

## Empirically Gauging the Effect of Teachers Neglected and Controversial Attributes on Promoting Students Educational Gains

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Article Info	Abstract
<p><b>Article History</b></p> <p>Received: September 18, 2021</p> <p>Accepted: April 20, 2022</p> <hr/> <p><b>Keywords :</b> Internals, Externals, Locus Of Control, Medium Of Instructions</p> <p><b>DOI:</b> 10.5281/zenodo.6473715</p>	<p><i>Paradox of individual's spirit to clutch entire success has been remaining deep-seated debate since decades. Argumentations prolonged when some claimed that success falls under luck while other confirmed it was humans' nonstop effort. The origin of social learning theory overpowered all myths and confirms that it was locus of control that dramatically affected on individual's success / failure. Teachers impart instructions, share knowledge and deliver plethora of information among students focusing locus of control applying diversity of languages for students' educational gains. The researcher planned present quantitative ex-post-facto research to explore the effect of teachers' locus of control applied in Urdu and English medium on a sample of 1,000 respondents; 200 teachers and 800 randomly selected from the public sector secondary schools of the Punjab. The researcher administered LoC and MoI scales to collect the data from the teachers and obtained students' educational gains from Board of Intermediate and Secondary Education Lahore, based on the students enrollment, ensured during data collection. After focusing ethical considerations, the researcher himself collected data. The results of regression techniques revealed that teachers' locus of control have affected 58%, medium of instructions 21.50% and teachers' demographic variables have affected 84.40% on students' educational gains. On the basis of results, it is recommended that teachers' training institutions may discuss their neglected attribute; locus of control by conducting training, arranging workshops and lecturing through motivational speakers focusing the worth of indigenous language, as single medium of instructions insert concrete effects on students' cognitive abilities and educational achievements.</i></p>

### Introduction

Paradox of individual's spirit to clutch entire success has been remaining deep-seated debate since decades. Argumentations prolonged when some claimed that success falls under luck while other confirmed it was humans nonstop effort. Origin of social learning theory overpowered all myths and confirms that it was locus of control that dramatically affected on individual's success/failure. Teachers impart instructions, share knowledge and deliver plethora of information among students focusing locus of control applying diversity of languages for students educational gains. The concept of locus of control originates from the work of eminent psychologist Jollian B. Rotter in 1960s. Rotter's states that locus of control is teachers opinions on their authorities and dependability towards learners educational and behavioral achievements (Marton et al., 2021; Rotter, 1992; Mearns, 2009). Term 'Locus' is derived from Latin, mean 'location' or 'place' and control mean 'power, manage, direct'. Locus of control refers to location or place where individuals control their activities (Shepherd et al., 2006). It is individual's attributes for achieving goals towards any direction. Term may be pronounced as individual's continuous range from external to external characteristics (Akkaya & Akyol, 2016). The concept is also pronounced as human's dual power character; one's expectations towards win or loss. Locus of control special place in place in the field of philosophy, myths, literature, natural sciences, physical sciences, behavioral sciences and social sciences as well (Kirkpatrick et al., 2008). Locus of control is teachers personal attribute which significantly effect on students' performance towards positivity/negativity. It is associated with teachers abilities to control students behavior in class room. Teachers locus of control is opinion on their tasks contributes for students educational gains and behavioral modifications (Nodoushan, 2012), teachers perception on their potential towards educational success (Rose & Medway, 1981), teachers beliefs on their abilities to control students everlasting events and interpreting to what extent they manage, organize, control students success or failure in class (Nilson-White et al., 2007). Teacher having high locus of control inculcates knowledge more passionately in students minds (Fakeye, 2011). Teachers locus of control is bipolar construct; internal and external (Kirkpatrick et al., 2008). *Internals* are victorious, thoughtful, assure students learning and untied learners hidden potentials (Cook, 2012), show their intention towards students' victories (Fakeye, 2011),

