvement and the student's academic performance in school. The Stepwise Method in Multiple Regression was employed to construct the best predictive equation to predict student academic performance.

Findings of the Study

1. To identify the factors of parent and family involvement and student academic performance in urban primary schools of Bhutan

Six factors (parenting, communication, volunteering, learning at home, decision making and collaboration with community) of parent and family involvement developed by Epstein were identified after the literature review. The findings showed that in overall, the respondent's level of agreement on the six factors of parent and family involvement in school was indicated at a high level. It was found that of the six factors of parent and family involvement in school, five factors were shown at high level (parenting (X_1), communication (X_2), learning at home (X_4), decision making (X_5) and collaboration-with-community factor (X_6). However, the respondent's level of agreement on volunteering factor (X_3) was at neutral level. The mean of student academic performance was at 76.29% and S.D at 12.76.

2. To study the multiple relationship between six factors of parent and family involvement in school and student academic performance in urban primary schools of Bhutan.

There were multiple relationships between the six factors of parent and family involvement and student academic performance with multiple correlation coefficient (R) of .270 and multiple coefficient of determination (R^2) of .073 ($p \leq 0.01$), which accounts for 7% variation on student academic performance, however, the variation contributed by all predictive variables was found to be low ($R^2 = .070$). The predictive equation in unstandardized and standardized score can be written as $Y' = 51.428 + 0.10(X_1) + 3.01(X_2) - 2.36(X_3) + 3.91(X_4) - 0.47(X_5) + 1.29(X_6)$ and $Z' = 0.004(Z_1) + 0.16(Z_2) - .15(Z_3) + .18(Z_4) - .03(Z_5) + .09(Z_6)$ respectively.

3. To construct the best predictive equation to predict the student academic performance by using six factors of parent and family involvement in urban primary schools of Bhutan

Stepwise multiple regression analysis produced the statistics to construct the best predictive equation with two best predictors; learning at home (X_4) and communication (X_2) for student academic performance with multiple coefficient of determination (R^2) of .060 ($p \leq 0.01$). Predictive Equation for student academic performance, using unstandardized and standardized score can be written as $Y' = 51.332 + 3.49(X_4) + 2.42(X_2)$ and $Z' = 0.16(Z_4) + 0.13(Z_2)$ respectively.

Discussion

The discussion consists of 1) to identify the factors of parent and family involvement and student academic performance in urban primary schools of Bhutan 2) to study the multiple relationship between six factors of parent and family involvement in school and student academic performance in urban primary schools of Bhutan 3) to construct the best predictive equation to predict the student academic performance by using six factors of parent and family involvement in school

1. To identify the factors of parent and family involvement and student academic performance in urban primary schools of Bhutan

Six factors (parenting, communication, volunteering, learning at home, decision making and collaboration-with-community) of parent and family involvement developed by Epstein was identified after the literature review. In overall, the result showed that the respondent's level of agreement on parent and family involvement factors were at high level. This finding confirms the finding of Gestwicki [37] who points out that when parents intervene in educational programs, it improves children's total learning environment by stimulating changes within key elements of environment, particularly in parental behaviors. Similar conclusion was made by Gestwicki [5] who states that the participation and active involvement of the parent in the school is perceived and appreciated by the child, who can derive from it a sense of security besides seeing it as a model and incentives for his or her own personal growth.

It was found that the respondent's level of agreement on the five factors (parenting (X_1), communication (X_2), learning at home (X_4), decision making (X_5) and collaboration-with-community (X_6) of parent and family involvement in schools at high level. The respondent's level of agreement on volunteering factors (X_3) of parent and family involvement was neutral. The mean of student academic performance was at 76.29% and S.D at 12.76. Kashahu, et al. [64] found that parenting styles and demographic characteristics were associated primarily with the educational level of parents and children's academic achievements are related to parenting styles. Kraft and Dougherty [66] found that "the frequent teacher-family communication immediately increased student engagement as measured by homework completion rates, on-task behavior, and class participation". Similar conclusion was made by McCroskey, et al. [65] who found that high communication apprehension students

were significantly more likely to drop out and attain lower grade point averages compared to low communication apprehension students. Olsen and Fuller [41] came to the similar conclusion that "the most accurate predictor of a student's achievement in school is not income or social status but the extent to which that student's family is able to: create a home environment that encourages learning, express high (but not unrealistic) expectations for their children's achievement and future careers, and become involved in their children's education at school and in the community.

2. To study the multiple relationship between six factors of parent and family involvement in school and student academic performance in urban primary schools of Bhutan.

In overall, the result revealed that there were a little positive relationship ($r=.185$ with $p\leq 0.01$) between six factors of parent and family involvement in school and student academic performance in urban primary schools of Bhutan.

