

# TEACHERS' TEACHING BEHAVIOUR AS A PREDICTOR OF STUDENTS' ACADEMIC ACHIEVEMENT IN PUBLIC AND PRIVATE SCHOOLS

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## ABSTRACT

*Teachers' teaching behaviour plays an imperative role in students' learning. Growing researches indicate that many school students show poor academic performance due to their teachers' ineffective teaching behaviour. Unluckily, the knowledge about the dynamic nature of teaching behaviour, its relation with learners' active engagement and promotion of students' achievement at school level is rarely investigated in the context of Punjab. To fill this knowledge gap, the current study aims to investigate the effect of teachers' teaching behaviour on students' achievement. Data was collected from 960 students representing 04 districts (Bahawalpur, Vehari, Okara and Rawalpindi) of Punjab. Multiple statistical measures, EFA, CFA, mean, correlation, t-test, ANOVA and stepwise multiple regression were applied to measure perspectives regarding teaching behaviour. The results expressed that effective teaching behaviours resulted in better performance of students. The findings also revealed a substantial association between teaching behaviours of teachers' and students' academic achievement.*

**Keywords:** Teaching Behaviour, Students' Achievement, Schools, Teachers, Public, Private.

## INTRODUCTION

Education is a social instrument to modify individuals' behaviours for better performance in society. According to Boit, Njok, and Chang'ach (2012) education contributes to reshaping citizenry and eliminates inequalities for acquiring absolute cognizance of peoples' lives. Ahmad (2001) expressed that education is now universally recognized as the social instrument through which political, moral, cultural and socio-economic development of a nation increases

rapidly. In the last two decades, nations have performed miracle gain immense achievement, made revolutionary progress, and taken major initiatives based on their effective educational systems. The major problem which is confronted by Pakistan today is to generate such an environment where equal weight-age for getting school education is given to every child. But in Pakistani society, this sphere has often been suffered as a neglected phenomenon by dividing children into diverse categories. To bridge the gap, the provision of school-level education only can be possible for every child if it is provided for free to all without any discrimination. Fairness and equality in education system pave the way for better opportunities for progress and prosperity for every citizen.

From a religious point of view, it is a compulsory obligation of Muslims to educate their children. As for this obligatory aspect of education, a huge responsibility comes to the proficient teachers who educate their children in a better way by knowing subject-matter properly (Bolman & Deal, 2003). Saeed (2001) stated that the success and prosperity of a nation can be guaranteed by the comprehensive and effective educational system of any country. It is, therefore, crucial to delivering quality education for generating the opportunities and fulfilment of social and economic objectives (Kosimbei, Onsuma, Muthaka, & Ngware, 2006). Kochhar (2006) argued that instructional quality mainly relied on the excellence of its masses, whereas the quality of masses based on the quality and excellence of their education system besides the other factors. Moreover, instructional excellence mainly depends upon teachers' background characteristics as well as their behaviours. Therefore, it is essential to improve teachers' teaching behaviour and attitudes for students' brilliant outcomes.

Murphy (2005) indicated that in the school setting, students and adults are influenced by their teachers. Teachers are significant figure providing technical direction of behaviours to solve classroom problems, encourage to establish the mood of the group and enthusiasm to learn new things for a better society. Teachers are those who are actively contributing to school reforms, influencing others to improve their professional practices, involving in promoting change and communicating effectively with their students (Harris & Muijs, 2002). Currently, teaching has been viewed as an outdated and ill-founded profession all over the world (Crowther, Ferguson, & Hann, 2009). The greatest challenge faced by professionally competent teachers is to discover students' learning problems. Maximization of discipline and organized learning environment requires skilful, committed, enthusiastic and prospective teachers having interpersonal skills to perform their professional roles within schools to enhance students' academic

improvement in a positive manner (Gabriel, 2005).

