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Effect of Development Interventions and Demographic Factors on Academic Performance of Students

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Abstract: *Thisstudy examined theeffect of 13 development intervention modules and demographic characteristics such as gender, family income and parents' education on academic achievement of school students.The respondents of the study were grade 9, 10 and 11 studentsfrom 4 different schools in the three emirates of UAE:Sharjah, Ajman and Fujairah. Education is a very costly project for the expatriate community in the Middle East. Hence it becomes imperative to analyze and understand the factors affecting the performance of learners so that the desired results are obtained. Moreover, there is a pressing need to bring to the attention of the parents, especially in the gulf region, about the impact of their educational background and income on the performance of their wards. Academic achievement was measured in terms of the average of Summative Assessment Exams of the students in the previous academic years. A structured questionnaire was administered among the sample group. This study found gender to be a strong predictor of academic achievement of students. Father's education and mother's education were found to be potent predictors of academic achievement of students in this study. It was found that family income was not a predictor of academic achievement of students. Students from middle income families were found to have higher academic scores compared to those belonging to lower and higher income groups.Only 3 of the development interventions, namely; Academic Coaching, Memory Techniques and Aptitude testing were found to have significant predictive relationship with academic achievement of students.*

Key Words: *Gender, Family Income, Parents' Education, Academic Performance, Development Interventions.*
JEL Code: I210, I240, I250

I. Introduction

The primary objective of educators all around the world would be to educate their students effectively and proactively, putting all the latest techniques and interventions available to full use so that they may be able to bring about an effective and sustainable improvement in the academic and holistic development of their students. Commendable efforts have been made by the UAE Government in the field of education. The people in charge of educating the future generations should be aware of the main determinants of academic success as well as academic failures. Results of several studies across the world have indicated a significant correlation between academic achievement and demographic characteristics. There is dearth of research on this topic in UAE. Education is a very costly project for the expatriate community in this part of the world. Hence it becomes imperative to analyze and understand the factors affecting the performance of learners so that the desired results are obtained.

Authors and researchers have pointed out several factors which effect the academic achievement of students in high school- some of them attributable to the schools, some of them to the home environment and few others to the students' disposition, motivation, aptitude etc. Students' achievement at the secondary level is influenced by a variety of factors including nature of the school, motivation of the students, family background, teacher student ratio, the quality of the teaching in schools, the teachers teaching styles, parenting styles, family size, race/ethnicity, extent of parental involvement, occupational status of parents etc. If both the groups: parents and teachers work hand in hand in developing and administering meaningful interventions within and outside schools such as mentoring, academic counseling, goal setting, reading and writing skill enhancement workshops, the desired results would be obtained.

To achieve this objective it is necessary for the educators to understand better about the factors that may contribute to the academic success of students. Moreover, there is a pressing need to bring to the attention of the parents, especially in the gulf region, about the impact of their educational background and income on the performance of their wards. The objectives of this study were to define and examine the four determinants of academic performance of students from 9th to 11th grade in CBSE schools- parents' education, family income, gender of the student and development interventions.This study examines the effect of 13 development interventions on the academic performance of students. An understanding of the current most relevant factors effecting a ward's academic achievement would pave way for qualitative reforms in this field

II. Literature Review

Seow, Poh-Sun and Pan, Gary and Tay, Joanne Siok Wan(2014) in their study titled 'Revisiting the Determinants of Students' Performance' found that mathematical aptitude, gender and prior academic performance were significantly associated with academic performance.Al-Mously, N., Salem, R. & Al-Hamdan, N. (2013) examined the impact of gender and English language as medium of instruction on the academic performance of two student cohorts in Saudi Arabia. The study concluded that female students outperformed their male counterparts in both the cohorts.Nasir (2012) found that academic achievement of university students showed significant positive correlation with age, urban locality, parents' education, household income and gender.Ming Tsui (2005) observed that although family income may make a difference in academic achievement of students, it cannot be considered the prime deciding factoras its effect pales in comparison to family's strong reverence for education, high parental expectations and presence of well trained and dedicated teachers. The same thoughts were echoed by Javaid Kaiser (1994) in his study of the role of family configuration, income, and gender in the academic achievement of young self-care children as it was found that family income was not a significant factor statistically in explaining differences in academic achievement among the sample students.