eager towards students success (Sahin, 2008), enthusiastic to revolutionize educational success (Senler, 2016), excited towards societal active participation, highly regarded, courageous towards liable tasks and work wholeheartedly for students success (Nordin et al., 2016), enhance learners educational craze (Shepherd et al., 2006), conduct regular test sessions for students enhanced educational gains (Yates, 2009), considered that students educational gains are interlinked with their own actions and hard work (Golparvar, 2014) and externals put significant effects on students attitudes, motivation, self-esteem, self-evaluation and self-confidence (Toussi & Ghanizadeh, 2012), students success is due to their hard work, luck, struggle and eagerness towards educational gains (Rotter et al., 1992). They declared that students social and educational success is based on teachers effort, intentions, reinforcement, responsibility and enthusiasm for students educational gains (Abdullah et al., 2021). *Externals* acquire obstructive thoughts and show poor performance towards students success (Bedel, 2008). They believe that students success, better educational and social outcomes are based on students success, hard work, abilities and luck (Kirkpatrick et al., 2008). Externals have less potential to enhance their weaknesses (Rotter, 1992), hold poor responsibilities and confirm that their own struggle and hard work never affects students achievements (Cook, 2012), show themselves reduced contributions to bring bit of change in students entire life achievements (Senler, 2016), decrease students educational gains and remain passive in classrooms (Yazdanpanah et al., 2010), have small contradiction between classroom performance, students social, behavioral and educational achievements (Turan, 2021), hold fewer tendencies towards departmental tasks, job, students success and feel burden in terms of stress, worries and low-confidence (Krampe et al., 2021).

*Medium of instructions* refers to mode of imparting instructions for learners ease. It works as a bridge or hindrance between learners and instructors (Ahmad, 2011; Coleman & Capstick, 2012). Medium of instruction is global issue as in China (Xioyang & Yagyang, 2014) in South Korea (Park, 2009) and in Pakistan since independence (Gopang et al., 2017; Nisar & Ahmad, 2011) This controversy in Pakistan was observed when English nation got hold and started governing in sub-continent (Shamim, 2008). After birth of Pakistan, burning dilemma was raised by stakeholders. Resultantly, Government policy document 1947 bound provinces to make permanent use of indigenous languages in educational institutions and accept Urdu as *Lingua Franca* for inhabitants communication (Government of Pakistan, 1947). Era of Ayub's martial law ascertained the formation of Sharif Khan Commission in 1959 that strictly proposed to replace Urdu language and steadily implement English language as medium of instructions whereas Urdu from grade five to ten. Furthermore, commission recommended the adaptation of English/National language only from intermediate to onwards due to scarcity of teaching staff and infrastructure (Government of Pakistan, 1959). Then, in 1969 General Yahya's government rejected the compulsion of English language and implemented Urdu and Bengali languages as medium of instruction (Government of Pakistan, 1970). After that Zulfikar Ali Bhutto established *The National Language Authority* and opt students to use Urdu/provincial language in 1979 (Government of Pakistan, 1979). Furthermore, remaining downfall of controversial medium of instructions prolong through the birth of O and A' level education; extending the murder of Urdu medium. Zia's Government put concentration towards medium of instruction but all in vein. Then Mushraff's era entirely based on English medium instructions that slaughtered remaining decays of students cognitive potential (Coleman & Capstick, 2012). Later on Pakistani constitutions were passed, but make ambiguous the implementation of single language in educational institutions. Constitutions declared that: **a)** Urdu as national and official language till fifteen years start from commence day, **b)** English may accept as official language in place of Urdu and; **c)** it is responsibility of provincial assembly to take necessary measures to evaluate and implement provincial language in extension of national language for teaching and official use (Gopang et al., 2017; Rahman, 2009). In short, entire description glimpse clear image of Pakistani Government negligence that put far furlong effect of students cognitive potential and lead state towards declining level. Controversial medium of instruction move learners educational attainments towards poor performance. Education provides basis for students learning for rest of their life. Resultantly, students remain deprived and less achieves good educational gains. This controversial medium of instruction is needed to be un-rooted towards any closing end, as it has been remaining fruitful in strengthening teaching-learning (Marsh, 2012).

Presently, the status of English language is like a knowledge store house and considered as *lingua franca* in world (Minkova & Stockwell, 2009). Official language of Pakistan is English and Pakistani constitutions, curriculum documents, plan and policies are written in English language (Ahmad, 2011). It is a challenge for Pakistani school going children to comprehend two parallel languages at a time (Government of Pakistan, 2009). Supremacy of Pakistani educational system is really considered complicated one. Curriculum construction and textbook development is central responsibility of Federal Government and students assessment is endorsed by traditionally established examination boards (Shamim, 2008). Third tier of Pakistani education system is authorized and decentralized from national to district level consisting of Executive Education Authority/District Education Authority; responsible for disbursing school funds, teachers hiring, posting, training, mentoring and promotion (Rahman, 2009). Prescribed authorities; national, provincial and district levels underline the requirements and widespread scheduling for policy makers at federal level management for