Moreover, Bolman and Deal (2003) proposed frames in an innovative and novel perspective to better recognize and organize school as an organization and teacher as a manager. These frames are considered as windows open to the universe or lenses bringing the world into focus. In this regard, the effective functioning of an education system must have comprehensive measures for determining students' academic achievement (El-Daw & Hammoud, 2015). There is no doubt that teachers are always in a position for improving students' academic achievement and perform a significant part in translating educational policies and principles into action during their interaction with students for educational attainment (Afe, 2006). Adediwura and Tayo (2007) opined that assigning marks is an effective expression for representing learners' scholastic standing in an educational environment. Lewin, Wasanga, Wanderi, and Somerset (2011) stated that academic achievement not only has an influence on the efficacy of schools but also provide the main incentive to the well-being of adolescence in particular as well as the nation in general.

Teachers' teaching behaviour is the term utilized for the social sign of the demonstration of educating, accomplished for encouraging the learning by an understudy or students' group. By and large, teachers' teaching behaviour and conduct can be characterized as successful when it affects students results, for example, scholarly commitment and scholastic accomplishment (Opdenakker et al., 2012). It is along these lines enveloping all the verbal and nonverbal practices exhibited by a teacher with an attempt to impart instruction inside a scholastic setting. It is seen that the encouraging methodology and strategies applied by various instructors have various outcomes for students' achievements. Especially, surveys of educational studies reveal the accompanying recognizable proof-based teachers' teaching behaviours to be experienced in any exercise: making a protected and animating learning atmosphere, giving clear guidance, initiating learning, versatile educating and showing teaching-learning techniques (Maulana, Helms-Lorenz, & Van de Grift, 2017)

Yusuf and Adigun (2010) elaborated that academic activities and performance of learners have always been on exalted position for educators, parents, society and government at large. Students' achievement may be influenced by various factors including students' motivation, family background, social/demographic factors, school environment, standard and

predominantly teachers' teaching behaviour. In the studies of the workplace, teachers' teaching behaviour has long been recognized as a significant factor throughout the world (Riketta, 2002). Dusenbery (2009) identified the behaviour as an intrinsic response towards an organism that changes its relationship with the surroundings. Croninger and Valli (2009) stated that special weight-age to students' academic and psycho-social adjustment dispensed within favour of three broad components of teachers' teaching behaviour such as instructional behaviour, organizational behaviour and socio-emotional behaviour. Instructional behaviour is used during the teaching-learning process with the intention of critical thinking, skill development and promotion of cognitive concepts.

Organizational behaviour may be expressed in the form of structures used to minimize disruptions, efficient use of class times, smooth transitions between academic activities organized by the teacher (Connor et al., 2009). Teachers' socio-emotional behaviour refers to the warm and responsive interactions between students and teachers at any time whether in class or outside the classroom resulting in the encouragement of learners' feelings of belonging and acceptance in an academic setting (Pianta, Karen, Paro, & Hamre, 2008). Instructionally supportive teaching behaviour is firmly supportive for the promotion of academic achievement, provision of learning opportunities, selection of appropriate learning material, and attainment of positive feedback (Curby et.al., 2011).

Organizational and administrative approaches are usually framed to enhance learners' period on their educational tasks for increased engagement in the learning process (Rimm-Kaufman et.al., 2009) and underlying those techniques that support the utilization of available instructional time more productively athwart the school year (Cameron, Connor, & Morrison, 2005). Proficient teachers employ deep, broad, planned and cohesive sets of information and capabilities for the implementation and revision of education (Siddiqui, 2004). Secondary education is like a platform for those students who want to excel for tertiary education. That's why, at this stage, both organizational and instructional teaching behaviours play a very crucial role in promoting learners' academic achievement which further correlated with a minimum negative effect, however, uncorrelated with positive effect.

Furthermore, emerging studies showed that socio-emotional teaching behaviour is positively correlated with improved academic achievement

(Rudasill, Gallagher, & White, 2010), various psycho-social determinants such as a respect-based relationship between student and teacher (Thijs, Koomen, & van der Leij, 2008), and outcomes related to intellectual health such as less anxiety and depression (Perry, Donohue, & Weinstein, 2007). Consequently, it can be said that educational, structural, and socio-emotional teaching behaviours usually have a damaging relationship with negative affect whilst socio-emotional teaching behaviour has a positive relation with positive effect. However, until now, very little research explored the direct association between teachers' teaching behaviour and students' academic achievement at the high school level in Punjab, Pakistan. Therefore, the present research was designed to find out the effect of teachers' teaching behaviour on the academic achievement of students.