Many researchers have noted that the parental education is a good predictor of academic achievement of the child. Juma, Lucy Stella Atieno; Simatwa, Enose M. W.; Ayodo, T. M .O (2012) in their study concluded that family income, family size, birth order and Parents' level of education have a significant impact on the academic achievement of girls in the district of Kisumu.Lucy et al(2012) found that high level of parental education of the family, high income and conducive home environment positively influences academic achievement of children.Sunitha.N.H. (2009) in their study on academic learning environment of students concluded that father's education and occupation as well as mother's education and occupation were positively related to the academic learning environment of the children. The correlations provide evidence that parent education and income are moderate to strong predictors of achievement outcomes explains Davis Kean (2005).

Literature pertaining to the development interventions and their effects on academic achievement of students were several. The study by Colin Young (2011) conducted on an after school intervention program for academic success concluded that the intervention program was successful in improving the performance of under achieving students. Morisano et al (2010) observed that goal setting intervention program was a quick, effective and economical intervention program for undergraduate students facing academic difficulty. Study conducted by ErhanDelen (2011) in Turkey highlighted the significance of ICT. It was found that student's exposure to ICT and technology helped to explain math and science achievement gaps between individuals.Akbiyik, C. &Simsek, N. (2009) found that those who learned with accelerated learning in classroom environment and computer environment performed better than those who underwent expository teaching. Corengia et al (2011) in their study titled, "Predicting academic performance and attrition in undergraduates" administered differential aptitude tests among students in Argentina. Results showed that "Differential aptitude testing can predict academic performance". The study observed that the DAT scores facilitated designing personalized strategies for the students for mentoring so as to promote academic performance and to increase retention rates. "The effect of career development interventions on academic performance" by Dykeman et al (2003) points out that "there is no statistically predictive relationship between participation in these interventions and academic self-efficacy and academic motivation of these students". However research literature submitted by Hughes and Karp(2004) revealed that students who undergo career guidance and academic counseling interventions have benefited a great deal from such programs. Such students were found to have increased academic outcomes. However, the researchers also pointed out that most of these interventions are short term and low dosage programs and hence lasting effects of these programs are not clear. In a study conducted by Winn& Armstrong (2006) it was concluded that taking and completing student life skills courses does have a positive impact on academic success of students.

Di Pherna (2008) emphases the need for interventions in his work titled "Academic Enablers: Assessment and Intervention Considerations" he points out that if a student's academic enablers demands intervention, various development strategies need to be adopted.."The Impact of Stress Management Training on Academic Achievement" examined by Mahdi et al (2013) concluded that stress management trainings can lead to improvement in academic achievement of students.Brigman& Campbell (2003) evaluated a study on "the impact of school-counselor led interventions on the academic achievement of students and their school success behavior". The intervention program that was evaluated was "SSS-student Success Skills" which was a group counseling and classroom guidance model. The improvement on math was shown by 82% of students and 61% students showed improvement in reading after the program.

Latest researches shed light on the significance of goal setting in academic performance. In a study by Clarke, Oxana D(2013) the impact of goal setting and selfregulated learning by students on their academic performance was examined. "Goal setting improves student performance and enhances achievement by allocating attention, activating effort, increasing persistence and motivation which in turn leads to the

development of self-regulation skills". Russel& Phelps (2009) found that academic achievement of students' increases significantly as a result of mastery based goal setting interventions. Joseph et al (2011) in "a meta-analysis of 213 school based universal social and emotional learning programs (SEL)" found that SEL programs enhanced skills, attitudes, positive social behaviors and resulted in fewer conduct problems and emotional distress. Academic performance was found to be significantly improved.

