

Predictors of Academic Achievement in Primary School Students

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Academic achievement is considered an important indicator for successful future. The present study examines the role of intellectual functioning, study habits and behavioral adjustment in predicting academic achievement of primary school children. It was hypothesized that study habits and intellectual functioning would positively predict high academic achievement. It was also hypothesized that behavioral maladjustment (impulsivity and distractibility, delinquency, family dysfunction, somatic concerns, social skills deficits and social withdrawal) would predict low academic achievement. The sample consisted of 280 school children of grade 4 and 5 equally divided for high ($n = 140$) and low academic achievement ($n = 140$). Both boys ($n = 143$) and girls ($n = 137$) along their teachers ($n = 54$) and mothers ($n = 280$) participated in the study. Personality Inventory for Children (Lachar & Gruber, 2001) and Raven's Colored Progressive Matrices (Raven, 1984) were administered along with a demographic information questionnaire. The results showed that delinquency and social withdrawal significantly predicted low academic achievement; however, family dysfunction, impulsivity and distractibility, social skills deficits, and somatic concerns did not significantly predict academic achievement. Implications of these results for parents, educationists, and school psychologists were discussed.

Keywords. Academic achievement, study habits, behavioral adjustment, intellectual functioning

An optimal level of performance in educational institutions has been a primary interest for not only the children themselves, but also for other stakeholders such as parents, guardians, teachers, and educational administrators. There is an augmented emphasis on the educational achievement of students which can be attributed to the phenomenon of globalization and industrialization. The educational

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trends that have swept globally underline not only the necessity of academic attainment but emphasize academic achievement in children because the latter is being seen as the predictor of personal and professional success in later life. Academic success or failure draw a prominent influence on the child's adolescence years and serve as a crucial indicator of personal adjustment (Cole, Martin, Peeke, Seroczynski, & Fier, 1999; Crystal et al., 1994) with the former considered to be the basis of wellbeing and happiness (Salmela-Aro & Tynkkynen, 2010).

Adane (2013) defines academic achievement as a successful accomplishment or performance in a particular subject area and is indicated by grades, marks and scores of descriptive commentaries. Generally, academic achievement is characterized into two categories; high and low (Dzulkifli & Alias, 2012). High academic achievement is conceptualized as an optimal level of performance in academic tasks while low academic achievement is considered to be a deficient or poor performance in academic tasks. The variation in achievement as high or low has led research community to identify factors that may prove to be a breeding ground for high or low achievement (Chamorro-Premuzic & Furnham, 2003). These factors are not only related to the children's dispositional components such as, impulsivity, inherent social skills, intellectual functioning, delinquent tendencies, but also encompass their situational variables, such as family environment (Considine & Zappala, 2002). Both dispositional and situational variables play part in determining a child's academic achievement. This research analyzed the dispositional and situational factors such as, impulsivity and distractibility, delinquency, intellectual functioning, study habits, family dysfunction, somatic concerns, psychological discomfort, reality distortion, social withdrawal and social skills deficits that influence and predict levels of academic achievement among children.

It is a palpable notion that an optimal level of performance in academic tasks requires a certain degree of concentration, diligence and consolidation of mental faculties. Impulsivity and distractibility are common occurrences in children undermining the aforementioned prerequisites of high academic achievement. Impulsivity is defined as a lack of self-regulation and self-control with a tendency to act hastily without investing rational thought (Spinella & Miley, 2003). On the other hand, distraction, which is characterized by inability to devote complete attention to a task for a required or long period of time, also has implications for academic achievement in children. Ek, Westerlund, Holmberg, and Fernell (2011) noted that children with

attention deficit problems and impulsivity display poorer academic performance and low academic achievement.

Delinquent behavior has long been considered to be a significant correlate of low academic achievement in children. Gyansah, Soku, and Esilfie (2015) discovered that delinquent behaviors in children such as, truancy, illegal drug use, vandalism, stealing, sexual offences etc. are significant predictors of poor academic performance in school children. Abundant research has been done in this regard which establishes that low academic achievement and leaving school at a young age are associated with juvenile delinquency (Maguin & Loeber, 1996). Research shows that students with high levels of aggression and disruptive tendencies are likely to score poorly on academic achievement (Dishion, 1990; Masten et al., 2005). Delinquency in children is also linked with family dysfunction and together both these factors contribute to poor academic achievement in children (Gyansah et al., 2015).