## **RESEARCH METHOD**

The main purpose of the current research was to analyze teacher's teaching behaviour affecting students' achievement. Several dimensions of teacher's teaching behaviour were analyzed to investigate the effect on students' achievement. The study follows the descriptive design, and the survey method was used which is the most frequently used technique for data collection in social sciences (Haider & Qureshi, 2016). The teachers' teaching behaviour was measured by their students and students' results were also taken as a record to observe the effect.

### **Sampling Procedure**

The study participants consisted of all the boys' and girls' students of 9<sup>th</sup> grade studying in government and privately managed secondary schools situated in Punjab. For a true representation, the sample of students was selected using a multistage sampling technique. At the first stage, 04 districts, Bahawalpur, Vehari, Okara and Rawalpindi were selected randomly out of total 36 districts of Punjab through balloting. At the second stage, 10 public high schools (05 boys and 05 girls) and 10 private high schools (05 boys' branches and 05 girls' branches) were randomly selected from each district. At the third stage, 12 students from each school were conveniently selected. In this way, 40 public high schools [20 boys' schools (240 boys' students) and 20 girls' schools (240 girls' students)] and 40 private high schools [20 boys' schools (240 boys' students) and 20 girls' schools (240 girls' students)] total 960 students were selected.

### **Measures**

Teaching Behaviour Questionnaire (TBQ-S) prepared by (Pössel et al.,

2013) covering a variety of items regarding teacher’s behaviour and Students’ Data Noting Sheet (SDNS) self-prepared by researchers were used to examine the teacher’s teaching behaviour and students’ achievement. Initially, the scale questions were modified with authors permission to make them simpler and more understandable for participants. Then they were translated into Urdu with the help of professional translators to maintain the validity of the scale, then back-translated into English (Forward-Translation and the Backward-Translation method was used). The purpose of the translation was to provide an easier and more understandable tool to the students for getting more accurate responses.

**Teaching behaviour questionnaire (TBQ-S).** Teacher’s teaching behaviour was measured with 37 items Teaching Behaviour Questionnaire (TBQ-S). The original questionnaire was comprised of four factors using a three-point scale and the responses ranging from (always = 1, sometimes = 2, and never = 3). However, in the present study, we changed it from a three-point scale to a four-point scale according to study requirement. The scale dimension, Instructional Behaviour (13 items), Negative teaching behaviour (9 items), Socio-Emotional Behaviour (10 items) and Organizational Behaviour was measured by (5 items) respectively.

**Students’ data noting sheet (SDNS).** Data related to students’ marks were collected through students’ data noting sheet (SDNS) specifically designed to record the 9<sup>th</sup> class students’ results (BISE Exams, 2019) by obtaining their enrollments’ data from their respective schools and BISEs.

Table 1. Demographic Characteristics of Respondents

| Background Variables  | Category | f   | %      |
|-----------------------|----------|-----|--------|
| Gender                | Boys     | 480 | 50.00  |
|                       | Girls    | 480 | 50.00  |
| Age of Students       | 14 Years | 110 | 11.46  |
|                       | 15 Years | 590 | 61.46  |
|                       | 16 Years | 228 | 23.54  |
|                       | 17 Years | 32  | 3.33   |
| Type of School        | Public   | 480 | 50.00  |
|                       | Private  | 480 | 50.00  |
| School Location       | Urban    | 660 | 68.80  |
|                       | Rural    | 300 | 31.20  |
| Medium of Instruction | Urdu     | 0   | 00.00  |
|                       | English  | 960 | 100.00 |

In the current study (See Table 1), the data consisted of 960 students' responses. The respondents representing the 4 districts of Punjab, and 480 (50%) of the respondents were girls and 480 (50%) were boys. Students' ages ranged from 14 years 11.46%, 15 years 61.46%, 16 years 23.54% and 17 years 3.33%. Approximately 50.00% of students were studying in public schools and 50.00% in private schools. About 68.80% of students reported their school location as urban schools and 31.20 rural schools. Approximately 100% of students reported their medium of instruction as English.

