

NEW HORIZONS

HEC RECOGNIZED JOURNAL

Research Journal
Faculty of
Social Sciences

#28



Greenwich University

PAKISTAN - MAURITIUS

www.greenwich.edu.pk

VOL.14, NO.2, July 2020
ISSUE DOI: 10.29270/NH.2020.14.2(28)

ISSN 1992-4399
e-ISSN 2521-2559

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ISSN: 1992-4399 (Print)
ISSN: 2521-2559 (Online)

Frequency: 2 Issues per year

New Horizons (NH) is an international peer-reviewed, academic research journal in the multidisciplinary field of social sciences, publishing innovative, and impactful research. The biannual *New Horizons (NH)* research journal is administrated and published by the Faculty of Social Sciences, Greenwich University, Karachi, Pakistan.

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New Horizons is a peer-reviewed journal and papers are published on a merit-based after the 'double-blind' peer reviews process. We publish both online and printed versions of research papers in all fields of social sciences e.g., education, International Relations, Political Science, Social Economics, sociology, geography, psychology, literature and linguistics, media, and communication studies. This issue of research journal New Horizons consists of articles on different aspects of social science research. We encourage the highest level of intellectual excellence. New Horizons understands the importance of social science study for the betterment of the society and a better understanding of human behavior, that's why it is providing a platform for the researchers to publish and share their valuable information in any field of social sciences.

As I write this editorial, I am looking at the table of contents for the Volume 14, Issue 2 of the journal which includes a wide range of articles on different disciplines covering Technological Pedagogical and Content Knowledge on their Classroom Teaching, Influence of Employees' Commitment on Organizational Performance, Innovativeness on Operational Performance of Government Level Firms (GLCs), Internal Branding In Higher Education, preventing and countering violent extremism and many more captivating articles that I am sure will delight you all. This diverse set of articles covering varied topics is a great strength to retain and enthrall scholarly readership and is something that New Horizons is committed to promoting in the research field.

With this note, I once again thank the New Horizons editorial board, reviewers, and authors for their unparalleled support and cooperation.

Sincerely,

Dr. S. Khurram K. Alwi
Editor
New Horizons

July 2020

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RELATIONSHIP BETWEEN MOTHER'S EDUCATION AND STUDENT'S ACADEMIC ACHIEVEMENT AT UNIVERSITY LEVEL

Dr. Kamal Haider* and Anila Jamshed**

ABSTRACT

The purpose of this study was to investigate relationship between mothers' education and students' academic achievement at university level. On existing literature, it was assumed that mother education would have significant correlation with students' academic achievement at university level. This study based on correlational research design. All the university students from Karachi city are considering as population. The sample of this study consisted of 152 university students (including 62 male and 90 female students). Further stratification represents 72 from public and 80 from private universities. Data was collected from both public and private universities located in city of Karachi-Pakistan. Descriptive and correlational statistic was applied to measure relationship between mothers' education and academic achievement of students at university level. Findings of this study showed that mother education has positive significant correlation with academic achievement of university students.

Keywords: *Mother's Education, Students' Academic Achievement and University Level.*

INTRODUCTION

In era of globalization and revolution, education is measured as a vital and most powerful variable for human development and betterment. According to Battle and Lewis in 2002 education is accepted as fundamental element for human wealth which is directly connected with a human success and better standard of living. In modern age education is one of the core factors which makes difference among developed and underdeveloped countries or societies. For economic and social growth of any country, stake

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holders including teachers and parents are continuously making efforts to highlight the role of education and increasing literacy rate. In 2002, Edwards indicated that teachers, guardians / parents, and lawmakers are consistently making arrangement for state funded education framework which will ultimately results in improved youth with a quality education.

Whereas, academic performance of youth is considered as one of the universal vital themes. Stakeholder always showed keen interest to investigate the pro-active and protective elements behind academic performance of students. Mann (1985) stated that the analysis of such factors can be traced back in seventeenth century. According to Crosnoe, Johnson and Elder (2004) these elements might be named as student's factors, family factors, scholarly institutions factors and friend factors etc. Among family factors parental education is considered as one of the prominent factors which has significant relationship with students' academic achievement.

Engin and Demir (2009) has expressed that youngsters with educated parents /guardians are in an ideal situation as they grasp their educational needs. Parent-child relationship demonstrates significant solidity over time. Youngsters' associations with their mothers normally influence their improvement more than father-child connection. Wintre and Yaffe (2000) find out that fathers' education and mothers' education as a predictor for GPA of post-secondary education. They concluded that father's education was an interpreter for boys' GPA and mother's education was the predictor for girls' GPA at college education. Fantuzzo and Tighe (2000) and Trusty (2000) stated that the mothers are more likely helpful their youngsters in their academic works and take more interest than fathers. Similarly, mothers' education always seems to be a strong influenced variable on children academic achievement. Educated mother has more competencies to educate her offspring especially at higher level of education. Mother education is also correlated with positive childhood development and also serves as predictor of the higher academic achievement. In 2005 Krashen discussed that the learners whose mothers are educated show higher standardized scores than those whose mother were not educated.

Regarding higher education, universities play a vital role in education, research, technology and professional training for jobs and

development of personalities. Universities are being viewed as a key institute bringing social change. In the entire cycle of academic life, higher education is an important stage. In 1999 Butlin illustrated that the advanced education is a main factor for economic improvement and for accomplishment of individual financial needs. Role of mother education in academic achievement of students in school or colleges are widely highlighted but this theme among university students has been rarely addressed specially in Pakistani context. Unfortunately, Pakistan is among those countries where literacy rate is very low. According to the Pakistan Economic Survey 2019 literacy rate of women is hardly around 48% which far behind from other countries or societies. Role of mother education cannot be denied improving the quality of academic achievement of students. Few researchers had indirectly uncovered this prime theme but there is dire need for more. Among these researchers like Aslam and Kingdon (2010) have stated that more educated mothers have healthier children. Whereas, Andrabi, Das and Khwaja (2009) found that educated mothers in Pakistan spend more time in educational activities with their children at home. Considering the importance of the current theme and existing literature gap this study was initiated which will serve as an opening gate for future researchers. Beside that implications of this study will be fruitful for policy makers, parents, teachers, students and other concerns authorities.

RATIONALE OF STUDY

With an expansion in innovation, globalization and statistic, the role of advanced education is expanded as it's viewed as the fundamental contributor and will addition with an increase in the rate of economic improvement in a society. This fundamental contributor has not been given due weightage in Pakistani educational researches; this study would fill the gap. In 2002 Corwyn and Bradley exposed that mother's education had the steadiest direct effect on children's psychological outcomes. Moreover, learners' psychological aptitudes, grades, and educational achievement are firmly connected to their mother's level of education. This phenomenon (i.e. role of mother education in academic achievement of learner) has been well established but scientific evidences in a form of researches have been overlooked comparatively. The current research aimed to uncover this tie. Thirdly role of mother education in academic achievement among university students has been rarely highlighted across the societies, so this study would also fill out

literature gap on this prime theme. As the implication of such study would be multi-dimensional and long lasting so present study would be beneficial for different stakeholders.

LITERATURE REVIEW

Education is essential components for human development. No nation can achieve advancement without taking keen interest in educational growth. Education does not improve individuals' efficiency, but it also serves vital role in advancement of societies. In this progression many important variables serve as mediators and parental education is one of them. Universally it has been widely reported that educated parents provide better and supportive environment to their offspring. Specifically educated parents create academically enrich home environment which play vital role in academic performance of their children. A review by Campbell, et al., (1999) revealed that students who exposed higher parental educational levels tended to have higher standard score. Researchers like Zhan (2005), Yamamoto (2007) and Yamamoto and Holloway (2010) reported that less educated parents are not as much ready to perform active academic participation in their youngster's academic activities. Moreover, such parents feel uncomfortable with interacting teachers about their children's academic happenings. In one study parental educational attainment was reported to be positively related to reading and writing scores of the learner (Young & Smith, 1997). Researchers in past also reported that parental education was strongly correlated to students' academic achievement (Mullis & Jenkins, 1990; White, 1982; Gruca et al., 1989).

Among parental education mother's education is seen more effective than father education. Grolnick and Slowiaczek (1994) stated that fathers' education was not found to be a significant effect on parental academic involvement. Fathers are less likely to be involved in academic activities of children than mothers and generally mothers spend more quality time with their child at home. Researchers pointed that the leaners whose mothers were educated gets higher achievement positions than those who had less educated or illiterate mothers.