In addition to delinquency, other externalizing behavioral maladjustments such as somatic complaints and socially withdrawn behavior are also associated with academic achievement (Nelson, Benner, Lane, & Smith, 2004). While socially withdrawn children have poor academic performance, it has been observed that children who exhibit pro-social and sociable behavior are more likely to achieve high grades in academic areas (Barriga et al., 2002). Research also shows that children's socio-metric status correlates with academic achievement (Wentzel & Caldwell, 1997) and children having popularity, acceptance and leadership positions among peers are more likely to be high academic achievers (Wentzel & Asher, 1995).

Research establishes the role of intelligence as a predictor of academic achievement (Deary, Strand, Smith, & Fernandes, 2006). In addition, study habits have also been linked with academic achievement. The simplest indicator of what the study habits of a student entail is to observe the number of hours being used to study in a typical week (Adeyemo & Kuye, 2006). However, this way of measuring study habits is not the most reliable one. There has been a debate about importance of quantity versus quality of hours spend on studying. It is shown that long hours spent studying ineffectively has hardly ever resulted in achieving high in academics (Nonis & Hudson, 2010). Numerous researches show the relationship between study habits and academic achievements (Kaur & Pathania, 2015; Cerena & Pavliushchenko, 2015). According to Crede, Wirthwein, McElvany, and Steinmayr (2008), study habits are external variables enabling study process which includes the frequency of studying sessions, review of the material, revisions, self-evaluation and studying in a conducive

environment. There can be seen a correlation among making time tables and high academic achievement (Ukpong & George, 2013). Another study analyzed efficacy of study habits in academic achievement and it was concluded that of all the study habits' subscales, teacher consultation was most influential; while, the exercise, time allocation concentration, note taking, reading and assignments emerged as less integral to students' academic performances (Owoyele & Oluwatimilehin, 2012).

An indigenous research investigating the same relationship concluded that there is a significant relationship among time management skills, note taking, and reading with academic achievement. Students with high academic achievement use a wide variety of study skill as compared to low achievers. Gender differences were also noted and it was reported that girls use more study skills as compared to boys (Fazal, Hussain, Majoka, & Masood, 2012). Research on gender differences in study habits has yielded conflicting findings. For example, few researches report nonsignificant gender differences in study habits (Bashir & Mattoo, 2012; Nuthana & Yenagi, 2009).

Given the dominant trends in our country and the condition of the educational institutes, it is important that we focus on the various factors that contribute to achievement in both positive and negative ways. It is highly significant to notice that academic success is essentially important at primary school where the child's bases of interest, motivation and success in learning are established (Alivernini, Palmerio, Vinci, & Leo, 2010). Primary school is the beginning stage of compulsory formal education hence it holds a crucial value to a child's later life. The basic establishment has to be sound enough to build the entire edifice of achievement. Research indicates that a child's developmental competence is of essential value to their competence in field of academics (Masten et al., 2005). Identification of factors contributing to high and low academic achievement in primary school years is pertinent as these are foundation years in a child's academic progress. Understanding of these factors will help to develop better management strategies at an earlier stage. This study aims to a) identify the effect of intellectual functioning and study habits on academic achievement in 4th and 5th grade students, b) identify the influence of behavioral maladjustment on academic achievement in primary school students, and c) investigate the gender differences in study habits of primary school students.

The present study has significance with reference to Pakistan because little or no literature is available that investigates this topic.

Thus, conducting this research will not only add to existing literature but it will also provide a basis for subsequent research to take place. In order to achieve aforementioned objectives, following hypotheses were formulated:

1. Intellectual functioning would predict high academic achievement among 4th and 5th grade students.
2. Study habits would predict high academic achievement among primary school students.
3. Behavioral maladjustment (i.e. impulsivity and distractibility, delinquency, family dysfunction, somatic concerns, psychological discomfort, reality distortion, social withdrawal and social skills deficits) would predict low academic achievement among 4th and 5th grade students.
4. Girls are likely to express better study habits than boys.