At a symposium in New York City on "Memory and Mind: Improving Memory and Achievement in the Classroom," Tracy Alloway (2011) pointed out that working memory predicts academic achievement far more robustly than IQ. Alloway cited a study showing that "an eight-week training program of specially designed computer games increased working memory, IQ, and learning outcomes significantly more than standard educational support".

Based on the significance attached to these development interventions in improving academic performance in many of the earlier research literature, 13 of them were chosen under development interventions in this study.

Objectives Of The Study

1) To define and examine the four determinants of academic performance of students from 9th to 11th grade in CBSE schools- parents' education, family income, gender of the student and development interventions.
2) To determine the effect of parents' education on the academic performance of their ward. This includes father's and mother's educational qualification, whether they have received formal education.
3) To determine the effect of annual family income on the student's academic performance-which shall decide the family's ability to arrange adequate learning resources/materials, private tuitions, coaching classes, personality development trainings etc.
4) To determine the effect of gender of the student on the academic achievement of students.
5) To determine the effect of development interventions on the academic performance of students-Workshops and trainings mentoring, academic counseling initiated by the school as well as those attended privately.
6) To measure the academic performance of students in terms of the average of their summative assessments scores of the previous academic year.
7) To establish a relationship between the academic performance of students and the 4 selected determinants.

Hypothesis

Following null hypotheses have been tested:
i. There is no effect of gender-male/female on the academic achievement of 9th, 10th and 11th grade students in the CBSE schools in Sharjah, Ajman and Fujairah.
ii. There is no effect of parents' education on the academic achievement of 9th, 10th and 11th grade students in the CBSE schools in Sharjah, Ajman and Fujairah.
iii. There is no effect of family income on the academic achievement of 9th, 10th and 11th grade students in the CBSE schools in Sharjah, Ajman and Fujairah.
iv. There is no effect of development interventions on the academic achievement of 9th, 10th and 11th grade students in the CBSE schools in Sharjah, Ajman and Fujairah.

Method And Procedure

Respondents were students of 9th, 10th and 11th grade in the CBSE schools in Ajman, Fujairah and Sharjah. An attempt has been made to include an equal number of male (318) and female (313) respondents in the sample. Convenience sampling was followed. A structured questionnaire was administered among the sample group. The scales used are Dichotomous Scale (yes/no), Category scale (Multiple items). For the purpose of qualitative analysis, respondents were asked to mention briefly how they found each development intervention useful on attending workshops for the same. School academic records were used as a source of the past academic year to collect the academic scores of the sample group. Analyses and interpretation of data has been carried out with the help of t-test, correlation, regression, percentage, average, ANOVA. SPSS 20 software has been used. One way ANOVA test was done to ascertain the difference in means within and between groups. Correlation analysis has been used to find out the relationship between various factors which is taken as independent variable and academic achievement which is taken to be dependent variable. Multiple linear regression has been conducted to come up with a predictive model of independent variables for academic achievement.

III. Data Analysis Findings And Interpretations

1) The t-test was used to compare the academic performance of male and female students in CBSE schools in Sharjah, Ajman and Fujairah.
Table 1: t-test

Gender	Df	Mean	SD	t	p-value
Male	317	86.92	27.803	-6.813	0.00
Female	312	101.38	25.435		
Total	629	94.09	27.599		

Means in Table 1 suggest that there is a difference between academic performance of male and female students. It shows us that the females have higher Academic scores than males.

2) The effect of Parent's education on Student's academic performance was explored through multiple comparisons by applying ANOVA using SPSS 20.

a) Summary of the ANOVA results showing comparison of means of academic performance of students in terms of their Father's education.

Table 2: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	75794.754	6	12632.459	19.556	.000
Within Groups	401798.048	622	645.978		
Total	477592.801	628			

There was a statistically significant difference between groups as determined by one-way ANOVA (F(6,622) = 19.556, p = .0.000).

b) Summary of the ANOVA results of comparison of means of academic performance of students in terms of their Mother's education.