In 1989 Engelhard discovered that mother's education influencing academic performance in children of both boys and girls. Some other researchers also supported that mother education is positively correlated with youngster's educational attainment also (LeVine, 1980; Stevenson

& Baker, 1987; Youniss & Smollar, 1985). Muola in 2010 also cited that maternal education has both a direct and indirect effect on student educational attainment. Mothers' education related in a general sense with educational achievement. High educated mothers are more likely to consider the nature of the nearby schools while choosing an area in which to live. When their kids enter a school, educated mothers are additionally more likely to focus on the nature of their youngsters' education and may endeavor to guarantee that their kids are satisfactorily attended. By involvement in parent-teachers' meetings and volunteering at school, they may urge staff to take care of their youngsters' individual needs. Educated mothers are more involved in their children's academic achievement because they thought that they are enough capable in assisting their kids in their academic performance. Shumow et al. 2004 stated that parental involvement is positive co related with their educational status. Mothers who are increasingly qualified and have higher self-respect have children who get higher test scores (Baharudin & Luster, 1998, Eamon, 2005). Highly educated parents/guardians can likewise utilize their social wealth to develop their youngsters' improvement. In many investigations, mothers' education has been recognized as the single most grounded associate of youngsters' accomplishment in academic career (Daouli, Demoussis, & Giannakopoulos, 2010; Falaye & Adams, 2008; Englund, Luckner, Amy & Egeland, 2004; Houtenville & Conway, 2007).

Importance of youngsters' education in nation' life is not unfolded. There are many factors correlated with student's academic achievement at university level. It is need of the time to sort out the connected variables. Amongst all variable's mothers' education is one of the most concern factor related to youngster's academic achievement. Although lots of work have done on co related variables at primary and secondary level, but at higher level there is lack of research. It is expected that this research would help out in opening the door of thoughts, views and judgment for policy makers, students' teachers' parents and stakeholders, and it will set light to improve academic achievement at university level in future.

RESEARCH HYPOTHESIS

After detail literature review it was hypothesized that "there would be significant correlation between mother education and academic achievement of the university students".

METHOD

Participants

The study used correlational research design. The sample of the study was 152 students consisting 62 male and 90 female students from public and private sector universities located in Karachi-Pakistan. Data was collected from public and private universities. From public sector universities 72 students were selected and from private sector universities 80 students were selected through convenience sampling technique. In further stratification 110 students were from graduation level and 42 students were from master level. Age ranged of the participants was 20 years and above. Participants belonged from different socio-economic background.

Measures

This study aimed to explore relationship between mothers' education and academic achievement among university students. Status of Mother education was measured by using students' self-reported demographic information in which status of mother education was divided in eight categories such as illiterate, primary, matric, intermediate, graduate, masters, MPhil / PhD and any others. Student's academic achievement at university level was measured by their self-reported current academic result. Although student's past academic grades were also considered while calculating their academic achievement. Moreover, researcher also developed a questionnaire to evaluate the following demographic aspects of students. Demographic information was collected through variables of gender, age, qualification, year/semester and residence articles etc.

Procedure

For data collection participants were approached through their respective academic institute. Research objectives were explained to those authorities and all necessary measures were provided. After getting permission from authorities of these institutes, participants were approached through their class teacher. Data was collected in a group form. Initially rapport was established by introducing researcher and research objectives. Confidentiality was assured and participants were informed that their participation would be voluntarily, and they can withdraw at any stage of research. The estimated time of the administration of the measures was also told. Those participants who agreed to participate their formal written consent were also taken. Then

demographic form along with questionnaire was distributed. During administration of measures if any concern was raised from the participants, it was answered in objective way. Throughout data collection and administration phase medium of instruction was kept constant. It was assured that classroom in which data was collected should be free from interruption and noise. It was also assured that no presence of academic institute authority and class teacher. Participants were also informed that they can approach researcher in case of in query or feedback. At the end of data collection participants and authorities were thanked for their cooperation.

Scoring and statistical analysis

All those forms which were partially filled or unfilled were discarded. Scrutiny and scoring of all filled forms were done through pre- determined method set by the researcher. Descriptive statistics and Pearson Product Movement Correlation was applied to calculate results using SPSS (latest version).

RESULT

The results of present study reveal that the mother education is significantly co related with the academic achievement of students at university level.

Table 1: Frequencies and percentages of variables of students' data

Variables		F	%
Gender	Male	62	40.8
	Female	90	59.2
University Type	Government	72	47.4
	Private	80	52.6
Qualification	Graduation	110	72.4
	Masters	42	27.6
Mother education	Illiterate	17	11.2
	Primary	13	8.6
	Matric	18	11.8
	Inter	28	18.4
	Graduation	52	34.2
	Master	24	15.8

Table 2: Descriptive Statistics of Mother Education and Academic Achievement

Variables	N	M	SD
Mother Education	152	11.14	4.907
Academic Achievement	152	70.13	6.880

Table 3: Correlation between Mother Education and Academic Achievement

Variables	Academic Achievement	
Mother Education	r	344
	Sig.	000
	N	152

DISCUSSION

The findings of this study (table 3) endorsed existing literature and our hypotheses regarding significant correlation between mother education and student academic achievement at university level has been accepted ($p > .05$). Few possible reasons can be mentioned for our result pattern.

First possible reason for our result could be mother supplementary influence on youngsters. As family is considered one of the important influential factors in youngster life and mother is directly attached with their youngsters so the mother influence is certain. The environment provided by mother, impact the youngsters' every aspect of life. Educated mother can provide a suitable learning environment to their young learners which can improve their academic achievement at higher level. Mothers can, for instance, exchange their convictions and qualities to their youngsters and give warmth and fondness just as control, direction and discipline. They additionally can take part in instructive exercises with their kids and use assets to make a subjectively stimulating home condition. Consequently, the family has been recognized as a significant unique condition where parent-child communications can significantly affect youngster's improvement from earliest stages to puberty (Bronfenbrenner, 1986). Inside the family condition, the role of mother education 'educational attitudes and practices on youngsters' academic achievement has been very abundantly

recorded (Eccles et al., 1997; Brook-Gunn, Klebanov, & Duncan, 1996; Brook-Gunn & Duncan, 1997; Hoff, 2003; Eccles, 2005).

Second possible explanations for our result pattern might be problem solving ability of mother. Problem solving approach is another quality which may leads to words better academic results. Illiterate mothers are reported that generally they don't know about the educational difficulties in depth, so they can't able to help their young learners to solve their academic problems. While educated mothers are commonly, more equipped because their concepts are cleared regarding different issues of education. Educated mothers are reported to guide their youngsters to solve their academic problems which may ultimately boost their offspring academic achievement. In addition, it is usually observed that educated mothers have awareness about the existing system of education because they were the part of that. So, in return educated mothers may spend quality time with their youngsters which added their academic achievements.

Third possible reason for our result pattern is mother support. In 1994 Cutrona et.al. proposed that the youngsters who have suitable assistance of their parents are able to overcome academic problems. It is characteristically believed that educated mothers are so concern about the study of their youngsters. They i.e. educated mothers are more keen watch on their youngster's academic performance and put all their efforts to improve and keep up their academic achievement. Wintre, et al. (1995) discovered that the students who have supportive relationship with parents are less likely to depressed and show good academic performance.

Another possible reason for our result pattern is mother level of involvement. It is observed that an educated mother invests assets of energy and money on those exercises that produce academic achievement. This in return may enhance the capability of their youngsters especially in the field of education. Additionally, educated mothers understand more procedure of development of her kids, can realize the different psychological, emotional and physical changes in her youngster's life. She put all her energy to realize, understand and solve different problems of youngsters regarding their social and educational issues and help them in behavioral adjustment. A few significant hypothetical models have been created to clarify the complex pathways by which mothers can have a fundamentally gainful impact on their youngsters' academic achievement

and behavioral adjustment (Bronfenbrenner, 1979 and 1986). Other possible reason for our result pattern is that educated mother develops confidence in her youngsters in account of trust on them. Success begins in the state of mind so; trust on self can lead to the better academic achievement especially at higher level. Educated mother identifies potential and ability her youngsters and treat them according their needs. Confidence provided by mother would one even able to label oneself a “good” (Wigfield & Asher, 1984; Alexander & Entwisle, 1988; Schneider & Coleman, 1993).

CONCLUSION

On a basis of this study results, it can be concluded that mother education has positive and significant correlation with academic achievement of Pakistani university students. There is possibility that educated mother generally provide supportive environment, enhance confidence of youngsters and may understand all their social, psychological problems as compare to uneducated mothers. For our result pattern further studies are recommended which will help researchers to comprehend this theme in a broader way.

LIMITATIONS AND FUTURE DIRECTIONS

Present study has some limitation, if in future it will overcome, results of upcoming studies will be more fruitful for students, teachers, parents and stakeholders.

The first limitation of the study is that it is only focused on university students, primary and secondary levels were not included in this study. So, it is recommended that other students i.e. primary, secondary and higher secondary level should be included in future researches which will provide broaden picture on this theme. Second limitation of that in current study was incapable to address uneducated mothers. Extending it to uneducated mothers will open the new entrées of thoughts, views and judgments. Third limitation of the study was that only mother education was kept in view. It is suggested that father education should also count in future researches. By doing so results may provide better comprehension of relationship pattern between parental education and academic achievement of youngsters. Another limitation of this study was that academic performance of students was measured through self-reported method mention in questionnaire. Other parameters for measuring academic achievements of the university students should be included in

future studies. In last sample size of the current study was small; in future enlarging sample size and extending data collection to other cities of Pakistan will offer enhanced generalizability.

IMPLICATIONS

The analysis of the current study highlighted that level of mother education has significant influence on youngster's academic achievement at university level. Therefore, there is dire need that government and education policy makers should take measures to increase women's literacy rate. By giving positional importance to mother education will results in progressive, youth, society and ultimately better nation.