Method

Participants

A purposive sample of 280 students of 4th and 5th grade was approached in school setting. Their class teachers ($n = 54$) and mothers ($n = 280$) were also included in the sample in order to obtain information on achievement level, study habits, class attendance and demographic information of participants. Among these students, 140 were high academic achievers and 140 were low academic achievers (Table 1). Both boys ($n = 143$) and girls ($n = 137$) with age between 9 to 11 years ($M = 9.85$; $SD = 1.05$) were included in the sample. Participants were approached in different branches of a private sector coeducation school. Students securing $\geq 80\%$ marks in previous academic year were grouped as high academic achievers and those securing $\leq 40\%$ marks in the previous academic year were grouped as low academic achievers. This categorization was done on the basis of grading key used in the private sector schools. Students living in intact families and whose mothers had education till graduation were included in the sample. Also students securing scores greater than 25th percentile on intellectual functioning assessed by Colored Progressive Matrices (Raven, 1984) were included in the study. It was done to make sure that low academic achievement was not mainly due to low intellectual functioning.

Table 1
Demographic Characteristics of Participants (n = 280)

Variables	High Achievers	Low Achievers
	(n = 140)	(n = 140)
	<i>f</i> (%)	<i>f</i> (%)
Gender		
Boys	83(59%)	60(43%)
Girls	57(41%)	80(57%)
Family System		
Joint	66(47%)	79(56%)
Nuclear	74(53%)	61(44%)
Who teaches at home		
Mother	94(67%)	59(42%)
Father	3(2%)	7(5%)
Tutor	8(6%)	50(37%)
None	13(9%)	3(2%)
Mother-Father	16(11%)	9(6%)
Father-Tutor	1(0.7%)	9(6%)
Mother-Tutor	5(4%)	3(2%)

It was observed in Table 1 that mean education of fathers of low achievers was higher ($M = 16.08$, $SD = 2.23$) than fathers of high academic achievers ($M = 15.8$, $SD = 2.27$). Similar trend was observed for educational level of mothers of low academic achievers ($M = 19.5$, $SD = 5.31$) in comparison to mothers of high academic achievers ($M = 16.22$, $SD = 2.31$).

Measures

Personality Inventory for Children (PIC). This inventory was administered to measure the behavioral, emotional, and interpersonal adjustment of children from kindergarten to 12th grade (Lachar & Gruber, 2001). It was a standardized test that consisted of statements that the parents or guardian rates as *true* (scored as 1) or *false* (scored as 0) in relation to their child. Score range on PIC was 0 to 96 and higher scores show increased tendency of a particular trait. In this study, the inventory was filled by mothers of students. The rationale for using the inventory was that, it was the only standardized tool available that would allow for a comprehensive picture of the child's personality during the primary school years. The behavioral summary of the inventory was used, which took 15 minutes for administration. It consisted of eight subscales and each subscale consisted of 12 items. These include Impulsivity and Distractibility ($\alpha = .80$; e.g., My child jumps from one activity to other), Family Dysfunction ($\alpha = .72$; e.g.,

The child's parents agree on how to raise the child), Somatic Concerns ($\alpha = .61$; e.g., My child often has headaches), Psychological Discomfort ($\alpha = .38$; e.g., My child tends to feel sorry for himself/herself), Social Skills Deficit ($\alpha = .42$; e.g., I often wish my child would be more friendly), Social Withdrawal ($\alpha = .68$; e.g., My child worries about talking to others), Reality Distortion ($\alpha = .34$; e.g., My child usually does not trust others), and Delinquency ($\alpha = .75$; e.g., My often disobeys me). The inventory has good reliability (Cronbach alpha ranging from .63 to .82) and validity estimates. For present sample, the Chronbach alpha were satisfactory for all subscales (ranging from .61 to .80) except for Psychological Discomfort ($\alpha = .38$), Social Skills Deficit ($\alpha = .42$) and Reality Distortion ($\alpha = .34$). The subscales showing low reliability coefficients were not entered in the analysis of this study. As a rule of thumb, scales or subscales should have value of Alpha at least $\geq .60$ in order to be a reliable measure (George & Mallery, 2003).