It was found that there were a little positive correlation between three factors (parenting (X_1), communication (X_2) and learning at home (X_4) of parent and family involvement and student academic performance in school at significant level of 0.01. The significant level of 0.05 was found between two factors (decision making (X_5) and collaboration with community (X_6) and student academic performance with little positive correlation. The result supports the findings of Gestwicki [40] who stated that when parents and families gets involved in student learning, the children are benefited in three areas: Increased security in the new environment, increase feeling of self worth, and increased number of helpful responses and appropriate experiences due to adults' sharing of knowledge. Peter [38] stated that the primary task of parents is the socialization of their children to the values held by family, as well as and assisting and monitoring children's development as learners and providing preparation for schooling. Callahan, et al. [62] stated that homework completion and quality increased significantly for the students whose parents are consistently working and involving with their child's school. Marzano [28] stated that "the schools that involve parents and community in their day to day operations have reported lower absenteeism, truancy, and dropout rates".

However, it was found that the relationship between volunteering factor (X_3) and student academic performance was not significant though there was little positive correlation. The reason might be due to certain potential barriers of parent and family involvement in school. Khan [43] pointed out that parents and family's having feeling of inadequacy, failure, and poor self-worth, as well as negative experiences with school affects their involvement in school. He further suggested that "parents with certain cultural backgrounds as well as many low-income parents consider schools as institutionalized authority, hence leaving the responsibility solely to the teachers to educate their children. Furthermore, many parents of cultural minority groups also face language barriers". Such factors might affect the involvement level of parents and families in school. Atkin, et al. [31] highlighted that the families and schools have much to offer each other and yet "there is still plenty of evidence of schools that fail to keep parents informed, of parental anxieties that go unrecognized or of home and school continuing to harbor gross misconception about each other". Similar conclusion was made by Moles [42] he identified five major kinds of barrier; lack of time and other resources, lack of information and training, school organization and practices, family-school differences, and lack of external support for family-School partnerships. Khan [43] stated that barriers to parent and family involvement are associated to themselves only such as associated to family's health problems, economic differences between parents and teachers, and working responsibilities.

The result on multiple correlation using enter-method in multiple regression analysis revealed that predictive factors (Parenting (X_1), communication (X_2), volunteering (X_3), learning at home (X_4), decision making (X_5) and collaboration with community (X_6) contributes 7% ($R^2=.073$) of variation on criterion variable (student academic performance) and the significance between this six predictive factors and criterion variable was found at .01 level. Predictive equation from multiple regression enter method for student academic performance using unstandardized and Standardized score can be written as $Y' = 51.428 + 0.10(X_1) + 3.01(X_2) - 2.36(X_3) + 3.91(X_4) - 0.47(X_5) + 1.29(X_6)$ and $Z' = 0.004(Z_1) + 0.16(Z_2) - .15(Z_3) + .18(Z_4) - .03(Z_5) + .09(Z_6)$. From the predictive equation, it can be concluded that communication (X_2) and learning at home (X_4) exert high positive effect on student academic performance, while volunteering (X_3) and decision making (X_5) exert negative effect on student

academic performance. Epstein emphasizes that not all parental involvement leads to improve student achievement; the selected results (produced by each of six types) that should help correct the misperception that any practice involves families will raise children's achievement test scores. She further notes that while certain practices are likely to influence students' test scores, others are designed to produce outcomes related to attitude and behaviors. Epstein notes that many of the possible secondary or indirect effects of a particular parental involvement practice are not yet understood. For example, parent involvement in type three (Volunteering) or type five (Decision-making) activities may result first in parents' feeling more connected with their children's schools, which may, in turn, lead to other types of involvement that will eventually produce outcomes related to student achievement [49].

In conclusion, the variation contributed by six factors were low (7%, $R^2=.073$). It might be due to other factors that affects the student academic performance in school, as many researchers have stated that student academic performance not only depends on parent and families involvement in school but also on school and home level factors. According to Dantesy [52] complementing environmental and socio-economic factors to produce high academic achievement and performance include good teaching, counseling, good administration, good seating arrangement and good building also affects the academic performance. He further argues that dilapidating buildings, lacking mental stimulating facilities that are characterized with low or no seating arrangement will also be destructive. Li-Grining [55] in her research suggested that the problem starts with the parents and their lack of education and understanding of the needs of children. Reynolds [44] highlighted that parents who are less involved in their children's education tend to be from poorer social classes, impoverished, and suffering from poor physical or mental health". Similar conclusion was made by Cooper and Crosnoe [45] who stated that the "lack of money, time, and energy limit economically disadvantaged parents' involvement in their children's education. Considering all those factors, it can be concluded that many factor contribute towards the academic performance of child in the school.