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TEACHER EDUCATORS' PERCEPTION OF TECHNOLOGICAL PEDAGOGICAL AND CONTENT KNOWLEDGE ON THEIR CLASSROOM TEACHING

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ABSTRACT

Students of present era, usually pronounced as “digital natives,” enter schools with an expectation that they will be engaged in an information and communication technology (ICT) enriched learning experience under some ICT-expert teachers. To meet students’ expectations, teachers strive to enhance their knowledge of modern technology and teaching techniques that demand integration of technology in classroom teaching. However, there is a consensus among all stakeholders, that also includes policymakers, that teachers (as well as teacher educators) in Pakistan are poorly prepared and thus cannot meet the expectations of the “digital natives.” This study is based on the pedagogical content knowledge (PCK) and technological pedagogical content knowledge (TPACK) framework, which measures educators’ knowledge of effective teaching with technology. The model attempts to describe the type of effective teaching knowledge required by educators to implement technology integration in learning environments. By adopting a quantitative approach, the study analyzed the impact of teacher educators’ knowledge of three elements of TPACK, that include, technological knowledge (TK), pedagogical knowledge (PK) and content knowledge (CK) on their classroom teaching. Using the survey method and two adopted questionnaires, data from all the teacher education institutes of public and private sector in Sindh, Pakistan were gathered. A total of 410 valid cases were used to analyze data through the SPSS and the

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Smart PLS. The findings of the study reveal that all three elements of TPACK have a significant positive impact on teacher educators' classroom teaching, this shows that it enhances students' achievement and the quality of education. The study recommends that administrators, policymakers and educational stakeholder, align teacher educators' continuing professional learning and development (CPLD) plans and curriculum of prospective teacher educators (pre-service teachers) with the specific factors that are known to improve a teacher's TPACK.

Keywords: *Teacher Educators, Technological Pedagogical Content Knowledge and Classroom Teaching.*

INTRODUCTION

Technological advances require an entirely different workforce and countries must rapidly adapt themselves to these contests, otherwise, they will be left behind in the comprehensive competition. Pakistan faces challenge in addressing the basic issues of education access and suggestively improving the excellence of education to compete in the global arena (National Education Policy Framework [NEPF], 2018). There is consent amongst all stakeholders, including educationists and policymakers that the competence level of teachers in Pakistan is substandard. All education policies of Pakistan have proven that the quality of teachers prepared through different modes remains questionable. A large number of less qualified and professionally unqualified teachers are in the workforce of all the provinces of Pakistan and this pool is increasing constantly (National Education Policy [NEP], 2017). Numerous studies conducted during the last decades have jagged out the key concerns of the teacher education in Pakistan. The literature has cited a diversity of features and generally recognized that the quality of teachers in Pakistan is extremely truncated due to inappropriate professional development. (NPSTs, 2009). Socio-economic growth of a country is based upon the masses and quality of its human resource. The mechanism of providing this basic element for viable development of the society is either elevated or suppressed with the efficiency of its education system in which teacher is a universally predictable key factor. Teacher educators in most of the teacher education institutions in Sindh, mainly in the affiliated colleges and universities that are having insufficient professionally qualified teachers in their respective field (Mishra & Koehler, 2006), are at risk (NEP, 2017).

The National Education Policy 2009 ascertains the quality of teachers

and acknowledges its importance as it is among the six basic pillars of overall quality of education, hence considers it the top primacy. Teacher education is a first and most important component for enlightening school effectiveness and student achievement (NEP, 2009). This is a technological modern globe where education reforms are necessary to improve teacher education programs and enhance teachers' knowledge and skills. Teacher education institutes in Pakistan, however are struggling to improve their programs as they have been facing innumerable challenges and lack of quality and professionally qualified teachers is one of them. In Sindh, many teacher educational institutes are engaged in preparing teachers at all levels. In Pakistan, like many other countries, teacher education institutions are the leading foundations for preparing teachers by their teachers' professional development courses. Qazi, Rawat and Thomas (2012) quoted Darling-Hammond who claimed that well prepared and qualified teachers generally perform better. Qazi et al. (2012) additionally established that Pakistani teacher education institutes do not meet the global standards and thus suggested preparing potential teachers for the certainties of classroom situations. The Government of Pakistan has been promoting the practice of teaching and learning through technologies in the schools, but technologies are not effectively used by the teachers in their classrooms (NEP, 2009). The strategic vision, as defined in the National Education Policy 2009, Pakistan identifies the need of teacher professional development in pedagogical aspects, communication, information and computer technology (ICT) skills at all levels (Munir & Khan, 2015). Zamir and Thomas (2019) recommended that teacher professional development in ICT needs instant attention for the development of teachers' competencies and confidence to integrate technologies in their teaching.

The moving objectives for learning, tied with changes in educational program noticeable quality and a more profound comprehension of educators' learning and thinking, have prompted new results about the effect of educators proficient advancement and how best to hone their aptitudes and information. What is important the most is that educators learn? Educators' professional advancement improves educators' information on instructing in the zone of content, teaching method and technological knowledge and at last it upgrades their teaching practices. Technology integration in education develops most important phenomenon in this new arena and this demands teachers to equip with the

technological knowledge for their better teaching practices in the classrooms. Technology integration in classroom teaching enables teachers to meet the expectations of students who are already much capable with digital devices (Prensky, 2001). In instructional planning, technology plays a vital role to engage learners in the learning process (Günüç & Kuzu, 2014). Technology integration is an important model of teaching effectively in the classrooms. Many researchers have been motivated to explore different features of such technology integration (Anderson & Maninger, 2007; Wood & Ashfield, 2008). Technology integration allows learners to learn more in less time and allows schools to emphasize on universal learning atmospheres. Moreover, it could be an effective teaching tool when the requirement is to involve all students in the learning process. The use of technology advocates that the introduction of digital technologies into classrooms unlocks new avenues not only for curriculum development and improvements but also for school improvements (Halverson & Collins, 2009).

Teachers are striving to equip themselves with technological understanding and skills to improve their students' learning for academic achievement. Where in recent time, researchers have focused on the integration of technology in normal classrooms, there a need for more research studies with a focus on the effective classroom teaching in teacher education institutes is seen as important (Minshew & Anderson, 2015). For better understanding of how to support teacher educators in their implementation of technology, their knowledge of technology, pedagogy, and content must be implicit, as well as their methods and perceived barriers to technology integration must be understood. For effective teaching and learning, there must be an integration of technology. However, effective and proficient integration of technology cannot be achieved unless the teachers begin to change their approaches positively towards the use of technology in their daily educational activities (Chukwuemeka & Iscioglu, 2016).

Programs of teacher education are allied to the improvement of teacher's competency that would qualify the teachers to encounter the necessities of their profession (Abanobi & Abanobi, 2017). Though, instructional technologies have placed a demand on the necessity for technical knowledge, Abanobi and Abanobi (2017) stresses the prerequisite for pre-service teacher development to be adaptable to the

various technological changes in teaching and learning. The teachers' role is producing the conducive environment for the students to learn. Teaching practices ought not to be executed through the routine strategies alone but instead educators should know about the capability of technologies to assist them with encouraging viably in the teaching. Classroom teaching is an unpredictable action that requires connecting various specific information. Koehler and Mishra (2009) perceived that educators practice their specialty in profoundly mind boggling, dynamic classroom settings that require them to change continually and advance their comprehension. Likewise, information from various spaces including information of learner's reasoning and learning, information on topic, and information on the utilization of instructing and learning are fundamental. The TPACK is a powerful tool of technology integration for classroom teaching (Koh et al., 2010; Koehler & Mishra, 2006). Educators' need to blend their study with technology for the higher achievement of students (Mishra & Koehler, 2006). Therefore, educators' should implement TPACK in their classrooms because it gives the huge establishment to technology integration, instructional methods and content information in teaching.

LITERATURE REVIEW

Technological Pedagogical and Content Knowledge (TPACK) was introduced for thought of educators' knowledge imperative for real integration of technology (Mishra & Koehler, 2006) which comprises of three overlying spaces of information including, Technological Knowledge, Pedagogical Knowledge and Content Knowledge. The idea of TPACK (Mishra & Koehler, 2006) is an extended work of Shulman's (1986) who gave a thought of (PCK). In his effort to express the information required by educators, Shulman recommended that educators' not just need to have content knowledge (CK) and general pedagogical knowledge (PK) about the methods of teaching and classroom management but they also need to possess an exceptional form of knowledge so that they can present content in a better way to their students. This form of knowledge, which is a blend of CK and PK and possibly other forms of knowledge such as the psychology of learners and so on, is known as PCK. With the development and proliferation of personal computers since the 1980s, it is clear now that teaching should be transformed by the ever more advanced (ICT). The lack of an inclusive theoretical framework to guide the formation of new practices associated with the integration of ICT is one of the key concerns that has been

identified (Mishra & Koehler, 2006). The insertion of technological knowledge (TK) transformed the original framework, and the new TPACK framework is possibly more comprehensive and influential in explaining what should be done in today's classrooms. Table 1 designates the domains of TPACK.