proper implementations (Shamim, 2008). The situation of Pakistani public sector educational institutions is still miserable and state is running parallel education system: Urdu, English and Deeni Madrasas, having different medium of instructions as well (Gopang et al., 2017). It is declared that 78% Pakistani educational institutions are running parallel language; Urdu and English for students educational gains (Ahmed et al., 2013) that is alarming and astonishing situation for parents, teachers, head teachers and Government officials. It is revealed that 91.62% Pakistani inhabitants use mother tongue; Urdu/Punjabi at their home (Behlol & Kayani, 2009) whereas researchers put emphasis on English medium instructions for students and teachers during teaching learning process (Manan & David, 2014). Resultantly minds of Pakistani inhabitants are cultivated and giving birth to isolated and contradictory groups; an alarming situation for Pakistani officials and country existence. Unpleasant picture presenting facts regarding Pakistani education system and controversial language dilemmas enable Pakistani inhabitants to build its own educational setup. Pakistani families having diverse socioeconomic status; working class, lower middle class, middle class, upper middle class and lower-upper class families (Rahman, 2009) admit/enroll their students in different educational institutions to gain education (Gopang et al., 2017). Division of Pakistani socioeconomic class invests on their children as per financial status. This division prolog in case of having elite class that class pay maximum to educate their children in renowned private schools having compulsory English medium instructions (Shaheen & Tariq, 2016). Rest of families enrolled their children in public and religious schools due to financial constrains and religious worshipping; Arabic medium. Public and religious schools opt to impart instructions either in English or Urdu language. An application of diverse medium of instructions in educational institutions is going to bury the integrity and uniformity of Pakistani inhabitants (Coleman & Capstick, 2012). Single language instruction enhances students conceptual understanding towards concrete learning (Yip et al., 2003).

### **Problem Statement**

Students educational achievement scores are going to be declined in public sector secondary schools (Adu et al., 2012) due to poor quality of teaching, teachers capabilities, lack in pedagogical knowledge, lack of training, recruitment, inspiration, non-attendance (Aslam et al., 2019; Dundar et al., 2014) teachers gender (Aslam, 2012), teachers locus of control (Dincürek et al., 2012; Hasan & Khalid, 2014), medium of instructions (Gopang et al., 2017; Rahman, 2009) and parental less concentration as well. Resultantly, enrollment in public sector educational institutions is gradually reducing students poor educational gains. On the other hands, Government invests billion of rupees, update school infrastructure, hire academic and professional teaching staff, establish computer labs with latest gadgets, provides free textbooks to students, arrange curricular activities in schools also cognizant on students health and safety measures but dilemma is uncontrolled (Aslam et al., 2019). Moreover, the teachers apply locus of control using diversity of languages; Urdu/English that is an important factors that continuously affecting on students educational gains. It is categorically reported that the continuous applications of Urdu and English medium instruction in public sector educational institutions have been remaining controversial since independence. An empirically the researchers explored the effect of neglected attribute; locus of control on students educational gains (Abdullahi, 2000; Adu & Oshati, 2014; Cetinkalp, 2010; Kirkpatrick et al., 2008; Melekeowei, 2015; Nongtdu & Bhutia, 2017) but hardly study framed in teachers controversial medium of instructions perspectives in Pakistan. the ultimate purpose of the current research was to find out teachers use of Urdu and English in classroom among students to obtain their better educational gains.

### **Research Questions**

The researcher framed following questions in current research

1. To what extent teachers locus of control effect on students educational gains?
2. What is the effect of medium of instructions on students educational gains?

