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EFFECTS OF TRANSPORT PROBLEM ON TEACHING EFFICIENCY OF PRIMARY SCHOOL FEMALE TEACHERS IN DISTRICT LAKKI MARWAT

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ABSTRACT- Education, health, regional facilities like leisure parks, production, and industrial sites, events such as culture, fairs, and sports are all badly affected and impossible to develop without a transport facility. It was a descriptive study. The population of the study consisted of (N = 810) respondents (GGPS teachers) in district Lakki Marwat in which (n=162, respondents) Primary School female teachers were taken as a sample of the study by applying the L.R.Gay sample size rule of thumb. Simple random, stratified and disproportionate sampling techniques were used. The key objective of the study was to know the effects of transport problems on the teaching efficiency of primary school female teachers in district Lakki Marwat. The data was delimited to Lakki Marwat only. Data were collected through a self-developed questionnaire of Likert type scale response of anchors with options "Most Affect (76-100%), More Affect (51-75%), Much Affect (26-50%), Less Affect (1-25%), and Never Affect (No Effect) carrying values 1, 2, 3, 4, 5. Results and conclusions were drawn by revealing that transport problems had bad effects on the teaching efficiency of Primary School female teachers in district Lakki Marwat. For its solution, some recommendations were suggested at the end.

Keywords: Teaching Efficiency, Transport Problem, Primary School, Female Teachers, Lakki Marwat.

I. INTRODUCTION

Most males strongly discourage their females to travel along in public transport because of harassment issues and social dishonor associated with public transport. Many reports are reported of harassment from male conductors, ticket checkers, drivers, and passengers and any misbehavior they encounter but remain to stay silent and endure harassment or try to avoid it by changing their travel patterns due to which their teaching interest and proficiency suffer a lot (Kurakina & Evtyukov, 2017). Female teachers living in rural areas and immature or awkward societies face greater challenges due to the limited availability of public transport (Mammen et al., 2015; Kravchenko & Oleshchenko, 2015). Poverty is reduced due to transport facility, well and better built-up roads, highways, railways, and even local tracks; the government officials and the officials of the education department can easily get access to every educational institution to assess, evaluate, examine, check and enhance educational set up through transportation facility (Pribyl et al., 2017; Evtiukov et al., 2017). Pakistan is among developing countries, and there are still so many social problems including lack of transportation due to which educational institutions, teachers, and students are suffering a lot due to which they show poor performance from a learning and educational point of view (Kuraksin, 2016). Many female teachers belong to far-flung areas are highly disturbed and psychologically restless or dissatisfied because of facing transport problems, fear of harassment, delay, and late duty, staying and dwelling in the houses of school owners that are extremely criticized by the culture, tradition, and the public or citizens (Kuraksin & Shemyakin, 2016). It is quite essential and mandatory for the government to ensure the better infrastructure of tracks, roads, railways, highways networks to improve the lives and standards of people by facilitating them so that the education system, health, and economic sectors may enhance, for which transportation is one of the key factors in developmental perspectives due to which all male and female teachers, as well as students, may able to easily avail their educational, teaching-learning, and other professional opportunities (Bernas et al., 2018). The current road system in Khyber Pakhtunkhwa, Pakistan is not satisfactory; there is always a flow of traffic and slow pace movement which badly influence people particularly students and teachers

during exam days and other important events or educational activities (Kuraksin, Shemyakin & Borychev, 2017; Brannolte, Pribyl & Silyanov, 2017).