Table 1: Components of the TPACK Model

TPACK components	Definitions
Technology knowledge (TK):	It refers to “the knowledge about numerous technologies extending from standard technologies like: pencil, paper to progressive technologies such as Internet, interactive whiteboards” (Schmidt, Baran, Thompson, Mishra, Koehler, & Shin, 2009).
Content knowledge (CK):	It refers to the “teachers’ knowledge of subject matter which means the knowledge of concrete subject matter that is to be learnt or taught (Mishra and Koehler, 2009, p. 397).
Pedagogical knowledge (P):	It refers to “teachers’ deep knowledge of the procedures and practices or methods of teaching and learning” (Koehler & Mishra, 2009, p. 64).
Pedagogical content knowledge (PCK):	It is “the knowledge of the teaching process” (Shulman, 1986). It is blended with teachers’ knowledge and teaching skills.
Technological content knowledge (TCK):	It highlights that “how technology can produce new illustrations for specific content” (Koehler & Mishra, 2009, p. 125).
Technological pedagogical knowledge (TPK):	It describes “the ways technology can effect on the learning and teaching practices that are implemented during classroom instruction” (Koehler & Mishra, 2009).
Technological pedagogical content knowledge (TPACK):	It refers to “the knowledge, which is taught with good pedagogy by using appropriate technological tools” (Koehler & Mishra, 2006).

Adapted from: www.tpack.org

Educators have an instinctual comprehension of the mind perplexing interaction among the three fundamental parts of knowledge (CK, PK and TK) by encouraging teaching utilizing appropriate academic techniques and advanced technologies. Various researches add to the collection of information contiguous teaching and technologies mix impacts. Wang, Hsu, Campbell, Coster, and Longhurst (2014) examined technologies in

schools by utilizing a blended techniques approach that included surveys, focus groups and observations of the teachers teaching practices. The nature of an educator's abilities is a basic factor that influences learners' outcomes (Magidin de Kramer, Masters, O'Dwyer, Dash, & Russell, 2012). Additionally, research has shown that teachers frequently require an impulsion from the school system to take on new technological skills (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). Kirikcilar and Yildiz (2018) studied teachers' TPACK and found that while all three types of knowledge were used to construct learning activities for students, teachers resisted most with integrating pedagogy and technology. Thus it is a prerequisite for teachers to grow in their understanding of how the knowledge of subject matter and the knowledge of technology interact. This includes understanding when and how technology will enhance the learning concepts. As the teacher's TPACK is established, the practices in the classrooms will more likely reflect the knowledge of the teacher.

Teacher Educator's Technological Knowledge and Classroom Teaching

The technological knowledge (TK) means knowledge of technologies which range from standard technologies such as pencil, paper to more innovative technologies and digital devices (Schmidt, et al., 2009a). Additionally, it includes the skills which require operational technologies, knowledge of how to install and remove additional devices and software programs (Mishra & Koehler, 2006). Cox (2008) described that TK is the capability of using computer technology, operating programs and hardware, and generating the anticipated results, but the ability of learning and adjusting new technologies into classroom teaching matters. Empirical studies on TPACK have primarily concentrated on technological knowledge. A study by Koh, Chai, and Tsai (2010) expressed that TK's effect was moderate to high on teachers' classroom teaching in Singapore. The results additionally indicated that technology courses that straight forwardly instructed technology apparatuses alongside instructional method, raised teachers' technological and pedagogical knowledge with moderate to high impact sizes. Technology integration into classrooms is resulted from the recommendations of many scholars (Hussain, Nawaz, Zaman, Dahar & Akhtar, 2010). The use of technology in the classrooms assists students' learning and it inspires students to participate in learning process. Lee, Tsai, Chai and Koh (2014) found that teachers who are reinforced by an educational technology established higher levels of TPACK in contrast to teachers who were not. Corry and Stella (2018) and

Cubeles and Riu (2018) claimed that experienced teachers while using technology had higher measures of self-efficacy during their classroom teaching. Thus the literature encouraged to postulate the following hypothesis (H₁).

H₁: Teacher educators' technological knowledge has a significant positive impact on their classroom teaching.

Teacher Educator's Content and Pedagogical Knowledge and Classroom Teaching

Pedagogical knowledge (PK) involves the procedures, processes, practices, strategies, and methods of teaching and learning (Koehler & Mishra, 2009). Educational goals and values, general classroom management skills, lesson planning, teaching and assessment strategies, and methods are included in this knowledge (Koehler & Mishra, 2009). Maor (2017) investigated two courses in Australia using merged learning for instructors. He discovered the effect of TPACK on digital pedagogies. Results stated that development in each domain of TPACK leading to in classroom teaching practices. Numerous studies specified that technology could offer teachers with facilities for online communication, feedback, and learning collaboration. Technology can help teachers to make them convenient, search abundant teaching materials on the internet, manage the virtual assessment, and allow them to monitor students having autonomous learning. Moreover, the use of technology in pedagogy has been revealed successfully to initiate students' learning motivation and grasp longer thoughtfulness (Hilton, 2016). Mouza et al. (2014) observed the first and second component jointly in a study. They stated that when the technology course is integrated with other skills and courses, pre-service teachers get benefits of putting on learning straight into teaching with technology. Hofer and Grandgenett (2012) studied teaching programs of teachers, results specified development in teachers TPACK during the program, but the major improvements occurred when pre-service teachers were simultaneously enrolled in the educational technology course, where they discoursed, instructional planning and technology integration.

Shulman (1986) indicated that content knowledge is positioned in the minds of teachers, and in the content knowledge, teachers should not only enlighten the truths of the fields, but they should also illuminate why the truths are required and worthy to know. Conferring to Jaikaran-doe and Doe (2017), CK covers knowledge of the subject area. Voithofer and

Cheng (2019) found that primary and secondary teachers establish that content knowledge of a subject has a significant effect on teaching. Harris and Hofer (2011) utilized content teaching method showing strategy for the advancement of instructors TPACK Participants arranged a unit by fusing an assortment of learning exercises into the content and pedagogical knowledge, participants distinguished that expansion specific exercises and technologies allowed them viably in their classroom teaching. The literature concerning the effect of the effect of content and pedagogical knowledge supported in postulating the following hypotheses (H_2 and H_3).

H₂: Teacher educators' pedagogical knowledge has a significant positive impact on their classroom teaching.

H₃: Teacher educators' content knowledge has a significant positive impact on their classroom teaching

CONCEPTUAL FRAMEWORK

The following conceptual framework for the current study was developed with the help of literature review.

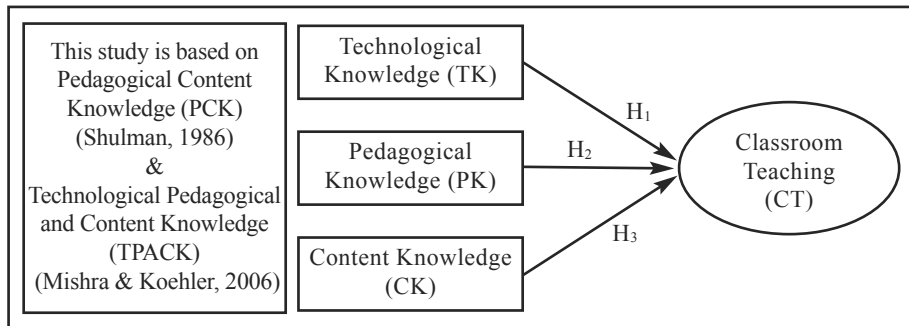


Figure 1. Conceptual Framework of the Study

The TPACK is a basic knowledge framework for effective combination of technology into the teaching process. (Figure 1) shows that teacher educators' technological knowledge (TK), pedagogical knowledge (PK) and content knowledge (CK) are independent variables and classroom teaching (CT) is a dependent variable. They illustrate that TK, PK and CK effects on teacher educators' CT which supported in postulating three hypotheses namely, H_1 , H_2 and H_3 .

METHODOLOGY

This study employed quantitative (Creswell, 2014) approach to find out the impact of teacher educators' Technological Pedagogical and Content Knowledge (TPACK) on their classroom teaching.

Sample and data collection

The survey method was used to collect data for the current research. All the teacher educators of public and private sector teacher educational institutes were selected as the sample. Literature such as (Schmidt et al., 2009; Mishra & Koehler, 2006; Maor, 2017) provisions the selection of teacher educators as respondents for the study in the context of teacher educators' professional knowledge and their effective classroom teaching. Therefore, 450 survey questionnaires were circulated among the 43 public and private sector teacher education institutes. Altogether 423 questionnaires were collected which indicate that the response rate was 94 percent, but 13 questionnaires were rejected because they had incomplete responses. A total of 410 valid cases were used for data analysis.