Table 3: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	79246.367	6	13207.728	20.557	.000
Within Groups	400265.019	623	642.480		
Total	479511.385	629			

There was a statistically significant difference between groups as determined by one-way ANOVA (F(6,623) = 20.557, p = .0.000)

3) The effect of Monthly family income on Student's academic was explored through multiple comparisons by applying ANOVA using SPSS 20.

Table 4: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8388.453	4	2097.113	2.784	.026
Within Groups	471482.995	626	753.168		
Total	479871.448	630			

There was a statistically significant difference between groups as determined by one-way ANOVA (F (4, 626) = 2.784, p = .0.026).

As the size of the family plays an important role in deciding the income per head of the family members, family size has also been taken into consideration.

The effect of Family size on Student's academic performance was explored through multiple comparisons by applying ANOVA using SPSS 20.

Table 5: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	24426.211	3	8142.070	11.209	.000
Within Groups	455445.237	627	726.388		
Total	479871.448	630			

There was a statistically significant difference between groups as determined by one-way ANOVA (F (3,627) = 11.209, p = .0.000).

4) The effect of Development Interventions on Student's academic performance was explored through multiple comparisons by applying ANOVA using SPSS 20.

There was no statistically significant difference between groups which attended career counseling and those who did not as determined by one-way ANOVA (F (1,629) = 1.488, p = .0.223).

There was statistically significant difference between groups which attended mentoring and those who did not as determined by one-way ANOVA (F(1,629) 4.090, p = .0.044).

Statistically significant difference was observed between groups which attended academic coaching and those who did not as determined by one-way ANOVA (F(1,629) = 27.179, p = .0.000).

There was no statistically significant difference between groups which attended goal setting as determined by one-way ANOVA (F(1,629) = 1.963, p = .0.162).

There was no statistically significant difference between groups which attended reading skill workshops and those who did not as determined by one-way ANOVA (F(1,629) = 0.572, p = .0.450).

There was statistically significant difference between groups which attended writing skills workshops and those who did not as determined by one-way ANOVA (F(1,629) = 4.285, p = .0.039).

There was statistically significant difference between groups which attended memory techniques workshops and those who did not as determined by one-way ANOVA (F (1,629) = 5.091, p = .0.024).

There was no statistically significant difference between groups which attended motivational workshops and those who did not as determined by one-way ANOVA (F(1,629) = 0.638, p = .0.425).

There was no statistically significant difference between groups which attended aptitude testing and those who did not as determined by one-way ANOVA (F(1,629) = 1.682, p = .0.195).

There was no statistically significant difference between groups which attended learning styles testing and those who did not as determined by one-way ANOVA (F(1,629) = 0.988, p = .0.321).

There was no statistically significant difference between groups which attended stress management workshops and those who did not as determined by one-way ANOVA (F(1,629) = .358, p = .0.550).

There was statistically significant difference between groups as determined by one-way ANOVA (F(1,629) = 7.916, p = .0.005) between groups which attended time management workshops and those who did not.

There was no statistically significant difference between groups which attended ICT workshops and those who did not as determined by one-way ANOVA (F(1,629) = 0.016, p = .0.899).

Therefore from the one –way ANOVA test run for the data we conclude that there is an effect of development interventions on the academic achievement of students in terms of attending workshops for mentoring, Academic Coaching, Writing Skills, Memory Techniques, while there is no effect of development interventions on the academic achievement of students with respect to attending workshops for the rest of the development interventions.

Correlation

To determine whether a relationship exists between the dependent variable and each of the independent variables, correlation test between the dependent and independent variables was conducted.