3. To construct the best predictive equation to predict student academic performance by using six factors of parent and family involvement in urban primary schools of Bhutan

Six factors of parent and family involvement in school was used to construct the best predictive equation to predict student academic performance in urban primary schools of Bhutan. The result indicated that of the six factors of parent and family involvement in school, learning at home (X_4) and communication (X_2) was found be the best predictive factor to predict student academic performance. The percentage of variation was found as follows; learning at home (X_4) accounted for 4.6 % ($R^2.046$) of variation towards student academic performance. Communication (X_2) combined with learning at home (X_4) accounted for 6% of variation towards student academic performance. It can be conclude that when two factors combined, they can contribute better to student academic performance. The rest four factors (Parenting, Volunteering, decision making and collaboration-with-community factor) were excluded, that means this factors were not statistically significant to predict the student academic performance in the school. The 6 % of the variation in student academic performance was accounted by the learning at home (X_4) and communication factor (X_2) taken together ($R^2.060$) with standard error estimated at 12.403. The F-value was 12.914 of the analysis which was significant at 0.01 level. Predictive regression equation for student academic performance, using unstandardized and standardized score can be written as $Y' = 51.332 + 3.49(X_4) + 2.42(X_2)$ and $Z' = 0.16 (Z_4) + 0.13(Z_2)$ respectively. However, it was found that the two factors (learning at home and communication) variation on student academic performance were low ($R^2=.060$). The reason might be due to other factors that affect the student academic performance. Research evidences on what affects the academic performance of the student in the school has revealed that many factors like income of parents, parents educational background, behavior of teacher and school environment affects the academic performance of the child in the school.

Azhar, et al. [51] concluded that the students whose parents are well educated perform better than those students whose parents are less educated. Further he stated that higher the income of family, better would be students' availability of resources and consequently better would be academic achievements. Mushtaq

and Khan [52] found that students' performance is significantly correlated with satisfaction with academic environment and the facilities of library, computer lab and etc. in the institution. Susan and Kinley [56] in their research finding concluded that major chunk of the Bhutanese students come from illiterate family background and parents lack required knowledge and skills to guide and support their children's educational programs beyond the classroom situation. Their research also found out that there are low parent volunteerism and ineffective communication between parents and schools. They highlighted that parent's lack skills, knowledge and competence to visit schools and help in educational programs.

Penny [54] found that parents' marital status actually has effects on pupils' performance. She emphasized that children living with their stepmothers are targets of misdirected emotion and mistreatments while children from stable families tend to perform far better in

Parent and family involvement in Bhutanese schools were seen as one of the most challenging task due to certain factors. The Youth in Bhutan report [9] stated that economic conditions of families and the need to work on farms beside studies are some reasons why children feel de-motivated to study repeat and fail in the end. Dorji [12] states that community with scattered settlement, low literacy rate, followed by poverty has left many Bhutanese parents without proper educational background to provide effective academic support and guidance towards their children's learning and education in the school. Poor parenting education has not only undermined parent's rights towards their children's education but also isolated themselves from many daily activities of the school.

The result from enter method and stepwise method in multiple regression analysis produced different R^2 value; The R^2 value in enter method was .073 (7%) and 0.60 (6%) by stepwise method. From the R^2 value produced, it can be concluded that the variation of predictive variables on criterion variable was high from multiple regression enter method ($R^2=.073$) than stepwise method ($R^2=.060$). The reason might be because in enter method of multiple regression analysis; all of the predictive variables are entered into the analysis at the same time without considering the statistical contribution of independent variables, where as in stepwise method of multiple regression analysis, the predictive variables are entered according to their

statistical contribution in explaining the variance in the criterion variable, the predictive variable which does not contribute to variation in criterion variable is excluded.

Recommendations

The evidence reported in this research study supported the following recommendations:

1. The factor of the parent and family involvement should be used as guidelines for raising awareness and encouraging parents and family's to work together with schools and the schools to involve parents and families in teaching learning activities of children.

2. The schools in Bhutan should involve parents and families in school activities geared toward the development and improvement of child's academic performance in the school.

3. The ministry should develop a Bhutanese model of parent and family involvement in schools focusing more on learning at home and communication factors (refer the sample practices in survey questionnaire measures in Appendix).

Future Research

1. Similar research should be carried in schools including lower secondary, middle secondary and higher secondary schools of rural and urban Bhutan using Path Analysis method to see the direct and indirect affect of six factors of parent and family involvement on student academic performance.

2. Research should be carried out based on parental occupation, socioeconomic status and educational background to improve student learning in schools of Bhutan.