Survey instrument and Procedure

Two questionnaires, including Survey of Pre-service Teachers' Knowledge of Teaching and Technology (Schmidt et al., 2009) and Self-assessment instrument for Teacher Evaluation scale (SITE) (Akram & Zepeda, 2015) were used to gather data for the present study. Every scale was determined through a 5 point Likert scale in which 1 determined strongly disagreed and 5 strongly agreed responses. In the study three TPACK constructs were used as independent variable that included: (1) Teacher educators' technological knowledge (TK) = 05 items; (2) Teacher educators' pedagogical knowledge (PK) = 07 items; (3) Teacher educators' content knowledge (CK) = 06 items and one contract from SITE, including, Teacher educators' classroom teaching (CT) that comprised two sub-constructs: (1) Teacher educators' instructional planning skills (IPS) = 05 items; and (2) Teacher educators' assessment skills (AS) = 04 items (See Appendix A). Concerning ethical issues, the lead researcher informed the participants about the realization of multiple and consent rules, secrecy, volunteer participation and confidentiality. The formal consent was obtained from the participants. Prior permission was obtained to use both the research instruments. The data were analyzed through (SPSS) version. 22.0, and Smart PLS version 3. Smart PLS (Ringle, Wende, & Becker, 2015) was used to confirm the validity and reliability and hypothesis.

Respondents' Profile

Table 2 reports the demographic details of the participants of the current study. It shows that 52 percent female and 48 percent male teacher educators participated in this study out of which 78 percent were from the

public sector and 22 percent were from the private sector. Majority of the respondents were belonged to the age group of 36 to 45 years and 72 percent were married and 28 percent were unmarried. All the respondents of this study possessed Master's degree, 97 percent having professional degree and majority of them having more than 6 years' work experience as a teacher educator (Lecturer, Assistant Professor, Associate Professor and Professor). Demographic information also revealed that among the 410 respondents 118 had completed MS/M.Phil. degrees and 34 had earned PhD degrees.

Table 2: Demographic Information of the Respondents

Demographic variables (n= 410)		Frequency (f)	Percentage (%)
Gender	Female	214	52.2
	Male	196	47.8
	Total	410	100.0
Marital status	Married	297	72.4
	Unmarried	113	27.6
	Total	410	100.0
Age	25-35years	138	33.7
	36-45years	165	40.2
	46-55years	81	19.8
	Above than 55years	26	6.3
	Total	410	100.0
Experience	1-5years	81	19.8
	6-10years	125	30.5
	11-15years	90	22.0
	16-20years	64	15.6
	More than 20years	50	12.2
Total	410	100.0	
Institution	Public	319	77.8
	Private	91	22.2
	Total	410	100.0
Academic Qualification	Masters	253	61.7
	MS/M.Phil	118	28.8
	PhD	34	8.3
	Others	5	1.2
	Total	410	100.0
Professional Qualification	B.Ed	104	25.4
	M.Ed	295	72.0
	Others	11	2.7
	Total	410	100.0

DATA ANALYSIS AND RESULT

In the present study four constructs TK, PK, CK and CT with their 36 overall items were analyzed. As recommended by (Hair, Ringle & Sarstedt, 2013) the items with loadings above than 0.70 are acceptable, however the items with loadings between 0.40 and 0.70 can be retained on the basis of their acceptable validity and reliability. However, values below 0.40 will be removed. Thus TK=1, CK=6 and CT=2 items with loadings below the 0.70 were removed and all other items with their acceptable loadings value above than 0.70 were considered for further analysis (See Table 3).

The Measurement Model

To confirm adequate construct validity and reliability of the measurement model, the researchers assessed content validity, convergent validity and discriminant validity. The content validity of the present research was valid as factor loadings shown in Table 3 were greater than 0.7 (Hair, Hult, Ringle, & Sarstedt, 2013). Hair, Risher, Sarstedt and Ringle (2018) stated that Cronbach's alpha is the lower bound whereas the composite reliability (CR) is the upper bound for the internal consistency reliability of the research model. Table 4 indicates that the values of Cronbach's alpha are above the threshold value (minimum = 0.7) and the values of CR are above 0.7 but below 0.95. Thus where internal consistency is established there indicator redundancy is not present. Two measures in the current study confirmed that the group of items converged to measure the same concept or construct (Hair, Hult, Ringle, & Sarstedt 2013). Initially, as indicated in Table 3, all factors loadings were above 0.7, and later Table 4 indicates that the average variance extracted (AVE) was greater than 0.05 (Hair, Rische, Sarsted, & Ringle (2018). To authenticate that a set of items can extricate a variable from other variables, three results were analyzed. Firstly, as indicated in Table 3, all items strongly loaded against their respective construct when compared with cross loadings, secondly, as indicated in Table 5, all diagonal bold values of the constructs, which are square roots of their respective AVE values, are greater than the values present in their respective rows and columns (Fornell & Larcker, 1981), and thirdly, as highlighted in Table 6, all the values for Heterotrait-Monotrait (HTMT) ratios are < 0.85 which depicts that the constructs in the current research discriminate from each other (Hair, Rische, Sarsted, & Ringle (2018).

Table 3: Loadings and Cross Loadings

Construct items	CK	CT	PK	TK
Ck4	0.719	0.236	0.285	0.212
Ck5	0.757	0.322	0.292	0.277
Ck6	0.752	0.277	0.285	0.283
Ck10	0.742	0.247	0.354	0.267
Ck11	0.776	0.316	0.352	0.265
Ck12	0.730	0.255	0.389	0.294
CT_AS1	0.244	0.735	0.365	0.198
CT_AS2	0.243	0.748	0.386	0.206
CT_AS3	0.243	0.737	0.337	0.225
CT_AS4	0.285	0.722	0.359	0.287
CT_IPS1	0.272	0.736	0.401	0.223
CT_IPS2	0.302	0.736	0.404	0.189
CT_IPS3	0.280	0.729	0.387	0.282
CT_IPS5	0.297	0.772	0.439	0.184
CT_IPS6	0.302	0.716	0.371	0.263
Pk1	0.276	0.420	0.722	0.228
Pk2	0.327	0.325	0.754	0.240
Pk3	0.356	0.395	0.803	0.315
Pk4	0.326	0.389	0.835	0.253
Pk5	0.359	0.414	0.778	0.306
Pk6	0.337	0.419	0.719	0.254
Pk7	0.368	0.437	0.794	0.248
Tk2	0.214	0.250	0.235	0.745
Tk3	0.327	0.269	0.315	0.821
Tk4	0.275	0.267	0.294	0.851
Tk5	0.359	0.250	0.249	0.823
Tk6	0.227	0.169	0.258	0.703

Notes: TK= Technological Knowledge, PK=Pedagogical Knowledge, CK= Content Knowledge & CT= Classroom Teaching.

Table 4: Convergent Validity

Constructs	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Teacher Educators' Technological Knowledge (TK)	0.85	0.892	0.625
Teacher Educators' Pedagogical Knowledge (PK)	0.887	0.912	0.598
Teacher Educators' Content Knowledge (CK)	0.841	0.883	0.557
Teacher Educators' Classroom Teaching (CT)	0.895	0.915	0.543

Table 5: Correlations of Discriminant Validity (Fornell-Larcker Criterion)

Constructs	CK	CT	PK	TK
CK	0.746			
CT	0.374	0.737		
PK	0.435	0.522	0.773	
TK	0.358	0.310	0.342	0.790

Notes: TK= Technological Knowledge, PK=Pedagogical Knowledge, CK= Content Knowledge & CT= Classroom Teaching.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

	CK	CT	PK	TK
CK				
CT	0.424			
PK	0.505	0.579		
TK	0.419	0.350	0.393	

Notes: TK= Technological Knowledge, PK=Pedagogical Knowledge, CK= Content Knowledge & CT= Classroom Teaching.

The Structural Model and Hypotheses Testing

After confirming the construct validity and reliability, suggested hypotheses of the study were tested through Partial Least Squares- Structural Equation Modeling (PLS-SEM) in Smart PLS (Ringle et al., 2015). The PLS-SEM approach provides better estimates over other covariance-based methods (Hair et al., 2013). Table 7 directs that all three elements of TPACK, namely, technological knowledge (TK) ($t = 2.186, p = 0.029$), pedagogical knowledge (PK) ($t = 7.801, p < 0.001$) and content knowledge (CK) ($t = 3.393, p < 0.001$) have significant positive effect on teacher educators' classroom teaching (CT). Thus the outcomes of the current research support all three hypotheses, that is, H₁, H₂ and H₃ (Refer to Table 7).

Table 7: Hypothesis Testing

No	Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics	P-Values	f^2	Decision
H ₁	TK -> CT	0.113	0.116	0.052	2.185	0.029	0.015	Supported
H ₂	PK -> CT	0.417	0.415	0.053	7.801	0.000	0.194	Supported
H ₃	CK -> CT	0.151	0.156	0.045	3.393	0.001	0.025	Supported

Notes: TK= Technological Knowledge, PK=Pedagogical Knowledge, CK= Content Knowledge & CT= Classroom Teaching.