### **Research Methodology**

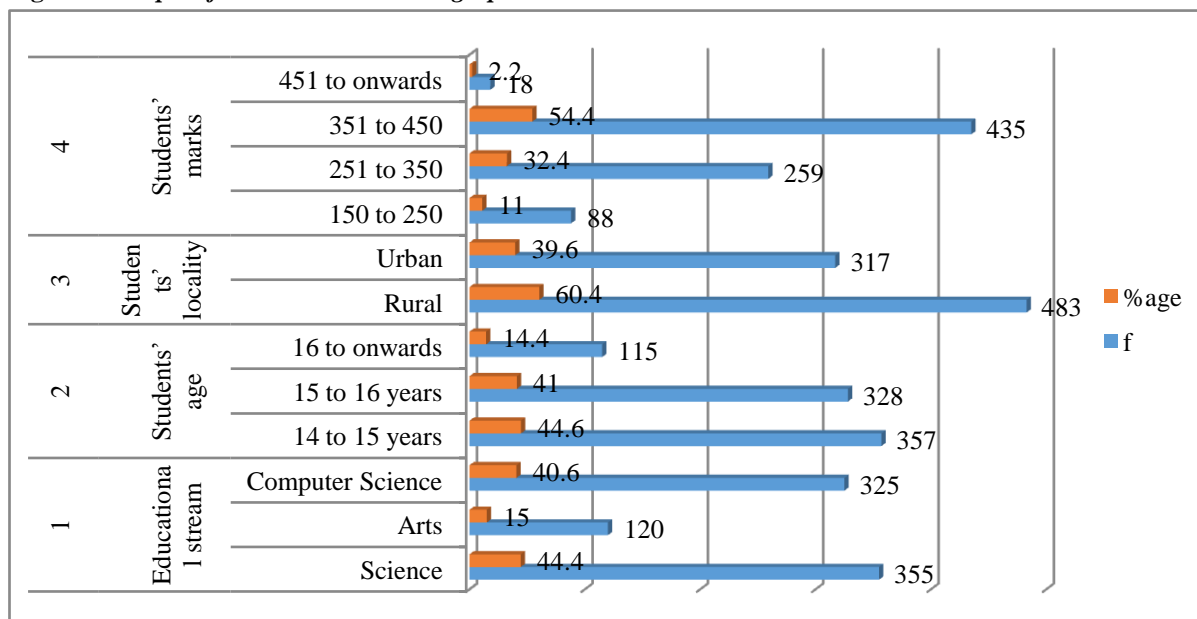
Research methodology used in this study was arranged in sequential order to conquer results. Study was quantitative in nature that provide real picture of current situation by providing concrete data collection and data analysis techniques towards ending research process (Tashakkori & Teddlie, 2009). The researchers used *ex-post-facto* design; provide real picture of current situation and facilitate researchers in data collection and data analysis procedures (Bryman, 2012; Cohen & Duun, 2011; Creswell, 2014; Singh, 2007).

#### ***The Population and a Sample the Study***

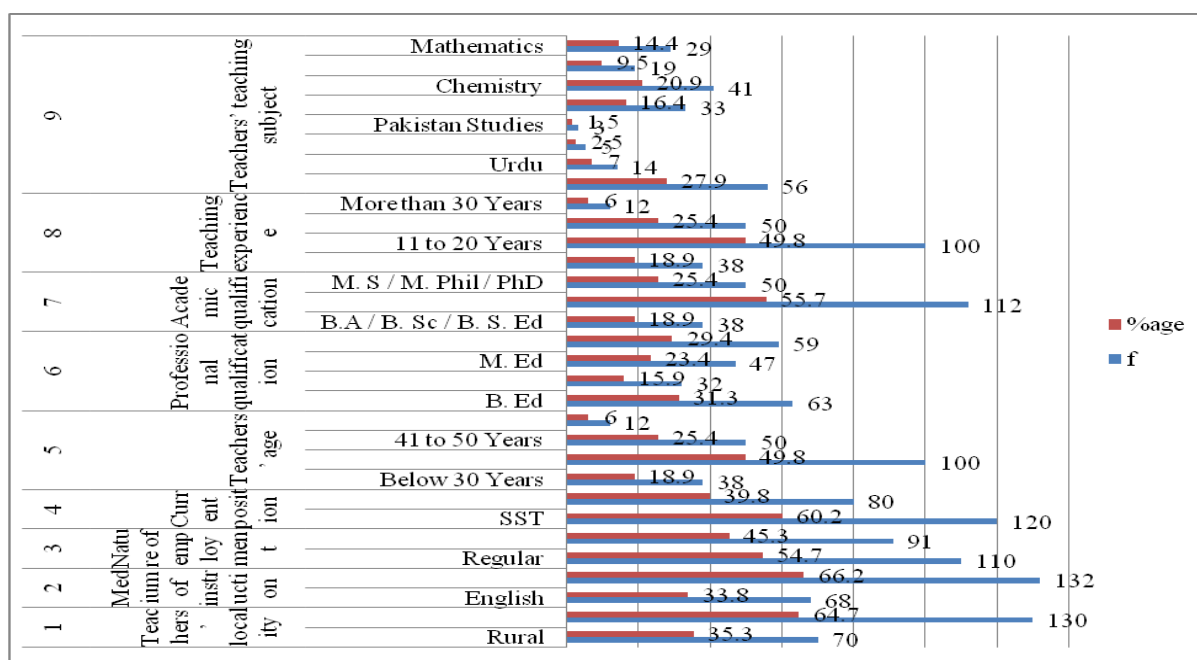
The population of the study consisted of 1,993 secondary schools teachers and 9,750 students of tenth grades enrolled in public sector secondary schools of District Kasur of Punjab. Literally speaking, District Kasur came into being in 1,976 where 88% inhabitants speak first language; Punjabi of 6.2% of population, remaining spoke different languages; Urdu, English, Punjabi etc. Currently people living in rural areas speak Urdu with the ratio of 7.3% and urban inhabitants make their communication in Urdu with the ratio of 2.6%. Researcher collected data from District Kasur because it consisted of 71.31% education scores, ratio of students enrollment 68.02%, students learning scores 51.60%, students retention rate 70% and ranked at twentieth position among thirty sixth districts of Punjab-Pakistan (District Census Report of Kasur, 2000; Pakistan District Education