The existing roads, highways, tracks, and other transport resources may be improved to ensure prosperity and development in Pakistan, for better and well-developed transport system along with praising infrastructure of roads, tracks, and highways are the most important factors to assist in economic, social, health and educational development in any country (Petrova, Chistyakov & Sorvacheva, 2017). Tracks and roads in backward rural and urban areas in Pakistan especially in Southern Khyber Pakhtunkhwa may be renewed in this globalized era (Yuan, Geng & Mao, 2018). Transportation services including tracks, roads, highways, railways, and airports should be the priority of the government to enhance and ensure the overall development such as health, education, and economy for the prosperity and satisfaction of the public (Whitfield, Meehan & Maizlish, 2017). Pakistan is the country where urban transport problem is on the pick; and people use low-cost public transport like wheel cart or wheelbarrow as a transport facility, in this regard the government overview the transport policy to avoid transportation problems of the public in which education, economy, and health sectors are badly influenced (Khreis, May & Nieuwenhuijsen, 2017). All problems about road transport safety as well as transportation for a female population may be seriously resolved (Gössling, 2016). Transport or road network plays a significant role in the educational and economic growth of a country; therefore, transport problems may be either totally resolved or reduced to a minimum level (Crayton & Meier, 2017).

II. STATEMENT OF THE PROBLEM

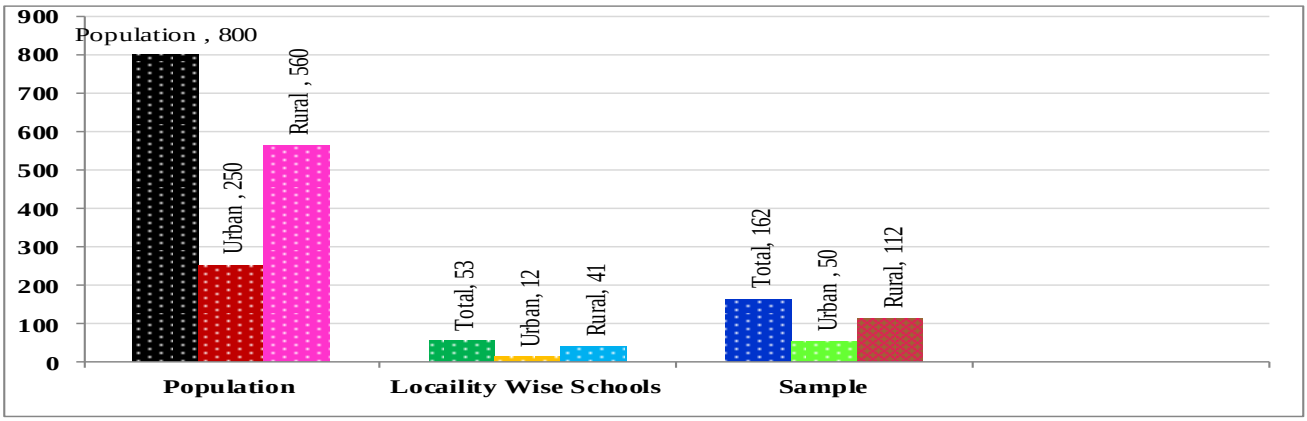
Female teachers are suffering from social problems in district Lakki Marwat especially transport problem badly influence their teaching efficiency. In this regard, the key reason behind the current study (research) was to know the effects of transport problem on teaching efficiency of Primary school female teachers in district Lakki Marwat.

III. RESEARCH METHODOLOGY

The current study was descriptive. Descriptive research aims to accurately and systematically describe a population, situation, or phenomenon via a survey by distributing questionnaires among the respondents particularly by focusing on day-to-day or situations or problems under the umbrella of the study. All-female Public Primary Schools in district Lakki Marwat were the population of the study. All Primary school female teachers in district Lakki Marwat were the target population of the study. The total numbers of (n = 162) respondents (Primary School female teachers) were taken as a sample of the study out of (N = 810) respondents in district Lakki Marwat by applying the L.R.Gay sample size rule of thumb. In this study, simple random, stratified and disproportionate sampling techniques were used. In the simple random sampling technique, everyone in the population has an equal opportunity for selection as a subject. In the stratified sampling technique, the population is divided into subgroups called strata and in the disproportionate sampling technique, the subgroup sample sizes are not equal in the population. Data was collected through a self-developed questionnaire of Likert type scale response of anchors with options “Most Affect (76-100%), More Affect (51-75%), Much Affect (26-50%), Less Affect (1-25%), and Never Affect (No Effect) carrying values 1, 2, 3, 4, 5. Pilot testing was ensured via validity and reliability. Cronbach’s Alpha was used to analyze and assess the internal consistency of the research instrument which was .964 that was the best as per general statistical rule of thumb that Cronbach's alpha of .70 and above is good .80 and above is better, and .90 and above is best. Data was statistically analyzed through SPSS by using One Way ANOVA and Linear Regression. One Way ANOVA was used for comparison among social, domestic, and economic problems while linear regression was used to know the effects of these problems on teaching efficiency of Primary school female teachers. Linear regression was preferred to individually examine and know the effects of each problem on the teaching efficiency of Primary school female teachers. The study was delimited to Primary School female teachers in district Lakki Marwat. The detail of population and sample is shown in the table below:

Table: Detail of Respondents

Locality	Primary Schools	Population	Sample
Urban	12	250	50
Rural	41	560	112
Total	53	810	162



Source: District Education Office (Female) Lakki Marwat

IV. RESEARCH OBJECTIVES OF THE STUDY

This research aimed to (1) examine transport problem (social problem) in district Lakki Marwat, (2) to know the effects of transport problem on teaching efficiency of Primary school female teachers in district Lakki Marwat, (3) to suggest possible solutions and recommendations regarding the transport problem in district Lakki Marwat.

V. RESEARCH QUESTIONS OF THE STUDY

The research questions were (1) is there transport problem for Primary school female teachers in district Lakki Marwat? and (2) what are the effects of transport problem on teaching efficiency of Primary school female teachers in district Lakki Marwat?

VI. HYPOTHESES OF THE STUDY

The research hypothesis of the study was (1) there were no effects of transport problem (social problem) on teaching efficiency of Primary school female teachers in district Lakki Marwat.

VII. RESEARCH RESULTS

L.R Gay Rule

Population Size	Sample Size
< 100	Entire Population
< 500	50%
< 1,500	20% (Sample falls in this category)
> 5,000	10%

Table 1 Showing Linear Regression Analysis of Transport Problem with the Teaching Efficiency of Primary School Female Teachers in District Lakki Marwat

Model Summary				ANOVAb					Coefficientsa				
									Unstandardized Coefficients		Standardized Coefficients		
R	R Square	Adjusted R Square	Std. Error of the Estimate	Sum of Squares	df	Mean Square	F	Sig.	B	Std. Error	Beta	t	Sig.
.243[a]	.059	.053	.38579	1.493	1	1.493	10.031	.002 a	1.961	.058		33.551	.000
				23.814	160	.149			.119	.037	.243	3.167	.002
				25.306	161								
Dependent Variable: Teachers' Teaching Efficiency Predictor/Independent Variable: Transport Problem (Social Problem) Respondents: Girls Primary School Teachers.													

*P<.05

R2/Coefficient of Determination Cutoff		
R-Squared values or Coefficient of Determination	Wording	Summary
R-Squared value < 0.3	No effect size	****
R-Squared value 0.3 < R < 0.5	Weak /Low effect size	***
R-Squared value 0.5 < R < 0.7	Moderate effect size	***
R-Squared value > 0.7	Strong effect size	No effect
Source: Moore, D.S. Notz, W.I., & Flinger, M.A. (2013). The basic practice of statistics (6th ed). New York, NY: W.H. Freeman and Company. Page (138).		

P-Value Cutoff		
P-value	Wording	Summary
< 0.0001	Extremely significant	****
0.0001 to 0.001	Extremely significant	***
0.0001 to 0.001	Extremely significant	***
0.001 to 0.01	Very significant	**
0.01 to 0.05	Significant	*
≥ 0.05	Not significant	Not Significant)

Table 1 indicates that a simple linear regression was calculated to predict "Teaching Efficiency" based on "Transport Problem (Social Problem)". In the above table the value of (R = .243a) showing multiple correlation; & (R Square or coefficient of determination = .059) with total variation of 5.9% in the dependent variable. The value of adjusted R2 is .053 which shows the goodness of fit for the regression model and moderate effect size. The regression equation (F (1, 160) = 10.031 is the degree of freedom; (Mean Square = 1.493, .149 with Sig. = .002a). Furthermore, in the unstandardized coefficient column, (B = 1.961, .119; Std. Error = .058, .037) represent the slope of the line between the predictor variable and the dependent variable; whereas in standardized coefficient portion (Beta (β) score (Coefficient of Regression) = .243; which reveals the level of effectiveness of the independent variable on dependent variable which is quite strong, and is significant at .002 level of significance. As P =.002 < alpha value (0.05). Therefore, the null

hypothesis is statistically rejected, and there is a strong effect of transport Problems on the teaching efficiency of Primary School female teachers in district Lakki Marwat.