Predictive Relevance of the Model

The predictive relevance of the different domains in the structural model was analyzed through R square (Hair et al., 2013) and Stone-

Geisser's Cross-Validated Redundancy (Q-square) (Geisser, 1974). Table 8 specifies that 30 percent (R-Square = 0.309) of classroom teaching is explained by the three constructs of TPACK, namely, TK, PK and CK which is larger than the threshold value (R-square = 0.10) recommended by Falk and Miller (1992). Besides, during the blindfolding method in Smart PLS, the value of Q-square was 0.163 which is > 0 (Geisser, 1974) hence, it reveals that the predictive relevance, though small (Hair, Risher, Sarstedt & Ringle, 2018), of the PLS-path model was established. Cohen (1988) claims that 0.02, 0.15 and 0.35 are three threshold three values of effect size (f^2) that represent small, medium and large effect size respectively. Table 7 presents effect size (f^2) of three predictors of teacher educators' classroom teaching. The values of effect size reveal that teacher educators' pedagogical knowledge has a medium effect ($f^2 = 0.194$), their content knowledge has a small effect ($f^2 = 0.025$) and technological knowledge has negligible effect ($f^2 = 0.194$) on their classroom teaching.

Table 8: Predictive relevance of the construct

	R Square	Q Square
CT	0.309	0.163

CT = Classroom Teaching

DISCUSSION

The present study has shown that three variables of TPACK namely, teacher educators' technological knowledge (TK), teacher educators' pedagogical knowledge (PK) and teacher educators' content knowledge (CK) have a significant and positive effect on their classroom teaching. All three hypotheses tested (H_1 , H_2 & H_3) through the Smart PLS were supported which revealed that (1) teacher educators' technological knowledge has a significant positive impact on their classroom teaching; (2) teacher educators' pedagogical knowledge has a significant positive impact on their classroom teaching; and (3) teacher educators' content knowledge has a significant positive impact on their classroom teaching. The findings of this study are in accordance with numerous studies conducted in different parts of the world in a variety of contexts. Similar to the current research, the previous studies (Mishra & Koehler, 2006; Koehler & Mishra, 2009; Schmidt et al., 2009; Bruce & Chiu, 2015; Harris & Hofer, 2017; Kirikcilar & Yildiz, 2018; Patria, 2019; Hill & Uribe-Florez, 2019) revealed that technological knowledge, pedagogical knowledge and content knowledge highly impact on teachers' classroom teaching. However, none of these studies focused on the impact of

technological, pedagogical and content knowledge on the classroom teaching of teacher educators' in Sindh Pakistan, so the present study has made a significant contribution by filling this gap in the literature as well. The t-statistics shown in Table 7 reveal that among the three predictors, teacher educators' pedagogical knowledge has the highest significant positive effect ($t = 7.801$, $p = .001$) while their technological knowledge has the least significant positive effect ($t = 2.185$, $p = .029$) and their content knowledge has the medium significant positive effect ($t = 3.393$, $p = .001$) on teacher educators' teaching skills. However, the values of effect size shown in Table 7 reveal that out of three predictors, pedagogical knowledge has a significant positive yet a medium level effect ($f^2 = 0.194$), content knowledge has a significant but small effect ($f^2 = 0.025$) and technological knowledge has a negligible or no effect on teacher educators' classroom teaching ($f^2 = 0.015$). This encourages inferring that teacher educators in Sindh rely heavily on their content and pedagogical knowledge and they are unable to establish a connection between their technological knowledge and their classroom teaching. This result is consistent with Kirikcilar and Yildiz (2018) who found that while all three types of knowledge were used to construct learning activities for students, teachers resisted most with integrating pedagogy and technology. Zameer and Thomas (2019) found that the use of technology by teachers was associated with some external factors, including availability of equipment and supportive environment as well as applicability and relevance of the technology. They also found that the use of technology was associated with teachers' attitude toward technology and their computer competence. The Table 2 indicates that the majority of respondents of the current research were from public sector institutes (77.8 %). When contrasted with private sector teacher education institutes, the public sector teacher education institutes in Sindh lack technological facilities and thus teacher educators in public sector do not find the classroom environment conducive for teaching through technology. Most of the respondents of the current study were highly qualified (PhD = 8.3%, MS/MPhil = 28.8%, Master = 61.7%), majority of them were professionally qualified (MED = 72%, BE = 25.4%) and most of them had more than five (5) years of experience (80.3%). These demographic characteristics of respondents encourage them to rely heavily on their experience as well as content and pedagogical knowledge and ignore technological knowledge. They find pedagogical knowledge irrelevant to teach the course content. On the contrary, Cubeles and Riu (2018) claimed

that experienced teachers while using technology had higher measures of self-efficacy during their classroom teaching. This implies that if academically and professionally qualified experienced teachers educators of Sindh are provided with professional development opportunities to enhance their TPACK, their classroom teaching will be improved significantly and they will develop a high level of self-efficacy.

Implications of the research

This research has implications in many folds. Firstly, as the current study shows that TPACK has a significant impact on Teacher educators' classroom teaching, all teacher education institutes need to adopt and include TPACK in their teaching practices. Secondly, all the teacher educators need to be providing professional knowledge enhancement resources to help them teaching through technology integration. Thirdly, the findings of this study encourage inferring that administrators, policymakers and educational stakeholders can tailor individual development plans for teachers on explicit factors that are known to improve a teacher educators' TPACK. The administrators' role in implementing individual plans is to monitor and evaluate whether or not teacher educators acquiring necessary knowledge for teaching and technology integration and using technology effectively in their classroom practices. Finally, teacher education programs must not teach courses in isolation and should not teach technology as an *add-on* course rather integrate content, pedagogy and technology driven courses as proposed by Koehler and Mishra (2009). Teaching with technology has the potential to improve teacher educators' classroom teaching and classroom teaching in general therefore teacher education programs are recommended to introduce TPACK in their curriculum for prospective teachers and potential teacher educators.

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INFLUENCE OF EMPLOYEES' COMMITMENT ON ORGANIZATIONAL PERFORMANCE: A STUDY OF PUBLIC HEALTHCARE PROFESSIONALS IN PAKISTAN

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ABSTRACT

Organizations are serving instruments to attain a specific function and are seen as synchronization of intentions and goals with their resources. This paper intends to assess the impact of employees' organizational commitment on organizational performance. It is based on the self-identification of personnel towards the organization. Highly self-identified personnel can be more motivated towards their job responsibilities and the personnel observation related to the organization in terms of success, sustainability, and development which is considered as perceived organizational performance. Statistical Package for Social Sciences (SPSS) was applied to analyze the attitudinal data obtained from healthcare professional through the administration of questionnaires. Fifty (50) healthcare professionals of public hospitals were selected to answer the questionnaire. The regression and correlation results displayed the employees' organizational commitment as a significant predictor for organizational performance. The impact of organizational commitment on organizational performance has been assessed through the hypothesized relationship between them. This research found a strong correlation between organizational commitment and its factors and organizational performance and revealed a significant positive relationship between organizational commitment and organizational performance.

Keywords: *Organizational commitment, Organizational performance, Organizational Citizenship Behaviour, Perceived Organizational Support, Training and Development, Group Cohesiveness.*

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INTRODUCTION

In a continuously changing business environment, organizations need an innovative response to capture the existing market. Nowadays the challenges of improving performance in firms have intensified with the efforts to maintain the quality of the working environment. During last decade or so, the increasing competitive environment among firms, globalization, and increasing expectation level of citizens have led organizations to concentrate more on the quality (Akdere, 2006). All over the world, public organizations are facing difficulty to cater for the increasing needs of the citizens (Nusair, Ababneh, & Bae, 2012). Public healthcare organizations in Pakistan are also facing difficulties in this regard. Healthcare organizations are highly sensitive and are required to improve their performance and particularly the public sector health organizations in Pakistan. Healthcare organizations are services-based businesses that are directly related to the attitude of healthcare professionals especially in terms of motivation, commitment, and satisfaction as they deal with patients. Motivation positively impacts the commitment of employees resulting a better performance which leads to the patients' satisfaction and helps improve the performance of the organization. The main purpose of this study is to evaluate the hypothesized relationship between organizational commitment and organizational performance in publicly owned healthcare organizations in Karachi. Porter, Steers, and Boulian, (1974); Knoop (1995); Lum (1998); Al-Aameri (2000); McNeese-Smith & Nazarey (2001); and Altindis (2011) are few of many studies in literature which emphasized to measure variables like job satisfaction, employees' motivation, turnover intentions, employees' performance and organizational commitment. Numerous studies showed a positive relationship between perceived organizational performance and organizational commitment and in few studies some mediating variables are also considered to see their impacts like Bakiev (2013); Camilleri & Van der Heijden (2007); Mansour, Gara, & Gaha (2013).

In this study it is intended to cover different aspects for evaluating organizational commitment and performance in Public healthcare sector. That is to gauge and find out the very essence of organizational commitment. Determining whether healthcare attaches any importance to organizational commitment as an important variable in the Public health domain. This study will evaluate the impact of Training and Development, Group Cohesiveness, Perceived Organizational Support, and

Organizational Citizenship Behaviour on Organizational commitment and organizational performance. Organizational commitment is seen as a derivative to enhance quality at working conditions, patient satisfaction, allocation of resources which are reciprocated in better organizational performance. This study meant to provide recommendations to enhance organizational core competencies. Another objective is to improve the relationship between management and their workforce. This study shall provide guideline to management how to use various resources and how to prioritize funds to develop more relevant market skills. Organization visionary performance will benefit from these ideas. This study will further gauge whether the organizational commitment is an important variable for the public hospitals in Karachi, for achieving a high degree of performance. Hospitals that are rendering healthcare services in Karachi would get an overall clear picture of the industry standards by applying the organizational commitment notion and performance. The academia, researchers, operational managers and healthcare professionals, all will gain insight and benefits from this research.