Raven's Colored Progressive Matrices (RCPM). This test was used to measure the intellectual functioning of the students. This helped screen out individuals with low intellectual functioning in order to fulfill sample's inclusion criteria. RCPM was generally used for assessment of intellectual functioning of children and less gifted adults. The age range for this test was 5-11 years. It comprises of 36 items in the form of matrices. The items were arranged in three sets that is set A, set Ab and set B with equal number of problems (12 in each set). In each test item, the examinee was presented with an incomplete matrix to be completed by selecting the appropriate missing symbol from a group of 6-8 choices. Examinee's responses were scored as *correct* (scored as 1) or *incorrect* (scored as 0) and higher scores show better intellectual functioning; while total score on RCPM could range between 0 to 36. This test can be conveniently administered individually as well as in group. Internal consistency ranged between .80 to .90 and retest reliability was .80 (Raven, Raven, & Court, 2003). For present sample, Chronbach alpha reliability was satisfactory ($\alpha = .79$). It was observed that 29% of low achievers scored at 25th Percentile on RCPM; whereas none among the high achievers fell on 25th Percentile on RCPM.

Demographic questionnaires. Two demographic questionnaires were developed by the researchers of this study that is one for the mothers and second for the teachers. The questionnaire for teachers asked information regarding students' attendance percentage, academic performance, conduct in class, punctuality in completing home assignments, prompting teacher for assistance in class when unable to understand new concepts. On the other hand, the

questionnaire for mothers asked information regarding parents' education, occupation, family system, and child's duration of study hours at home. Thus, study habits of students were assessed by asking questions related to duration of study hours at home, punctuality in completing home assignments, prompting teacher for assistance in class when unable to understand new concepts.

Procedure

Permission was obtained from the school administration to collect data. The class teachers of 4th to 5th grade were asked to identify high and low achievers according to study criteria in addition to filling a demographic information questionnaire pertaining to students' classroom related behavior. It was also observed that schools were quite reluctant to provide data for low achievers and after continued reassurance of confidentiality they agreed to provide data. A total sample of 584 students was approached for the present study and this number decreased to 280 after screening for inclusion criteria and adjusting for response rate and consent of the parents. These participants were then administered Raven's Colored Progressive Matrices (RCPM) to measure their intellectual functioning. After screening for intellectual functioning, PIC along with demographic information questionnaire was sent to the students' mothers through school administration. It was clearly mentioned on the accompanying notice that these questionnaires should be filled by mothers only. Mothers were selected as primary informant on PIC because generally mothers are the keenest observers of their children particularly during their early developmental phase of life, they spend more time with children of this age and thus they were the right informants to provide data on PIC. They were asked to send back the completed questionnaires to school within the next five days. Mothers were assured of confidentiality of data and informed that they could withdraw from study any time.

Results

Descriptive statistics were calculated for high and low achievers' scores on PIC, CPM, and class attendance. Logistic Regression Analysis was carried out to explore factors contributing to academic achievement of primary school students. Gender differences regarding study habits and intellectual functioning were analyzed. To identify predictors of high academic achievement, logistic regression analysis was conducted as outcome variable consisted of two categories (i.e.

high academic achievement and low academic achievement). Gender, family system, attendance, mother's education level, father's education level, intellectual functioning percentile scores, study habits and subscales of PIC were entered in regression equation by using enter method.

Table 2

Logistic Regression Analysis Showing Predictors of High Academic Achievement (N = 280)

Predictors	<i>B (SE)</i>	<i>OR</i>	95% CI
Constant	-11.76(5.17)		
Gender	-0.75(0.60)	0.47	[0.14, 1.52]
Family System	2.58*** (0.68)	13.19	[3.42, 50.80]
Attendance	0.08*(0.04)	1.08	[1.00, 1.16]
Misconduct	0.00(0.39)	1.00	[0.47, 2.15]
Mother's Education	-0.45**(0.16)	0.64	[0.47, 0.87]
Father's Education	-0.14 (0.16)	0.87	[0.63, 1.18]
Score on CPM	0.09*** (0.02)	1.10	[1.05, 1.13]
Study Habits	1.22*** (0.23)	3.38	[2.15, 5.31]
PIC			
ADH	0.16 (0.13)	1.18	[0.91, 1.52]
DLQ	-0.50** (0.18)	0.61	[0.42, 0.87]
FAM	0.16 (0.20)	1.18	[0.79, 1.76]
SOM	0.00 (0.18)	1.00	[0.70, 1.42]
DWL	-0.89*** (0.20)	0.41	[0.28, 0.60]

Note. *OR* = Odd Ratio; *CI* = Confidence Interval; For Gender: 0 = Boys, 1 = Girls, For Family System: 1 = Joint Family, 2 = Nuclear Family; PIC = Personality Inventory for Children; ADH = Impulsivity & Distractibility; DLQ = Delinquency; FAM = Family Dysfunction; SOM = Somatic Concerns; DWL = Social Withdrawal; CPM = Colored Progressive Matrices.