Rankings, 2016). Private sector educational institutions following English medium instruction in schools whereas public sector schools are opt to follow medium of instructions; Urdu/English, massive source of confusion for students, parents, teachers and head teachers. The sample of the study consisted of two parts: **Part A**: 200 male teachers and **Part B**: 800 students randomly selected from 50 public secondary schools. Random sampling technique aid researchers in quick data collection, save money, energy, time and also assists researchers in completing research on time (Field, 2009; Gay et al., 2006; George & Mallery, 2010; Fraenkal et al., 2012). The detail of teachers sample is given below:

**Figure 1 Sample of Teachers with Demographic Data**



*Note:* Figure 1, demonstrates the sample of teachers working in rural and urban secondary schools. Researcher selected 4 teachers from each public sector schools where they are providing their services to enhance students social, educational and cognitive abilities.



**Figure 2 Sample of Students with Demographic Information**

*Note:* Figure 2, determine the sample of students randomly selected 800 students enrolled in public sector secondary schools. Researcher selected sample of participants applying Cochran (1977) and Yamane (1967) sample size calculating formula; already used in other researches (Bartlett et al., 2001; Dell et al., 2002).

#### Instrumentation

The researcher collected the data from the teachers by administering *Rose and Medway, (1981)* standardized scale having dichotomous items and *Wang (2021) Medium of Instruction scale* having 14-items. Locus of control scale consisted of 28-items. Half items; 14-constructed to measure teachers inner and half; 14-items constructed to gauge teachers outer locus of control, already used in other studies to measure teachers locus of control (Cook & Bastick, 2003; Toussi & Ghanizadeh, 2012). Cook and Bastick, (2003) made little bit changes in *Rose and Medway scale, (1981)* standardized questionnaire. The researcher have concerned only male secondary school teachers and made changes in items number 8, 14, 16, 17, 20, 21, 24 and 27 by deleting words “she” into “he”. The researcher obtained unfettered and unrestricted permission to use *Rose and Medway (1981)* scale from authors upon request. In Pakistani educational institutions, female teachers are less cooperative, provide less information and feel shy in providing their educational data for research purpose. That’s why the researcher selected male respondents only as they are more supportive and provide actual information to researchers. Prior to collect the data from teachers, the researcher ensured ethical considerations and pilot tested *Rose and Medway Scale, (1981)* to confirm Kuder-Richardson reliability statistics in MS Excel sheet; .842. The researcher reliability of medium of instruction scale was .801.

#### Data Collection Procedures

After ensuring instrument’s reliability, researcher administered instrument among teachers. For this purpose, researcher obtained list of schools from the office of Executive District Officer/District Education Authority of District Kasur, selected samples schools, make telephonically calls to head teachers, described study purpose and fix schedule for data collection. On scheduled day, researcher met with schools heads/teachers and parents, explained the purpose of the study and assured ethical consideration; informed consent, anonymity, fairness, self-respect, no physical and psychological harm in case of respondents volunteer participation (Bhutta, 2004; Beebe & Smith, 2008; Bondy & Mastromarino, 1997; Jegede, 2009). After collecting data from teachers, the researcher randomly selected 16 students from each 50 schools and obtained students educational gains with the consent of students, parents, teachers and head teachers. Collected data/forms were arranged in orders through assigned numbers and were entered in SPSS to ensure normality for applying smooth analysis. Normality distributed data ensure directions of parametric/non parametric tests (Ghasemi & Zahediasl, 2012; Osborne, 2012; Singh & Masuku, 2014).