Table 2 showing Responses of the Respondents Regarding Effects of Transport Problem on Teaching Efficiency of Primary School Female Teachers in District Lakki Marwat

Statement The transport problem badly influences the teaching efficiency of female teachers in District Lakki Marwat.					
Responses of Respondents					Total
Most Affect (76-100%)	More Affect (51-75%)	Much Affect (26-50%)	Less Affect (1-25 %)	Never Affect	162
133 (82.1%)	12 (7.4%)	11(6.8%)	4(2.5%)	2 (1.2%)	100%

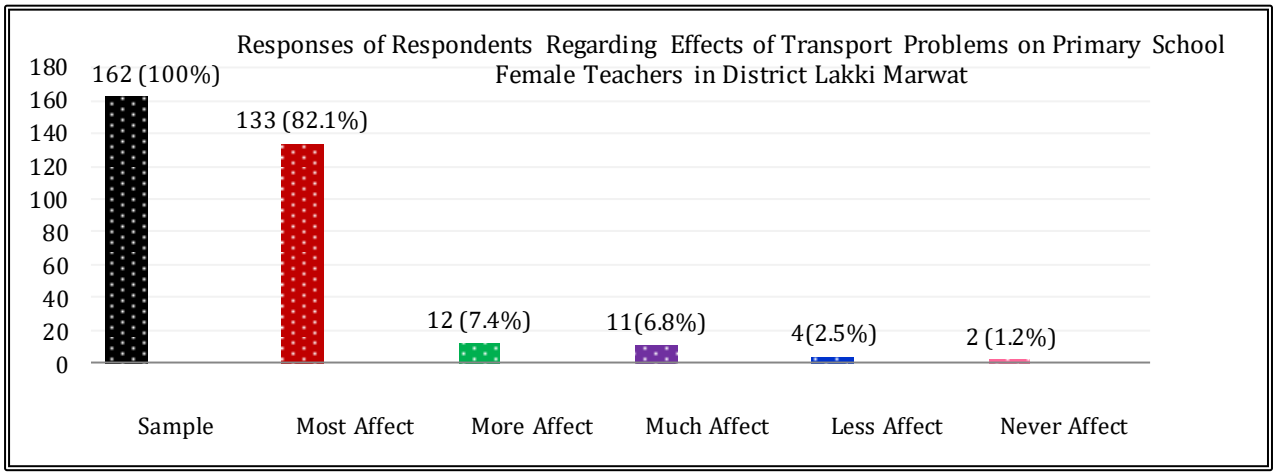


Fig: Effects of Transport Problem on Teaching Efficiency of Primary School Female Teachers in Lakki Marwat

Table 2 along with the graph indicates that Out of (n = 162 (100%), respondents), (n = 133 (82.1%) respondents showed their responses with most affect, 12 (7.4%) more affect, 11(6.8%) much affect, 4(2.5%) less affect, and 2 (1.2%) never affect regarding the statement that Transport problem badly influences the teaching efficiency of female teachers in District Lakki Marwat.