Pakistan's public healthcare organizations are playing a pivotal role in the lives of the citizens especially for those who belong to the middle class and lower middle class and for those who are suffering from the chronic disease because, in most of the public healthcare organizations, healthcare professionals are having high expertise and experience in their fields. So, patients prefer to consult the doctors/practitioners at reasonable fees. In short public healthcare organizations are very important and the backbone of public services system because they help the majority of the society and especially the lower middle- and middle-class society. To get healthy Pakistan, these organizations must be more efficient to respond to the needs of patients in a highly satisfactory manner. Patients' satisfaction can be attained through those healthcare professionals who are highly committed to their workplace. Wang, Ma and Zhang (2014) discussed the problems related to motivating employees to work hard and to show that a high degree of organizational commitment is a concern of managers, but it deserves extra investigation. Effect of organizational commitment on organizational performance within the public healthcare organization of Pakistan is still not completely examined and evaluated. This study might help to address the issue to increase the understanding of the impact of organizational commitment on organizational performance in Pakistan's healthcare hospitals.

Role of Organizational Commitment on Performance in Public Healthcare Hospitals

It is the significant task of hospitals to deliver services to their patients to achieve long term success. For better performance, hospitals need to reflect good choices about services offered at low cost. So, to attain the above-mentioned objectives the role of commitment is indispensable. The importance of commitment can easily be assessed by realizing the fact that it is a behavior that gets the task completed. Commitment is much stronger than our intentions, willpower, or circumstances. Influences, passion, opportunities are worthless, and barriers are unbreakable without commitment (Maxwell, 1999). Highly committed professionals can be developed through organizational commitment which improves organizational efficiency. Organizational commitment also molds actions taken by leaders towards their workforce. Organizational commitment played a major role in the industrial revolution, prior to this, work was accomplished in an entrepreneurial environment. Initially, research was conducted to enhance workers' productivity. Then it has been realized that job satisfaction and job performance have a great deal with each other but later on, the relationship was not found as much strong as it has been considered, so later on researchers started to emphasize organizational commitment by identifying various aspects related to it. Research work of Meyer and Allen (1997) stimulated the interest to know: what are those elements that made some contribution in non-profit concerns go highly committed towards their task and how might this attitudinal concept of commitment be instilled in others. Through monitoring their employees' performance, employers can understand the level of organizational commitment towards the goals, motivation towards their job continuation and measure their desire to work hard.

In the business industry organizational performance plays one of the most significant role and it is considered as an ultimate dependent variable of interest which is mandatory for the growth and development of modern businesses in the competitive environment of industrial activity and consequently, various business auxiliaries such as marketing, operations, HR, and strategy are all evaluated by their employees' contribution towards organizational performance.

REVIEW OF LITERATURE

Organizational Commitment

Organizational commitment is taken as contrast to feelings and beliefs

that Managers perceive related to their workplace (Solinger, van Olffen, & Roe, 2008). Committed managers are very much concerned and always ready to serve their organizations and do not prefer to quit (Mathieu & Zajac, 1990). Committed managers are motivated to accomplish organizational objectives and ready to persuade their subordinates. In today's world, we are facing a fast-changing environment with critical and unpredictable global competition. To function at an optimum level, healthcare units are required to focus on commitment. Dolan, Tzafirir, and Baruch (2005), are of the view that psychological attachment of a person with his/her workplace along with the sense of belonging, ownership of organizational objectives makes him always ready to face challenges. Without, the commitment, it is almost difficult to attain strategic goals (Briscoe & Claus, 2008; Fugate, Stank, & Mentzer, 2009). Commitment has the essence of zeal and excitement. Whenever commitment level enhances, performance and productivity take place. A high level of commitment is indispensable for sustainable growth and to achieve the competitive advantage. Theoretically and empirically it is evident that organizational commitment is linked with performance (Meyer & Allen, 1997; Yiing & Ahmad, 2009). It has been suggested by Dirani (2009) that organizational commitment is a crucial element that influences the output of employees and an important indicator of performance. For the productivity of the organization, human resources are playing a very effective role as they bear a remarkable effect on achieving organizational competitive advantage with the co-ordination of committed employees. It has been studied by the practitioners and researchers that organizational commitment is the most famous work attitude (Meyer et.al, 1998) nowadays because of its impact on the work performance of the organization (Dirani, 2009; Yousef, 2000). For the development of employees' commitment, substantial research has been conducted in past years (Meyer & Allen, 1997) for loyalty and efficiency, which plays an important role (Berberoglu & Secium, 2015). The concept commitment had been for the first time defined in 1960 by Becker "A consistent human behavior generated by one mechanism" Becker (1960) and later Porter et.al in (1974) elaborated the same concept of organizational commitment as the mutual attitude of personnel towards their workplace and organizational commitment defined as "It is the expertise/potency of an individual as well as identification with and entanglement in a specific unit".

Organizational commitment, as defined by Meyer and Allen (1997), is

a psychological state which creates a link between the workplace and decisions of employees to either quit or continue in the particular organization. Effectiveness in the form of high level of participation, low absenteeism and increased productivity with low turnover can be attained by highly committed employees which leads them to increased operating performance (Angle & Perry, 1981). Employees either can perform tasks assigned to them satisfactorily or unsatisfactorily that is termed as performance. Some factors changed together that could influence their performance like motivation, personality and ability. If we sum-up all employees' performances in the organization we call that achievement, which is the sole result, of each employee's performance (Mullins, 2010). Employee's morale and turn over intentions are usually studied to assess the criteria of organizational performance and the level of perceived organizational effectiveness (Jain, 2012). What employees perceived related to organizational performance is their perception about organizational overall performance, on the contrary, Mullins (2010) and Giaque et.al (2013) perceived organizational performance is the outcome of the human resources management practices that affect the employee's attitude with-in an organization.

Organizational Performance

In management research the concept of performance is widely studied by the scholars however its structure and definition varies in different scenarios of organizations. Organizational performance improves the effectiveness of organizations and the well-being of its workforce with the appropriate innovations. Organizational performance referred to as output or outcomes related to organization measured as expected output, goals, and objectives (Jon & Randy, 2009). Organizational performance is known as a measure of how efficiently and effectively superiors allocate their resources to improve the level of satisfaction of their clients and attain the organizational vision. There as four commonly applied attempts to measure the organizational performance including the overall outcomes of human resource activities, organizational performances, financial results, moreover the capital market outcomes. Absenteeism, turnover, and employee satisfaction are related to human resource outcomes. The productivity of labor, customers' satisfaction, and quality of services, all are related to organizational outcomes. The indicators of financial performance are return on equity (ROE), return on assets (ROA), and profitability, whereas the outcomes of capital market include the price of

stock and its growth and market returns (Dyler & Reeves, 1995). Organizational performance influences the effectiveness and efficiency of the organizations and therefore to attain desirable work performance, managers must not only pursue the right goals but also make available right resources. The organizational performance deals with combination of productive assets such as human, physical & capital resources working collectively in any organization to attain shared objectives (Alchian & Demsetz, 1972; Jensen & Meckling, 1976; Simon, 1976) and Barney, 2002). The concept of organizational performance can be elaborated as the outcome defining efficiencies and inefficiencies of the institutes related to their overall impression in terms of their corporate image, competencies, and financial performance (Khandekar & Sharma, 2006). There are various ways to appraise the performance of the employees. According to Rowold (2011) the high level of performance in work processes and practices, have been identified needful in playing a significant role for the attainment of business objectives and better organizational effectiveness. While there is no consensus on configuration or combination of such system and practices. The reason behind it is that a high degree of performance work system gives impact and maintains employees' attitude and behavior according to the strategic objectives of their workplace and they improve employee commitment which leads to improved organizational performance. Human resource practices hold a significant impact on the organizational performance. When human resource practices concentrate on developing positive work attitude it enhances the employees' motivation and they use their maximum potential whereas employees performances remain under-utilized with low work motivation in the environment where human resource practices does not work efficiently.

In 2000 organizational commitment and perceived organizational performance got popularity due to their significance whereas numerous studies witnessed a considerable correlation between organizational commitment and the perception about organizational performance. The study by Bakiev (2013) showed that a performance work system is a mediating variable between perceived organizational performance and the organizational commitment and even if the work system is not strong, organizational performance can be enhanced by encouraging employees' organizational commitment which will give a positive impact on organizational performance. For attaining performance managers not only

pursue the right goals but also make available right resources to achieve desired objectives. Bakiev (2013) studying Kyrgyzstan police officers investigated the hypothesized impact of organizational commitment on the perceived organizational performance and it transpired that perceived organizational performance has a positive relationship with organizational commitment. At the same time opposite findings were obtained in some other research too, for instance Bicer et al., (2009) revealed insignificant relationship between the two concepts which were organizational commitment and perceived organizational performance.