** $p < 0.01$, *** $p < .001$.

The results in Table 2 showed that family system, attendance, intellectual functioning scores and study habits significantly positively predicted high academic achievement. Overall model was significant ($\chi^2(13) = 278.32$; $p < .001$) explaining 63% of variance ($R^2 = 0.63$). Analysis of odd ratio showed that participants belonging to nuclear families were 13.19 times more likely to be high academic achievers. Similarly, odd ratio for study habits revealed that students scoring high on study habits tend to be 3.38 times more likely to be high academic achievers. However, class attendance and intellectual functioning scores showed an odd ratio of 1.08 and 1.10 respectively showing that high academic achievement was significantly predicted from regular class attendance and intellectual functioning.

Conversely, mother's education, father's education, delinquency, and social withdrawal negatively predicted high academic achievement and showed an odd ratio < 1 , therefore, a separate regression analysis was conducted for these variables by reversing the encoding of academic achievement variable. It helped to identify regression model for low academic achievement.

Table 3

Logistic Regression Analysis Showing Predictors of Low Academic Achievement (n = 280)

Predictors	B (SE)	OR	95% CI
Constant	-12.81 (2.07)		
Gender	0.97** (0.32)	2.64	[1.40, 4.99]
Mother's Education	-0.03 (0.90)	.97	[0.82, 1.15]
Father's Education	0.40***(0.11)	1.48	[1.19, 1.83]
PIC			
DLQ	0.44***(0.09)	1.56	[1.32, 1.84]
DWL	0.77***(0.11)	2.15	[1.72, 2.70]

Note. OR = Odd Ratio; CI = Confidence Interval; For Gender: 0 = Boys, 1 = Girls, PIC = Personality Inventory for Children; DLQ = Delinquency; DWL = Social Withdrawal

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

Table 3 shows finding for predictors of low academic achievement. As expected, gender, father's education, delinquency and social withdrawal significantly predicted low academic achievement. The overall model was significant ($\chi^2(5) = 138.26$; $p < .001$) explaining 39% of variance ($R^2 = 0.39$) in outcome variable. Gender showed higher odds for low academic achievement explaining that likelihood of low achievement was approximately double for girls in comparison to boys. Surprisingly, father's high education level was associated with 1.48 times more likelihood to be a low academic achiever. In addition, odd ratio for delinquency and social withdrawal was 1.56 and 2.15, respectively showing increased possibility to be a low academic achiever.

In order to see the gender differences on CPM and study habits, t -analysis was computed and results are presented in Table 4. Results show that there were significant gender differences regarding study habits in primary school students as the findings indicated that boys scored significantly higher on study habits than girls with a medium effect size.

Table 4
Gender Differences on CPM Scores and Study Habits (N = 280)

Variables	Boys	Girls	<i>t</i> (278)	<i>Cohen's d</i>	95% CI
	(<i>n</i> = 143)	(<i>n</i> = 137)			
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			
CPM Scores	73.60(27.15)	75.22(25.64)	0.51	.06	[-4.60, 7.83]
Study Habits	7.81(1.87)	7.17(1.69)	3.06**	.37	[0.23, 1.05]

p* < .01, *p* < .001.

Results in Table 4 reflect that boys spend more time in studying at home and prompt their teachers more often than girls. However, there were not significant gender differences in intellectual functioning reflected on CPM percentile scores of our sample.

Discussion

The present study focused on the factors contributing to academic achievement of primary school students. It was hypothesized that study habits and IQ scores would predict high academic achievement. Our finding supported this hypothesis which is in lines with the previous researches. Studies consistently show that high scores on intelligence tests are associated with school achievement (Brody, 1997; Diseth, 2003; Gustafsson & Undheim, 1996; Sattler, 2001). Typically, children having higher intellectual functioning scores have higher school grades, tend to perform well on standardized achievement tests, and complete more years of education. In other words, intellectual functioning scores more often predict school achievement. Similarly, it was noted that those who scored high on the standardized intelligence tests were also the ones who scored higher grades in exams. The study showed a very strong correlation between intelligence as a predictor of academic achievement (Deary, Strand, Smith, & Fernandes, 2006).