## **RESULTS**

In our study, we primarily focus on teachers' teaching behaviour and its impact on students' achievement. The data analysis process takes place in two steps. Initially, SPSS 19<sup>th</sup> version software was used to conduct Exploratory Factor Analysis (EFA) and Amos 20<sup>th</sup> version for Confirmatory Factor Analysis (CFA). In the second phase, correlation, t-test, ANOVA and stepwise multiple regression were performed.

Table 2. Mean and Standard Deviation of Teachers' Teaching Behaviour

| My teacher....,   | Mean | SD   |
|---|------|------|
| Gets feedback on previous material before going to the next topic                       | 2.39 | 0.81 |
| Gives the answers of all questions in an easy and understandable way                    | 2.39 | 0.81 |
| Elaborates with simple examples for my understanding                                    | 2.39 | 0.81 |
| Has clear grade requirements  | 2.56 | 0.70 |
| Checks my work in time and return quickly   | 2.50 | 0.76 |
| Listens to my opinions patiently  | 2.29 | 0.69 |
| Fairly deals all students   | 2.65 | 0.64 |
| Has fair regulations for classroom behaviour  | 2.77 | 0.51 |
| Tries to use different teaching techniques for students' understanding                  | 2.60 | 0.66 |
| Smiles at me  | 2.64 | 0.61 |
| Depends on his / her mood, sometimes threatens me to punish                             | 2.49 | 0.75 |
| Threatens me to punish, when I misbehave  | 2.72 | 0.65 |
| Threatens me to punish, when I talk with my neighbour                                   | 2.09 | 0.72 |
| Has no consistency in his /her mood, quickly changed                                    | 2.58 | 0.69 |
| Has no understanding, what to do next   | 2.45 | 0.82 |
| Easily be influenced (e.g., easily be get to talk about something besides class topic). | 2.28 | 0.75 |
| Provokes easily   | 2.75 | 0.60 |
| Tells jokes or funny stories  | 2.59 | 0.70 |
| Discusses with me school-related issues   | 2.03 | 0.77 |
| Discusses with me general issues (e.g., at home, with other kids).                      | 2.73 | 0.49 |
| Displays his/ her emotions (e.g., changes tone of voice, uses facial expressions).      | 2.44 | 0.83 |
| Greets me   | 2.50 | 0.79 |
| Asks me regarding my interests  | 1.84 | 0.80 |

|  |      |      |
|--|------|------|
| Helps me to solve my daily life or school-related problems         | 2.24 | 0.76 |
| Always appreciates participation, even if it is not always correct | 2.40 | 0.82 |
| Emphasizes me to obey and understand classroom rules               | 2.34 | 0.89 |
| Identifies my misbehaviour or wrong behaviour                      | 2.35 | 0.89 |
| Takes away a privilege if I abuse it.                              | 2.23 | 0.80 |
| Stops me to use equipment if I wrongly or dangerously use          | 1.99 | 0.87 |
| Always stays on task.  | 2.54 | 0.68 |

The results (See Table 2) revealed that the most frequently used behaviour has been “Has fair regulations for classroom behaviour”; the individual teachers have demonstrated it ( $M = 2.77$ ,  $SD = .51$ ) mean times during their class lectures. Also, the other kind of behaviours, for example, provokes easily ( $M = 2.75$ ,  $SD = .60$ ), Discusses with me general issues (e.g., at home, with other kids ( $M = 2.73$ ,  $SD = .49$ ), Threatens me to punish, when I misbehave ( $M = 2.72$ ,  $SD = .65$ ) and my teacher fairly deals all students ( $M = 2.65$ ,  $SD = .64$ ) were among the most frequently used teachers’ behaviours. Tries to use different teaching techniques for students’ understanding ( $M = 2.60$ ,  $SD = .66$ ) also looks at popular behaviour of teachers. Has clear grade requirements ( $M = 2.56$ ,  $SD = .70$ ) also look to have established their position. My teacher greets me ( $M = 2.50$ ,  $SD = .79$ ) also seem to be applied frequently, but on the other hand, asks me regarding my interests ( $M = 1.84$ ,  $SD = .804$ ) and Stops me to use equipment if I wrongly or dangerously use ( $M = 1.99$ ,  $SD = .87$ ) does not appear to be the very common behaviour. On an average, Give the answers of all questions in easy and understandable way ( $M = 2.39$ ,  $SD = .81$ ), Get feedback of previous material before going to next topic ( $M = 2.39$ ,  $SD = .81$ ), Identifies my misbehaviour or wrong behaviour ( $M = 2.35$ ,  $SD = .89$ ) and Emphasizes me to obey and understand classroom rules ( $M = 2.34$ ,  $SD = .89$ ).