VIII. RESEARCH DISCUSSION

The results of the current study indicated that Primary School female teachers showed unsatisfactory teaching efficiency due to lack of transport facilities in district Lakki Marwat. Road conditions in different circles in district Lakki Marwat were unable to use even there were found no pedestrian facilities for Primary School female teachers. The roads to Primary schools in different circles such as Landiwah, Tajazai, Titter Khel, Tajori, Gandi Khan Khel, Serai Naurang, and Lakki Marwat were totally muddy and not suitable or useless for vehicle. Most of the Primary School female teachers tried to avail wheel cart or horse carriage due to which their teaching efficiency affected baldy; and in such circumstances, Primary School female teachers were found psychologically afraid to secure their self-esteem and honor, and face taunting attitude of their families as well as society in district Lakki Marwat. According to the previous study by (Mindell, Cohen & Shelton, 2014) that it is the need of the day to build better safe roads, highways, railways, tracks, short and long transportation; and the government may gravely take a step to root out corruption in the traffic department so that educational, social, and economic development can be ensured. In another study (Cohen, Boniface & Watkins, 2014) revealed that no development in education, health, economy, and society is possible if there is a problem of transportation because transport is directly related to education, economy, society, and health.

According to the previous study by (Zhang, Chen & Tu, 2013), it is the responsibility of the government of the time to bring betterment to the existing infrastructure of roads and highways in Pakistan mostly by focusing on the backward regions in Pakistan so that public prosperity, economic development, and educational improvement may be ensured with easy access and approach towards any educational institution via better roads and highways, etc.

(Adeel, Yeh & Zhang, 2014) revealed that female teachers feel unsafe while traveling by public transport. Public transport has become the main barrier for female teachers to work confidently in educational activities and affecting the ability to engage in independent activities and all these problems badly influenced the teaching proficiency of female teachers. (Dunckel-Graglia, 2013) described that the government of the time needs to ensure efforts regarding transport facilities for female teachers by properly developing transport policies to address female teachers' transport needs to avoid their fear of harassment, crime, and sexual assault while attending their schools either by bus or wagon; and even walking to bus or wagon stop, for their teaching proficiencies are negative influences due to the fear of poor and unsafe transportation.

IX. RESEARCH CONCLUSIONS

The researcher concluded in the light of the results and discussion by keeping in view the objectives of the current study that there was transport problem for Primary School female teachers in district Lakki Marwat due to which their teaching efficiency affected badly. The researcher further concluded that no serious measures were taken in district Lakki Marwat from transport point of view. District Lakki Marwat was found completely deprived of transport facility due to which the citizens of district Lakki Marwat were badly effected from all aspects like health, business, society and so on especially female teachers who were totally unsecure due to lack of transport facility in district Lakki Marwat. The researcher further revealed that most of female teachers showed poor teaching performance and lack of interest in their teaching due to lack of transport facility for them due to which they were psychologically and mentally tired and dissatisfied because they face the problem of useless, sinuous, muddy, sandy, and thorny tracks as well as roads for miles and miles distance to their schools. The researcher investigated that 82.1% of the respondents were of the views that transport problem transport problem badly affected their teaching efficiency at Primary school level in district Lakki Marwat.

X. RESEARCH SUGGESTIONS

The following recommendations were drawn by keeping in view the objectives and results of the study:

1. The government may improve public transport services in district Lakki Marwat.
2. The government may assist the education department in the provision of easy and comfortable access to public transport in areas where there are schools and other educational institutions.
3. The policymakers may ensure the solution of the transport problem by getting data of the whole district Lakki Marwat to know and prob the problem of transportation easily and then to resolve it.
4. The competent authority of district Lakki Marwat like Deputy Commissioner (DC) along with other officials and political leaders of the area may take mandatory and necessary action and steps to solve transport problem in district Lakki Marwat, particularly by focusing on school and other educational institutions where teachers face transport challenges in district Lakki Marwat.
5. The education department may demand transport facilities from the government for school teachers especially female teachers so that their teaching efficiency and performance may not suffer at all.