Study habits predicted high academic achievement in current sample which is in agreement with the results of a study which revealed that of all the study habits' subscales, 'teacher consultation' was significantly related to students' academic performances (Owoyele & Oluwatimilehin, 2012). Our research also assessed study habits by incorporating questions pertaining to 'asking teacher for assistance'. Therefore, these findings are supported by existing research. Similarly, Mendezabal (2013) explored that those who had favorable study habits and attitudes did better on examinations. Such researches provide evidence that study habits are an integral part of achievement in the academic field.

There was another interesting observation in data of current study that low academic achievers spend more time in studying at home than high achievers. It may be possibly due to the fact that parents of low academic achievers are concerned with their children's poor performance which results in their greater emphasis on their child's involvement in studies in terms of spending more time on studies.

The third hypothesis of this study was partially supported. Delinquency and social withdrawal significantly predicted low academic achievement. These findings are in line with the studies which conclude that delinquency and high achievement are inversely related (Gyansah et al., 2015). Abundant research has been done in this regard and the evidence is quite clear that poor school performance and leaving school at a young age are associated with juvenile delinquency (Maguin & Loeber, 1996). So far, findings related to social withdrawal are concerned; Bester and Budhal (2001) also found out that as much as 29% of the variance in academic achievement can be accounted for the social isolation making it an important contributor to the academic achievement at primary school level. A negative relationship was found between social isolation, self-esteem, and academic achievement.

Gender differences in study habits were also observed as boys scored higher on study habits than girls. However, existing research findings are conflicting on this issue. Ossai (2012) found out that girls scored higher on study habits than boys; conversely, Suneeta, Muktesh and Snehalata (2010) did not find significant gender differences in study habits of their sample. Our findings are not in line with existing research on study habits and reason may be twofold i.e., a) difference in operationalization of study habits in these researches and b) our indigenous cultural scenario. In our research, study habits were assessed by asking questions related to number of hours spent in completing home assignments and requesting teacher for assistance when unable to understand a concept. Usually boys take longer time to complete their home assignments and prompt more often their teachers for help (Miller, Finley, & McKinley, 1990). So far our indigenous cultural scenario is concerned; parents take more active interest in education and subsequent academic achievement of their sons. Being a potential breadwinner for the family, boys' educational needs are attended well and their studies are given more time at home. This may also be a reason for boys' high scores on study habits.

Additional findings showed that participants belonging to nuclear family systems were more likely to be high achievers. This is also confirmed by Kuan and Yang (2004) who concluded that majority of high academic achievers belonged to nuclear family systems.

Moreover, if we see in our cultural context, one can find better opportunity to study with concentration in a nuclear family system because joint families share same space and one can find it hard to get a quiet corner for studying and completing school assignments.

Father's educational level significantly predicted low academic achievement which was quite surprising. It may be due to the fact that generally fathers are not so closely involved in their children's studies. In most instance mothers are managing academic issues of children during primary school years. Therefore, higher educational levels of fathers did not predict high academic achievement. It was also observed that girls in our sample were more likely to be low achievers. Conversely, previous research does not support this as Mickelson and Greene (2006) found no significant differences in achievement in early school years.

In conclusion, it was observed that better study habits predicted high academic achievement during primary school years. Girls were more likely to be high academic achievers than boys. Further it was also concluded that delinquency and social withdrawal predicted low academic achievement in primary school students.

Limitations and Suggestions

Findings of this study can be useful if generalized with caution because there are some limitations too. Firstly, English version of PIC was administered to parents and only graduate parents were included in the sample however, future research can be aimed at translating PIC in Urdu language in order to increase its applicability in Pakistan. Secondly, PIC short form was administered in this study while full length version can also be used in future researches to get more comprehensive findings. Thirdly, this study was limited to students from private sector school yet it can be replicated by taking a sample from public sector schools.

Conclusion and Implications

The present study came up with the fact that there are factors in addition to intellectual functioning which contribute to academic achievement of primary school students. As primary school level education is building block for the upcoming academic years, so, achieving good grades and grasping basic concepts becomes more important. This study showed that study habits, family system, and

behavioral adjustment contributed significantly to academic achievement in early years.

This study holds positive contribution to the dearth of research literature on primary school children in Pakistan. This population is generally overlooked when examining personality variables as adolescents make a more easily available sample. There is a growing need of more research on the amount of involvement by parents and the behaviors that are seen as a result of it which consequently impact the academic performance of their children.

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