Table 6:

		Academic score
Gender	Pearson Correlation	.262**
	Sig. (2-tailed)	.000
	N	631
Monthly family income	Pearson Correlation	.101*
	Sig. (2-tailed)	.011
	N	631
Family size	Pearson Correlation	-.203**
	Sig. (2-tailed)	.000
	N	631
Father's education	Pearson Correlation	.347**
	Sig. (2-tailed)	.000
	N	629
Mother's education	Pearson Correlation	.359**
	Sig. (2-tailed)	.000
	N	630
CC Merged	Pearson Correlation	.049
	Sig. (2-tailed)	.223
	N	631
MM merged	Pearson Correlation	-.080*
	Sig. (2-tailed)	.044

	N	631
	Pearson Correlation	-.204**
AC merged	Sig. (2-tailed)	.000
	N	631
	Pearson Correlation	.056
GS merged	Sig. (2-tailed)	.162
	N	631
	Pearson Correlation	.030
RS merged	Sig. (2-tailed)	.450
	N	631
	Pearson Correlation	.082*
WS merged	Sig. (2-tailed)	.039
	N	631
	Pearson Correlation	.090*
MT merged	Sig. (2-tailed)	.024
	N	631
	Pearson Correlation	.032
MW merged	Sig. (2-tailed)	.425
	N	631
	Pearson Correlation	-.052
AT merged	Sig. (2-tailed)	.195
	N	631
	Pearson Correlation	.040
LST merged	Sig. (2-tailed)	.321
	N	631
	Pearson Correlation	.024
SM merged	Sig. (2-tailed)	.550
	N	631
	Pearson Correlation	.111**
TM merged	Sig. (2-tailed)	.005
	N	631
	Pearson Correlation	.005
ICT merged	Sig. (2-tailed)	.899
	N	631

**Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that there exist statistically significant weak positive relationships between Academic Score and Gender (r = 0.263, p = 0.000), Monthly Family Income(r = 0.101, p = 0.011), Parents' education (Father (r = 0.347, p = 0.000) and Mother (r = 0.359, p = 0.000)).Statistically significant weak negative correlation is found between academic score and family size. This indicates that larger the number of members in the family, poorer the academic performance of the student.
Development Interventions: Statistically significant weak negative relationships were found between Academic score and mentoring (r = -0.080, p = 0.044), Academic Coaching(r=-.204, p=.000).
Statistically significant weak positive correlation was found between Academic score and writing skills workshops(r=.082, p=.039), memory techniques workshops(r=.090, p=.024) and time management workshops(r=0.111, p=.005).

Multiple Linear Regression
The correlation between every pair of independent variables in the model was checked.
No statistically significant correlation in excess of 0.8 between the different pairs of independent variables was observed. Hence this study proceeded with Multiple Linear Regression analysis.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518a	.269	.247	23.937

Predictors: (Constant), ICT merged, SM merged, Family size, Monthly family income, MM merged, MW merged, RS merged, AC merged, MT merged, GS merged, Gender, AT merged, CC Merged, Father's education, TM merged, LST merged, WS merged, Mother's education
The results in Table 7 indicated that with all the predictor variables entered into the regression model at once, there was a significant prediction 26.9% of students' academic performance (R = .518; R2 = .269). This showed that all the predictor variables- gender, family income, family size, parents' education and development interventions accounted for 26.9% of the variance in students' academic achievement.

Table 8: Coefficients.a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	73.919	5.531		13.364	.000
	Gender	13.470	2.049	.244	6.574	.000
	Monthly family income	.065	.874	.003	.074	.941
	Family size	-3.964	1.901	-.080	-2.085	.037
	Father's education	3.761	.891	.186	4.222	.000
	Mother's education	3.789	.891	.194	4.250	.000
	CC Merged	.298	2.185	.005	.136	.892
	MM merged	-.033	2.148	-.001	-.015	.988
	AC merged	-11.104	2.207	-.182	-5.032	.000
	GS merged	1.615	2.385	.025	.677	.498
	RS merged	-.860	4.032	-.008	-.213	.831
	WS merged	-.957	2.335	-.017	-.410	.682
	MT merged	6.238	2.782	.087	2.243	.025
	MW merged	.930	2.295	.016	.405	.686
	AT merged	-4.486	2.129	-.081	-2.107	.036
	LST merged	-5.795	3.182	-.074	-1.821	.069
	SM merged	-.619	3.278	-.007	-.189	.850
	TM merged	2.990	2.134	.054	1.401	.162
	ICT merged	3.498	2.315	.056	1.511	.131