REFERENCES

1. Bernas, M., Płaczek, B., Korski, W., Loska, P., Smyła, J., & Szymała, P. (2018). A survey and comparison of low-cost sensing technologies for road traffic monitoring. (Switzerland); **Sensors**, 18(10), 32-43.
2. Brannolte, U., Pribyl, P., & Silyanov, V. (2017). Simulation of regional mortality rate in road accidents. **Transportation Research Procedia**, 20, 112-124.
3. Cohen, J.M., Boniface, S., & Watkins, S. (2014). Health implications of transport planning, development, and operations. **J Transp Health**, 1, 63-72.
4. Crayton, T. J., & Meier, B. M. (2017). Autonomous vehicles: developing a public health research agenda to frame the future of transportation policy. **J Transp Health**, 6, 245-252.
5. Evtiukov, S., Kurakina, E., Lukinskiy, V., & Ushakov, A. (2017). Methods of accident reconstruction and investigation gave the parameters of vehicle condition and road environment. **Transportation Research Procedia**, 185-192.
6. Gössling, S. (2016). Urban transport justice. **J Transp Geogr**, 54, 1-9.
7. Huvarinen, Y., Svatkova, E., Oleshchenko, E., & Pushchina, S. (2017). Road safety audit. **Transportation Research Procedia**, 20, 236-241.
8. Khreis, H., May, A.D., & Nieuwenhuijsen., M. J. (2017). Health impacts of urban transport policy measures: a guidance note for practice. **J Transp Health**, 6, 209-227.

9. Kravchenko, P.A. (2013). Organization and safety of traffic in large cities. **Science and Technology in the Road Industry**, 1(64), 1-2.
10. Kravchenko, P.A., & Oleshchenko, Y. M. (2015). Full observability concept for traffic safety systems. **Russian Federation Transport, Special edition**: 25-31.
11. Kurakina, E., & Evtyukov, S. (2017). Improvement of the system for accounting of parameters during the construction of motor roads. **Architecture and Engineering**, 2(3), 34-42.
12. Kurakina, E.V. (2018). On the effectiveness of studies carried out at places of road traffic accident concentration. **Bulletin of Civil Engineers**, 2(67), 231-237.
13. Kuraksin, A. A. (2016). Methods of assessing the adequacy of transport dynamic multimodal models at the mesolevel [Metodika otsenki adekvatnosti transportnykh dinamicheskikh multimodalnykh modeley mezourovnya]. **World of Transport and Technological Machinery**, 2(53), 77-80.
14. Kuraksin, A. A., & Shemyakin, A. V. (2016). On the issue of technology for the construction of the mesoscopic model for the transport system of a large city [K voprosu o texnologii postroeniya mezoskopicheskoj modeli transportnoj sistemy krupnogo goroda]. **Bulletin of Transport Information**, 5(251), 100-103.
15. Kuraksin, A., Shemyakin, A., & Borychev, S., (2017). Meso-DTA traffic model technology for evaluating effectiveness and quality of the organization of traffic in large cities. **Transportation Research Procedia**, 20, 378-383.
16. Mindell, J. S., Cohen, D. L., & Shelton, N. J. (2014). Transport and clinical practice. **J Transp Health**, 1, 73-80.
17. Petrova, T., Chistyakov, E., & Sorvacheva, Yu. (2017). Assessment of the operational safety of roads and transport structures with the use of the fracture mechanics methods. **Transportation Research Procedia**, 20, 505-510.
18. Pribyl, P., Novikov, A., Vasileva, V., & Katunin, A. (2017). ITS control of highways capacity. **Transportation Research Procedia**, 20, 468-473.
19. Whitfield, G. P., Meehan, L. A., & Maizlish, N. (2017). The integrated transport and health impact modeling tool in Nashville, Tennessee, USA: implementation steps and lessons learned. **J Transp Health**, 5, 172-81.
20. Yakimov, M. (2017). Optimal models are used to provide urban transport systems efficiency and safety. **Transportation Research Procedia**, 20, 702-708.
21. Yuan, D., Geng, Z., & Mao, Y. (2018). A study on comprehensive traffic capacity of urban roads. In: Cao BY. (eds) Fuzzy information and engineering and decision. Advances in intelligent systems and computing. **Springer**, 646, 343-355.
22. Zhang, J., Chen, X., & Tu, Y. (2013). Environmental and traffic effects on incident frequency occurred on urban expressways. Intelligent and Integrated Sustainable Multimodal Transportation Systems Proceedings from the 13th COTA International Conference of Transportation Professionals, 1366-1378.