**Table 1 Shapiro-Wilk’s Tests of Normality on Teachers Demographic Data**

Sr.	Name of variables	Shapiro-Wilk’s test			Skewness	Kurtosis
		Statistic	df	p		
1	Locality	.604	200	.134	5.678	6.619
2	Medium of instruction	.597	200	.297	2.075	6.972
3	Nature of employment	.633	200	.921	4.359	3.232
4	Current position	.621	200	.309	-1.074	5.154
5	Age	.854	200	.066	3.823	2.619
6	Professional qualification	.821	200	.816	1.230	.972
7	Academic qualification	.795	200	.621	-5.105	6.481
8	Teaching experience	.854	200	.519	1.177	6.398
9	Subject	.850	200	.603	-4.020	1.481

#### a. Lilliefors Significance Correction

As presented in Table 1, Shapiro-Wilk’s test was applied to measure the normality of data on teachers demographic variables; locality, medium of instructions, nature of employment, current position, age, professional and academic qualification, teaching experience and teachers teaching subject. Shapiro-Wilk’s test is best fit that confirms the normality of the data,  $n < 2000$ ,  $p > .05$  (Elliott & Woodward, 2007; Field, 2009) with +3 to +10 value of Skewness and Kurtosis (Klines, 2015; Saunders et al., 2009). The researcher ensured normality of the data prior to applying smooth analysis. Data were analyzed applying regression to measure the effect of teachers locus of control on students educational gains.

#### Data Analysis and Interpretation

Data analysis and interpretation was performed to measure the effect of independent variables; teachers locus of control and medium of instructions on dependent variables; students educational gains through applying linear and multiple regression analysis techniques. Calculated value of Durbin-Watson test ranged between 0-4 ascertained that data is not auto-correlated (Montgomery et al., 2001; Cronk, 2012).

**Table 2 Effect of Teachers Locus of Control on Students Educational Gains**

Sr.	Model	B	SE	$\beta$	t	p
1	Students educational gains	111.515	12.668		8.803	.01
	Teachers LOC	14.265	.863	.761	16.529	.01

**Note:**  $R = .761^a$ ,  $R^2 = .580$ ; ( $F(1, 199) = 273.211$ ,  $p < .05^a$ ), Durbin-Watson, 1.166

As delineated in Table 2, results of simple linear regression show the formation of significant regression equation ( $F(1, 199) = 273.211$ ,  $p < .01$ ) comprising .580 value of  $R^2$  through 58% explained

variations were observed with standardized regression co-efficient ( $\beta = .761$ ). Ascertaining output of regression coefficient, interpretation of independent sample t-test declared that teachers locus of control was significant predictor on students educational gains,  $t(198) = 16.529$ ,  $p < .05$ . Students estimated achievements were equal to  $111.515+14.265$  scores whereas teachers locus of control was evaluated in terms of their control on students during classroom teaching. It is concluded that students achievement were increased by 14.265 gains for applying teachers locus of control.

**Table 3 Effect of Teachers Medium of Instructions on Students Educational Gains**

Sr.	Model	B	SE	$\beta$	t	p
1	Students educational gains	192.072	17.043		11.270	.01
	Teachers medium of instructions	72.840	9.864	.464	7.384	.01

**Note:**  $R = .464^a$ ,  $R^2 = .215$ ; ( $F(1, 199) = 54.526$ ,  $p < .05^a$ ), *Durbin-Watson*, 1.257

As presented in Table 3, results of linear regression with construction of significant equation ( $F(1, 199) = 54.526$ ,  $p < .05$ ) having .215 value of  $R^2$  with 21.50% variations were observed with of standardized regression co-efficient ( $\beta = .464$ ). Establishing results of regression co-efficient, output of independent sample t-test delineated that teachers medium of instructions was significant predictor on students educational gains,  $t(198) = 7.384$ ,  $p < .05$ . Students educational gains were equal to  $192.072+72.840$  scores whereas teachers mediums of instructions were measured through imparting instructions in Urdu and English language. It is concluded that students educational gains were increased 72.80 scores by applying single medium of instruction in classrooms.