a. Dependent Variable: Academic score

The results in Table 8 above revealed that seven out of the predictor variables were good predictors of students' academic performance. The predictor variables- gender(β=13.470,t=6.574,p<.05),father's education(β=3.761,t=4.222,p<.05), mother's education(β=3.789, t=4.250,p<.05) and attendance of academic coachings(β=-11.104,t=-5.032,p<.05) were the most potent of the predictors of academic achievement of the students.

Family size(β=-3.964,t=-2.085,p<.05), attendance of memory techniques workshops(β= 6.238,t=2.243,p<.05), and Aptitude testing(β= -4.486,t=-2.107,p<.05) were next in predicting students' academic achievement. Monthly Family Income, Career Counseling, Mentoring, Goal setting workshops, Reading skills workshops, writing skills workshops, motivational workshops, Learning styles testing, stress management, time management workshops and ICT were found to be not statistically significant predictors of student's academic achievement.

Hence on the basis of the above observations:

-we reject the null hypothesis and accept the alternative hypothesis that there is an effect of gender-male/female on the academic achievement

- the null hypothesis is rejected and the alternative hypothesis that there is an effect of parents' education on the academic achievement is accepted.

- we accept the null hypothesis that there is no effect of Family Income on the academic achievement of students. It was found that there is an effect of family size on academic achievement of the students.

- we reject the null hypothesis and accept the alternative hypothesis that there is an effect of development interventions (Academic Coaching, Memory techniques, Aptitude testing) on academic achievement.

IV. Conclusions And Recommendations

In this study, gender and parents' education was found to be strong predictors of academic performance of students. This echoed the findings by Nasir(2012) that "academic achievement of university students showed significant correlation with gender".Nuthana (2007) revealed that "parents' education was positively and significantly correlated to academic achievement of their children". Educated parents attach

more value and honour to education and this perception may rub off on their wards.Family income is not found to be a predictor of academic performance of students.This could be due to the fact that majority of the Indian families in the Middle East attach high importance and reverence to education making this the top priority in their budgets irrespective of their monthly income level. Understandably, family size was found to have negative predictive significance on academic achievement of students indicating that with increase in number of members in the family there was a fall in the academic achievement of the children. Davis Kean (2005) found that family size does have an influence on parental beliefs and behaviors which in turn has an impact on the child's academic achievement.

Out of the 13 development interventions which were included in the scope of this study, only 3-Academic Coaching, Memory Techniques and Aptitude testing were found to have significant predictive relationship with academic achievement of students. Furthermore attending mentoring, academic coaching, writing, memory techniques and time management workshops were found to have statistically weak relationship with academic achievement. Academic Coaching was found to have no impact on the scholarship examination in the study by Dianna T. Kennya& Gavin Fauncea (2004) who assessed "the effects of out-of-school hours academic coaching on students' academic performance on end-of-year examinations in English, mathematics, and science; student's attainment of academic scholarships and on student's acceptance to Gifted and Talented classes and selective high schools". Memory techniques workshops had statistically significant predictive relationship with student's academic achievement. This finding is in line with the presentation by Trace Alloway (2011) in which she cited that that an eight-week training program of specially designed computer games increased working memory, IQ, and learning outcomes significantly more than standard educational support. Memory techniques such as mneumonics, guided imagery, pegging, musical learning are found to enhance the learning capacity of students who attend such workshops. A negative predictive relationship between aptitude testing and academic achievement has been observed. One main hurdle faced in applying the results of aptitude testing in the Middle East is the fact that stream choosing happens on the basis of merit/academic results of the students in pre board examinations conducted by the schools. Irrespective of the aptitude of the child, stream is allotted purely on the basis of academic performance thereby nullifying the findings of aptitude tests conducted in majority of cases.