Next, we performed a factor analysis of the teachers’ teaching behaviour. Exploratory Factor Analysis (EFA) of 37-items with Principal Components Analysis (PCA) followed by Varimax rotation take out four facets (See Table 3). Everyone has its eigenvalue higher than 2.0 and all these components brought more than 55% of the common variance after eliminating the poor performing items. This result is consistent with the scale’s theoretical suggestions. The four factors of teachers’ teaching behaviour produced by EFA were Interactional Behaviour (1, 2, 4, 5, 8, 11, 20, 23; Cronbach’s  $\alpha = .811$ ), Negative Teaching Behaviour (6, 17, 27, 28, 29, 30, 31, 32, 34; Cronbach’s  $\alpha = .840$ ), Socio-Emotional Behaviour (7, 13, 14, 15, 16, 18, 19, 33; Cronbach’s  $\alpha = .799$ ) and Organizational Behaviour (10, 22, 25, 36, 37; Cronbach’s  $\alpha = .800$ ). Factor loadings of four subscales range from 0.440 to 0.874.



Table 3. Factor Analysis of the Items of Teachers' Teaching Behaviour

| Items<br>(My teacher...)   | Factors Loadings |       |       |      |
|--|------------------|-------|-------|------|
|  | 1                | 2     | 3     | 4    |
| Gets feedback on previous material before going to the next topic                      | .874             |       |       |      |
| Gives the answers of all questions in an easy and understandable way                   | .874             |       |       |      |
| Elaborates with simple examples for my understanding                                   | .874             |       |       |      |
| Has clear grade requirements   | .517             |       |       |      |
| Checks my work in time and return quickly  | .482             |       |       |      |
| Listens to my opinions patiently   | .481             |       |       |      |
| Fairly deals all students  | .441             |       |       |      |
| Has fair regulations for classroom behaviour   | .440             |       |       |      |
| Tries to use different teaching techniques for students' understanding                 |                  | .731  |       |      |
| Smiles at me   |                  | .687  |       |      |
| Depends on his / her mood, sometimes threatens me to punish                            |                  | .591  |       |      |
| Threatens me to punish, when I misbehave   |                  | .586  |       |      |
| Threatens me to punish, when I talk with my neighbour                                  |                  | .546  |       |      |
| Has no consistency in his /her mood, quickly changed                                   |                  | .533  |       |      |
| Has no understanding, what to do next  |                  | .524  |       |      |
| Easily be influenced (e.g., easily be get to talk about something besides class topic) |                  | .516  |       |      |
| Provokes easily  |                  | .441  |       |      |
| Tells jokes or funny stories   |                  |       | .643  |      |
| Discusses with me school-related issues  |                  |       | .529  |      |
| Discusses with me general issues (e.g., at home, with other kids).                     |                  |       | .524  |      |
| Displays his/her emotions (e.g., changes tone of voice, uses facial expressions)       |                  |       | .499  |      |
| Greets me  |                  |       | .490  |      |
| Asks me regarding my interests   |                  |       | .471  |      |
| Helps me to solve my daily life or school-related problems                             |                  |       | .470  |      |
| Always appreciates participation, even if it is not always correct                     |                  |       | .440  |      |
| Emphasizes me to obey and understand classroom rules                                   |                  |       |       | .764 |
| Identifies my misbehaviour or wrong behaviour  |                  |       |       | .745 |
| Takes away a privilege if I abuse it.  |                  |       |       | .611 |
| Stops me to use equipment if I wrongly or dangerously use                              |                  |       |       | .582 |
| Always stays on task.  |                  |       |       | .565 |
| Eigenvalue   | 5.26             | 3.26  | 2.50  | 2.08 |
| Percentage of Variance   | 18.01            | 14.57 | 12.87 | 9.81 |