**Table 4 Effect of Teachers Demographic Data on Students Educational Gains**

Sr.	Variables	B	SE	$\beta$	t	p
1	Students educational gains	85.346	12.514		6.820	.001
2	Locality	-3.604	4.767	-.023	-.756	.451
3	Nature of employment	16.719	5.884	.112	2.842	.005
4	Current position	7.446	6.001	.049	1.241	.216
5	Professional qualification	3.533	1.847	.058	1.913	.057
6	Academic qualification	-1.713	5.610	-.015	-.305	.760
7	Teaching experience	75.338	4.711	.816	15.991	.001
8	Subject	.297	.853	.010	.349	.728

**Note:**  $R = .919^a$ ,  $R^2 = .844$ ; ( $F(2, 198) = 129.538$ ,  $p < .05^a$ ), *Durbin-Watson*; 1.533

As revealed in Table 4, results of multiple linear regression construction of significant regression equation ( $F(8, 192) = 129.538$ ,  $p < .01$ ) with .844 value of  $R^2$  means 84.40% increased in variance were observed with standardized regression co-efficient in terms of teachers locality ( $\beta = -.023$ ), nature of employment ( $\beta = .112$ ), current position ( $\beta = .049$ ), professional qualification ( $\beta = .058$ ), academic qualification ( $\beta = -.015$ ), teaching experience ( $\beta = .816$ ) and teaching subject ( $\beta = .010$ ). Expanding the results of regression co-efficient, output of independent sample test ascertained that teachers nature of employment,  $t(198) = 2.842$ ,  $p < .05$  and teachers teaching experience,  $t(198) = 15.991$ ,  $p < .05$  were significant predictors whereas, teachers locality,  $t(198) = -.756$ ,  $p > .05$ , current position,  $t(198) = 1.241$ ,  $p > .05$ , professional qualification,  $t(198) = 1.913$ ,  $p > .05$ , teachers academic qualification,  $t(198) = -.305$ ,  $p > .05$  and teaching subject,  $t(198) = 15.991$ ,  $p > .05$  were non-significant predictors on students educational gains. Students estimated educational gains were equal to  $85.346-3.604-16.738+16.719+7.446+3.533-1.713+75.338+.297$  scores where teachers locus of control was measured in account of teachers abilities based on teachers locality, nature of employment, current position, professional qualification, academic qualification, teaching experience and teachers teaching subject applied in classroom on students for students educational gains. It is concluded that students educational gains were enhanced 81.278 scores by applying teachers demographic attributes applied in classrooms.

## Discussion

Locus of control is a key psychological construct that is internationally used by researchers to examine the effect on students educational gains (Ross & Broh, 2000). Teachers locus of control is belief on their abilities that students success or failure is connected either with their hard work or students own struggle. Results of current study ascertain that teachers locus of control put significant affect on students educational gains that support with the results of study conducted by Hasan and Khalid (2014) that ascertained that locus of control significantly affects on students educational gains ( $F(1, 183) = 8.02$ ,  $p < .01$ ) and also consonance with the findings of the study conducted by Cetinkalp (2010) explore the effect of locus of control on students educational gains whose results declared that locus of control significantly affects on students educational gains ( $F(6, 581) = 4.29$ ,  $p < .01$ ) that are supported by the findings of the quantitative study conducted by Nongtdu and Bhutia (2017) whose findings revealed significant difference between teachers locus of control and students educational gains. There is desirability for better education, easy access on educational institutions to enhance, impart and for better earning. Urban teachers put bird eye on students abilities to impart their knowledge as per students demands. Results of present study also congruent with the findings of the study conducted by

Dinçyürek et al. (2012) which reveals no significant but positive weak relationship between teachers level of assertiveness and students achievement scores ( $r = .092^{**}$ ,  $n = 274$ ,  $p > .01$ ) and non-significant but weak association between teachers locus of control and students achievement scores ( $r = .057^{**}$ ,  $n = 274$ ,  $p > .05$ ) also supported with the results of the study conducted by Adu and Oshati (2014) that ascertained significant and weak positive association between study habits and students achievement scores ( $r = .048^{**}$ ,  $n = 598$ ,  $p < .01$ ), significant but weak negative relationship between teachers self-efficacy and students achievement scores ( $r = -.097^{**}$ ,  $n = 598$ ,  $p < .01$ ) and exists significant but moderate association between teachers locus of control and students achievement scores ( $r = -.582^{**}$ ,  $n = 598$ ,  $p < .01$ ). Results of present study slightly support by the findings of the study conducted by Kirkpatrick et al. (2008) in USA that reveals significant but moderate association between locus of control and students educational gains ( $r = .596^{**}$ ,  $n = 269$ ,  $p < .05$ ). Melekeowei (2015) articulated that teachers locus of control is pivotal element which acts as catalyst and promotes teachers potential in classroom towards acquiring target attainments. Likewise, results established significant and weak association between teachers locus of control and educational effectiveness ( $r = .089^{**}$ ,  $n = 506$ ,  $p < .05$ ) and also slightly support with the results of the conducted by (Abdullahi, 2000) which shows that teachers locus of control affect 1% on students educational gains with formation of significant regression equation ( $F(3, 1332) = 1.192$ ,  $p < .05$ ) and support with the result of current study and further supported with the findings of other studies (Al-Mulhim, 2021; Golparvar, 2014; Pedron et al., 2021).