V. Limitations Of The Study And Scope For Further Research

This research chose family income as an independent variable. However the researcher feels that taking into account the family size of each student and calculating the family income available per head would shed more light into the effects of income on academic performance. Furthermore, the amount spent on education of the child would be an interesting independent variable to compare with academic performance. This may include the cost incurred for private tuitions, cost of learning materials purchased, conveyance expenses for the purpose of education etc.

The educational qualification of parents is a significant variable on which there is scope for further and detailed research. The kind of schools the parents attended (such as government run schools or private schools), location of the school-urban or rural, the medium of instruction in their schools etc would give insights into the exposure the parents gained during their school years. Those who attended English medium institutions are found to be involved in the students learning process. Furthermore, it would be interesting to look into the effect of parents' education on academic performance when parents and students followed the same educational curriculum. This might influence the parent's ability to assist the child in his learning to a large extent.

Though studies based on the topic of education are several in the university level courses, those at school level are almost absent in the Middle East. As a part of our responsibility to mould a competent future generation, more researches should be carried out in the CBSE schools run by Indian Managements in the Middle East.

There are innumerable factors that may have an effect on the academic achievement of students both inside school and outside schools. Hence further research should be carried out to find out the effects of other relevant factors on academic performance and achievement of the students such as:

-teacher's competence: Female graduates who are in their husband's sponsorship visas are recruited by schools without even formal interviews at times so as to escape the visa processing charges which the school has to incur every year. This definitely has to be examined in detail.

-peer influence. It has been found that school environment also paves way to the peer groups a child would fall into. Such groups play a very powerful role in shaping a student's identity as well his attitude towards achievement (Phelan, Davidson, &Ya, 1998).

-hobbies and interests of the students: whether these hobbies/interests are time consuming and eating into the study hours, causing distractions to the child should be assessed.

-Usage of smart phones and social media

-Cash allowances given to the student

-Parental involvement in child's education which depends to a great extent on the level of education of the parents, occupation as well as parental expectations.
-Parenting styles and its influence on the learning environment at home. An aspect of family environment that plays a role in establishing the identity and instilling achievement motivation in students is the parenting style.

The educators should take it upon themselves to create awareness among parents about the significance of factors such as parent's education and family size on the academic achievement of their children.

In the case of development interventions such as academic coaching, aptitude testing, memory techniques workshop etc, instead of resorting to such trainings as last resort by poor performers in a desperate effort to improve their scores, should be yearlong processes. Attending such workshops once in a life time would not give the desired results. There should be follow up sessions regularly for them to yield benefits. Such interventions would yield results in the long run and student performance should be monitored on a regular basis. It is recommended to measure the student achievement scores before and after attending such workshops in order to establish the effectiveness/ineffectiveness of such workshops.Interventions such as Differential Aptitude Tests if administered at the right time can significantly reduce the dropout rates and poor performances arising out of mismatch of aptitude and aspirations of the students. Students' cognitive profile measured through such aptitude tests are reported to reduce academic failure and consequent dropout, and can be helped to promote career counseling and mentoring strategies.Development interventions and training workshops have emerged as mushrooms in the Middle East due to the demand and acceptability for them in this part of the world. However, a word of caution would be to cross check the credentials of the trainers and the quality of the trainings before enrolling for such sessions. It requires proper training, organizational planning and skills to conduct or administer such interventions. Schools should take care while outsourcing training personnel, facilitators and instructors for this purpose to ensure that such interventions yield the best results.It is observed that after attending such workshops, they are forgotten by the students and parents, totally neglecting the after course recommendations and follow up to be done. This greatly hampers the effectiveness of such interventions. It is recommended that educationists plan the classroom activities, workshops and trainings to make sure that the students be provided with the opportunities to arrive at their fullest potential in learning and performance.

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