Further Confirmatory Factor Analysis (CFA) for the instrument described relatively high associations amid the error variances of questions 03, 09, 12, 21, 24, 26, and 35. For achieving better goodness of fit, it is suggested to remove these questions. After removing these items, we obtained a better model fit such as, (Chi-square goodness of fit = 7.641,  $p = 0.031$ ; CFI = 0.87; NNFI = 0.87; RMSEA = 0.041; IFI = 0.89; RFI = 0.83; NFI = 0.84) whereas, the reliability coefficient of complete scale was 0.803.

Table 4. Correlation matrix among Teachers' Teaching Behaviour dimensions

|                                | Mean | SD   | 1       | 2       | 3       | 4       |
|--------------------------------|------|------|---------|---------|---------|---------|
| 1. Interactional Behaviour     | 2.49 | 0.44 | (0.811) |         |         |         |
| 2. Negative Teaching Behaviour | 2.51 | 0.39 | .316**  | (0.840) |         |         |
| 3. Socio-Emotional Behaviour   | 2.34 | 0.39 | -.008   | .214**  | (0.799) |         |
| 4. Organizational Behaviour    | 2.28 | 0.53 | -.023   | .122**  | .052    | (0.800) |

\*\*  $p < 0.01$ Numbers in brackets are Cronbach's  $\alpha$  (reliability) estimates

Correlation matrix reveals a statistically high correlation between different factors of teachers' teaching behaviour. The interactional behaviour of teachers has a moderate correlation with negative teaching behaviour  $r = .316$ ,  $p < .01$ . The negative teaching behaviour of teachers has a weak association with the socio-emotional behaviour  $r = .214$ ,  $p < .01$  and organizational behaviour  $r = .122$ ,  $p < .01$ . However, interactional behaviour has an insignificant correlation with socio-emotional behaviour and organizational behaviour. Socio-emotional behaviour has also an insignificant association with organizational behaviour (See table 4).

Table 5. Teachers' Teaching Behaviour – Background Variables Comparison

| Variable        | N   | Students' Marks |        |                               |
|-----------------|-----|-----------------|--------|-------------------------------|
|                 |     | Mean            | SD     |                               |
| Gender          |     |                 |        |                               |
| Boys            | 480 | 507.26          | 242.31 | t (478) = -3.026, Sig = .003  |
| Girls           | 480 | 533.66          | 238.94 |                               |
| Type of School  |     |                 |        |                               |
| Public          | 480 | 507.94          | 242.59 | t (478) = -2.994, Sig = .002  |
| Private         | 480 | 532.88          | 238.76 |                               |
| School Location |     |                 |        |                               |
| Urban           | 660 | 604.85          | 243.31 | t (478) = -13.326, Sig = .000 |
| Rural           | 300 | 334.80          | 71.56  |                               |
| Age of Students |     |                 |        |                               |
| 14 Years        | 110 | 363.38          | 124.56 | F (4,475) = 9.412, Sig = .000 |
| 15 Years        | 590 | 534.79          | 238.07 |                               |
| 16 Years        | 228 | 575.15          | 260.00 |                               |
| 17 Years        | 32  | 397.44          | 208.14 |                               |

For measuring effects of background characteristics as independent variables and students' marks in 9<sup>th</sup> class examination as dependent variable, t-test and ANOVA were performed (See table 5). A significant difference was noticed between boys' and girls' students' marks ( $t = -3.026$ ,  $p = .003$ ). The effect of school type also revealed that ( $t = -2.994$ ,  $p = .002$ ) the students of both public and private schools also differ

significantly in students' performance. Similarly, a significant effect of the school location was also noted ( $t = -13.326, p = .000$ ) indicating urban locality as a better indicator ( $M = 604.85, SD = 243.31$ ) of students' performance. In case of students' age, a significant effect  $F(4, 475) = 9.412, p = .000$  was also noticed for students' performance ( $M = 575.15, SD = 260.00$ ) as compared to other age levels.