Teachers working in educational institutions deliver lecture focusing pedagogical knowledge in diversity of languages for affective communication and students better educational gains. Teachers are nation builders of societies. They impart instructions among students applying diversity of languages. The findings of the present study also showed current picture of Pakistani teachers who are imparting instructions by means of Urdu, English and to some extent Punjabi language that have affected 21.50% on students educational gains with construction of significant regression ( $F(1, 199) = 54.526$ ,  $p < .05$ ). The results of current research congruent with the findings of the study conducted by Shakoor et al. (2016) in Pakistan on sample of 1,615 respondents of 10th grade reveals significant difference between medium of instructions and male and female students educational concerns,  $t(1613) = 3.32$ ,  $p < .05$ ; instructions imparted in Urdu among students were more achievers ( $M = 109.49$ ,  $SD = 11.80$ ), as compared to English medium students ( $M = 107.39$ ,  $SD = 13.53$ ). Yip et al. (2003) conducted study in China which reveals that medium of instruction have been remaining controversial dilemma after imposing language policy in 1998 and bound to communicate teachers in Chinese language whereas quarter of educational institutions were ordered to impart instructions in English among bright students. Results established that bilingual instructions; English and Chinese, imparted among students make them handicapped hence, they gain poor educational gains that support the results of present study. Results of the study contradict with the finding of the study conducted by Shaheen and Tariq (2016) that establish no significance difference between and after changing medium of instructions on students educational gains,  $t(47) = p > .05$ ; students obtained same scores before applying Urdu medium of instructions ( $M = 67.70$ ,  $SD = 5.54$ ) and after applying English medium instructions ( $M = 66.97$ ,  $SD = 6.81$ ). Moreover, the results of present study ascertained that teachers locality, nature of employment, current position, academic and professional qualification, teaching experience and teaching subject have affected 84.40% on students educational gains that support the result of other studies (Abdullahi, 2000; Crystal, 2003; Melekeowei, 2015) whose findings revealed that teachers demographic variables significantly affect on students educational gains.

## Conclusions

Locus of control is a key construct that put significant effects of individuals entire achievements. Teachers locus of control is his/her control over students educational achievements in classroom based on their behavioral and social characteristics. Focusing the worth of locus of control, present quantitative study was conducted to explore the effect of teachers locus of control and medium of instructions on rural and urban secondary schools students educational gains. Results of linear regression delineated that 42% teachers locus of control put less effect on students educational gains. It is one of the teachers neglected attributes that significantly affect on enhancing students educational gains. Teachers working in public sector secondary schools put their maximum potential to show their worth in education sectors. They spend their energies on students moral and educational development, remain in touch with teaching learning process and have better school infrastructure, established practical labs, well educated and surplus staff poured their bundle of information for the sake of students achievements applying English and Urdu medium of instructions; remain controversial in Pakistan since independence and still debatable. Teachers and students, since childhood both speak mother tongue and with the passage of time they are bound to communicate official languages. The result of present study established that teachers medium of instructions put 78.50% less effect on students educational gains due to controversial language. Imparting instructions in mother tongue; Urdu brings fluency during teaching learning process. Government implemented English as educational language since primary to Bachelor level in educational institutions. Pakistani secondary schools teachers lack in spoken English and seem confused during conveying knowledge. Likewise, secondary school teachers impart instruction in Urdu more clearly for

students understanding and educational gains but it is officially prohibited/restricted. Imparting instructions in other than indigenous language; Urdu enhances students declining level towards poor educational gains. Students become mind numbing and confuse due to new vocabulary, use of appropriate word at exact place. Furthermore, teachers teaching subjects, professional qualification, age, teaching experience, academic qualification, teachers locality, nature of employment and teachers current position put 15.60% less effect on students educational gains. Teachers have prescribed academic M. A./M. Sc with professional qualification; B. Ed. They are working on permanent basis having prescribed age for maturation that enables teachers keenness towards target accomplishment. Teachers have more than required teaching experience in relevant subject that work as catalyst towards students educational gains.

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