Table 6. Multiple Regression Analysis of Teachers' Teaching Behaviour and Students Marks

| DV              | Teacher's Behaviour         | $\beta$ | t        | F        | R    | R <sup>2</sup> |
|-----------------|-----------------------------|---------|----------|----------|------|----------------|
| Students' Marks |                             |         |          | 6.269*** | .224 | .050           |
|                 | Interactional Behaviour     | -34.51  | -1.348   |          |      |                |
|                 | Negative Teaching Behaviour | -21.98  | 4.486*** |          |      |                |
|                 | Socio-Emotional Behaviour   | 13.17   | -2.837** |          |      |                |
|                 | Organizational Behaviour    | 14.07   | 0.696    |          |      |                |

\*\*\* $p < 0.001$ , \*\* $p < 0.01$

Multiple regression analysis was used to assess the predictive ability of teachers' teaching behaviour on students' academic achievement. Negative teaching behaviour has significant and inverse effect ( $\beta = -21.98, t = 4.486, p = .001$ ) on students' score (See Table 6). It demonstrates that one unit increase in the negative teaching behaviour will bring 21.9 marks decrease in the students' scores. However, socio-emotional behaviour has a statistically significant effect ( $\beta = 13.17$ ), on students' achievement. The results revealed that t-value is statically significant for socio-emotional behaviour ( $t = -2.837, p = .01$ ) and it will cause 13.1 marks increase in students' achievement. It reveals the main contribution of socio-emotional behaviour in explaining the variations in students' marks.

Table 7. Step-wise Regression analyzing the effect of Background Variables on Students' Marks

| Predictors      | $\beta$ (Standard)  | t-value  |
|-----------------|---|----------|
| Model 1         |   |          |
| Gender          | 6.049   | 0.466    |
| Type of School  | -2.527  | -0.195   |
| Age             | 0.260   | 0.358*   |
|                 | $R^2 = 0.019, \Delta R^2 = 0.019, F(3, 476) = 3.097^*$      |          |
| Model 2         |   |          |
| Gender          | 6.088   | 0.494    |
| Type of School  | -9.963  | -0.805   |
| Age             | 0.094   | 0.136    |
| School Location | 11.823  | 7.176*** |
|                 | $R^2 = 0.115, \Delta R^2 = 0.096, F(4, 475) = 15.442^{***}$ |          |

\*\*\*  $p < .001$ , \*  $p < .05$

Stepwise multiple regression analysis shows that in model 1 students' age, separately, has a significant impact ( $R^2 = 0.019$ ,  $\beta = 0.260$ ) on students' achievement. The goodness of fit indices expresses 1.9% variance in students' marks due to students' age. Surprisingly, the inclusion of the school location in model 2 demonstrated school location as a major predictor of students' achievement ( $R^2 = 0.115$ ,  $\beta = 11.823$ ). The goodness of fit indices showed that one unit increase in the school location will cause an 11.8% increase in the students' marks. The results expressed that t-value is highly significant only for school location ( $t = 7.176$ ,  $\text{sig} = .001$ ) in model 2. It reveals the main contribution of school location in explaining the variation in students' performance  $F(4, 475) = 15.442$ ,  $p = .001$  which proves the significance of overall regression model fit presented in model 2 (See table 7).

## DISCUSSION AND CONCLUSION

The core idea of the present research was to investigate the effect of teachers' teaching behaviour on students' performance. Teachers' behaviour in any society is characterized as having a substantial influence on students' achievement. Students are highly energized by their teachers' love, affection, character, competence and moral commitment. Dusenbery (2009) stated that a good teacher is a basic part of the success of students. Teacher-Student relationships are fundamental elements for the educational achievement of both teachers and students. Teachers-students warm, loving and affectionate relationship is not only required for students' learning but also cause teachers' success in delivering the lesson effectively. Appreciation, fair behaviour and affection based on positive teacher-student relationships facilitate learners academically and socially.

Yusuf and Adigun (2010) pointed out that positive teacher-students' relationship has an important effect on students' academic achievement. Ulug, Ozden, and Eryilmaz (2011) also stated that suitable and supportive teachers' behaviour increases students' enjoyment, interest, engagement and academic performance. Rudasill et al. (2010) depicted that teachers' positive behaviour is a primary factor for the students' higher academic achievement. Teachers' sense of responsibility is also considered as a significant factor in teaching-learning processes (Dahlgren & Chiriac, 2009). They explored that negative behaviours such as teacher easily provoke, favouritism, threatens to punish students and scolding seems to be because of students' failure and lack of confidence.

V. Jones and Jones (2015) explored that teachers' behaviour influenced

the students' academic achievement. Students' learning depends upon the teachers' communication if the teacher communicates with students positively then students' learning will be successful. Research has revealed that corporal punishment harms students' learning. M. G. Jones and Vesilind (1995) also agreed that giving physical punishment to students causes lack of confidence whereas, teachers' positive interaction with students results in warm and vigorous social relations among parents, fellows, students and teachers. The findings of the study demonstrate that teacher treats every student fairly, teachers make sure that students understand the material before moving to something new, they answer the questions in a way that is easy for them to understand as well as they use simple examples during the teaching-learning process to make it more effective and understandable are the most frequent behaviours.

These results are similar to Inelmen (2011) who expressed that students' achievements are affected by some teaching behaviours such as willingness, confidence about subject content, academic innovations and commitment to student learning. Teachers who are comfortable more likely to engage students in the learning environment. The results showed a significant difference between boys and girls score. The effect of school type also revealed that students of both public and private schools differ significantly in terms of students' performance. The mean score of private schools was more than public schools showing better performance of the private sector. The school location was also indicating urban locality as a better indicator of students' achievement.

It was also noticed that teachers' verbal and non-verbal communication have a massive influence on students' learning such as nodding, smiling, eye to eye contact and facial expression etc. The same results were drawn by Ashukker (2010) who explained that teachers' positive behaviour affects students' achievement such as: appreciating students' good performance, listen to students with concentration and showing interest to fulfil their learning need. Positive behaviour of teacher encourages students' efforts in the right direction, boost up their confidence level and students' character building which results in students' personality development.

The results demonstrate a weak positive correlation between negative teaching behaviour and students' achievement and a very weak positive relationship between Socio-emotional teachers' behaviour and students' achievement. The regression analysis indicates that the role of teachers'

negative social behaviour and socio-emotional behaviour was more vibrant in explaining students' achievement. Negative teaching behaviour has significant and inverse effect on the students' achievement. One-unit increase in the negative teaching behaviour will cause 21.9 marks to decrease in the students' scores. Socio-emotional behaviour also has a statistically significant effect on students' achievement. One unit increase in the socio-emotional behaviour will cause a 13.1 marks increase in the students' scores. It reveals the main contribution of socio-emotional behaviour in explaining the variations in students' achievement.

However, the overall variation in students' achievement due to teachers' teaching behaviour was extremely low, only 5%. In the case of students' background variables and students' academic achievement. The stepwise multiple regression results identified students' age as a significant contributor to students' achievement in model 1. The goodness of fit indices showed that the teacher's age accounts for 1.9% variation in students' achievement. Nevertheless, in model 2, school location emerged as a major determinant of students' achievement. The goodness of fit indices revealed 11.5% variation in students' achievement due to school location.

The study has some evident implications. In Pakistan, the teacher has vital importance for the transmission of knowledge, skills, positive attitudes, intellectual traditions and human morals in students. More the teacher is aware of the importance of teaching behaviour, experiences, major interests, the effect of positive and negative behaviour, the better will he understand the forces at a workplace that are required to direct and use in the formation of suitable teaching behaviour. The study results explained the importance of positive teaching behaviour, reduction in physical punishment and provision of educational resources for enhancing students' achievement. Finally, our study emphasizes the importance of socio-emotional behaviour in students' achievement, whilst school location emerged as a significant precursor of students' performance. In short, increasing students' performance in schools mainly relied on teachers' socio-emotional teaching behaviour. The results of the present research also support several other studies conducted in advanced countries excluding only an uncommon that not yielded similar results.

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