Organizational Citizenship Behaviour

It is the prerequisite for Organizational commitment which is an attitudinal concept that depicts the behavior of the workforce that is considered extra participation or performance that leads to the effectiveness of the corporation. The Reward system does not explicitly recognize it. Through the research study findings, it is revealed that there is a significant positive relationship between Organizational Citizenship Behaviour and organizational commitment (Morrison & Robinson, 1997). Organizational Citizenship Behaviour is important for the sustainable growth of the organization. Organizational Citizenship Behaviour is said to be discretionary behaviour (Organ, 1988). The research study carried out by Moorman (1991) has shown that organizational commitment, job satisfaction and perception of justice are considerable predictors of Organizational Citizenship Behaviour (Moorman, 1991). Through the meta-analysis, Organ and Ryan (1995) realized that some attitudinal variables depicted a strong relationship with Organizational Citizenship Behaviour such as satisfaction, fairness, and commitment. Organizational Citizenship Behaviour is an extra effort which is beyond the formal responsibilities. It shows the feeling of belongingness. This concept is purely related to providing benefits to the organization by the employee. There are two classifications of Organizational Citizenship Behaviour such as positive contribution which means helping someone and another avoid harmful behaviour which means say no to abusing the rights of someone. The research has proved a positive or direct relationship between organizational citizenship behaviour and organizational performance (Shore & Wayne, 1993).

Perceived Organizational Support

Perceived organizational support leads to improved performance, decreases stress, ensures positive mood at the job place and desire to stay

in the organization. According to the meta-analysis around 167 research studies on perceived organizational support found four outcomes related to the workforce such as organizational commitment, job satisfaction, performance, and intention to leave. The research findings of Riggle et al., (2009) concluded a statistically strong positive impact of perceived organizational support on job satisfaction and organizational commitment, a moderate impact on employee performance, and a strong inverse relationship with intentions to leave. Perceived organizational support leads to organizational commitment (Riggle et al., 2009; Ahmed et al., 2015). It is also found that perceived organizational support has an impact on employee engagement, organizational commitment and job satisfaction; on the other hand moderate relationship with organizational citizenship behaviour and turnover intention (Ahmad et al., 2015). Perceived organizational support gives satisfaction to the employees and it influences the discretionary behaviour of them. Nowadays most of the organizations have started to focus on their human resources to compete with their rivals. To get the best output from their employees, organizations are required to invest in them and give them the necessary support. The support could be tangible and intangible. The support of the organization has a reciprocal effect. This relationship between employees and organizations is based on the exchange of efforts for each other.

Training and Development

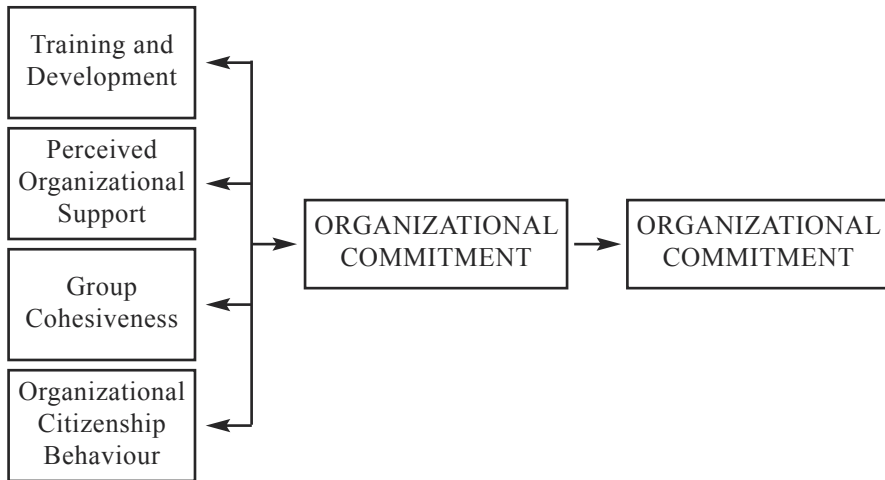
Training is a practice that leads to investment in the workforce and simultaneously increases the level of perceived organizational support. Trained employees feel that they are supported by their organization to fulfil their responsibilities which develop satisfaction and commitment among them. Training leads to the development of various skills, knowledge, and behaviour which differentiate a trained individual from untrained. It helps old employees to meet the current requirement of the job and help them to retain their jobs. On the other hand, it gives confidence to the new entrants. Training & Development raises the level of organizational performance (Shepard et al., 2003). Armstrong (2000) stated the firm must very carefully design the training session for its employees. The requirement of the workforce must be born in mind while arranging training programs (Ginsberg, 1997). Tsaur and Lin (2004) stated that training design and delivery style are important to be considered while arranging training programs. Training not only plays a significant role for the employees but also for organizations and inappropriate training

programs are merely a waste of efforts, time and financial resources. Proper training not only helps employees to perform their job but also saves time.

Group Cohesiveness

The success of organizations depends on the level of cohesiveness (Sapran, 2010). Group cohesiveness shows the tendency for a group to work together for the attainment of various goals. For the achievement of organizational performance, it is important to focus on group cohesiveness. Therefore, research based on organizational performance is improper in the absence of group cohesiveness (Elenkov, 2002). Group cohesiveness can be classified into task cohesion and social cohesion. Group cohesiveness develops the feeling of belongingness and supports which ultimately enhance job satisfaction that influences the creativity of the employees. To meet the challenges of the competitive environment, the cooperative movement must be adopted to attain improved performance (Sapran, 2010).

The theoretical framework for the research study:



Hypotheses

The following hypotheses have been tested in the current study.

H₁. Training and development, Perceived Organizational Support, Group Cohesiveness, and Organizational Citizenship Behavior, are significant predictors of organizational commitment.

H₂. Organizational Commitment has a significant positive relationship with Organizational Performance.

RESEARCH METHODOLOGY

Doctors working in public healthcare hospitals are the population of this study. A simple random sampling technique was used to select the sample. The questionnaire contained 50 statements out of which 38 statements were based on Organizational Commitment and its factors and 12 statements were on Organizational Performance. Items on Organizational commitment are taken from the studies of Richard T. Mowday, Richard M. Steers, and Lyman W. Porter and on Organizational Performance from Armstrong (2012) with some adjustments. Factors questions are self-administered. The research is conducted to analyze the influence of organizational commitment on the performance of the healthcare organization which is quantitative. Organizational commitment is the independent variable and organizational performance is the dependent variable. The research was conducted on healthcare professionals during January 2020. Public hospitals were considered situated in Karachi which has been chosen to cover the variety of behavior of respondents, questionnaires were developed to collect the data. 80 questionnaires were distributed and 50 were collected back and only primary data were considered. Likert scale is used ranging from 1-Strongly agree to 5-Strongly disagree.

Table 1: Reliability Test of Research Instrument

Cronbach's Alpha		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.781	0.819	6

The value of Cronbach's alpha is 0.78, showing a higher level of internal consistency for our scale with this specific sample. We observed that removal of any factor, except Organizational Citizenship Behavior resulted in a lower Cronbach's Alpha. Removal of OCB lead to a small improvement in Cronbach alpha, and the "Corrected item-total Correlation" value was also low for this item.

Data Analysis and Result interpretation

Organizational commitment has a highly positive association with organizational performance $r = 0.821$. Simultaneously organizational commitment has a significant positive relationship with Training & Development, Perceived Organizational Support, Group Cohesiveness,

and Organizational Citizenship Behavior. Among all the factors of organizational commitment, it is noticed that Training & Development is highly associated with organizational performance ($r = 0.529$).

Table 2. Person Correlation

	TD	GC	POS	OCB	OC	OP
Training & Development	Pearson Correlation Sig. (2-tailed)	1				
Group Cohesiveness	Pearson Correlation Sig. (2-tailed)	0.4049** 0.004	1			
Perceived Organizational Support	Pearson Correlation Sig. (2-tailed)	0.3046* 0.031	0.5929** 0.000	1		
Organizational Citizenship Behavior	Pearson Correlation Sig. (2-tailed)	0.217 0.131	0.277 0.051	0.1072** 0.458	1	
Organizational Commitment	Pearson Correlation Sig. (2-tailed)	0.334* 0.018	0.6502* 0.000	0.6119** 0.000	0.3577* 0.011	1
Organizational performance	Pearson Correlation Sig. (2-tailed)	0.529** 0.000	0.5358** 0.000	0.4635** 0.001	.243 0.088	0.8215** 0.000

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

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

Training and Development = TD, Group Cohesiveness = GC, Perceived Organizational Support = POS, Organizational Citizenship Behavior = OCB, Organizational Commitment = OC, Organizational Performance = OP

It is found that among all of the factors, organizational commitment is highly associated with group cohesiveness ($r = 0.65$) and then perceived organizational support ($r = 0.612$) which depicts that in public healthcare domains group cohesiveness and perceived organizational support leads to organizational commitment. It shows that group cohesiveness with perceived organizational support develops a feeling of organizational commitment among doctors. On the other hand, within the factors of organizational commitment, organizational support, and group cohesiveness are highly associated with each other($r = 0.593$).

Regression

Table 3: Organizational Commitment vs all other factors

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	1.191031	0.224497	5.305327	3.31E-06	Significant
Training and Development	0.020047	0.073865	0.271404	0.787321	Insignificant
Group Cohesiveness	0.239668	0.088422	2.710514	0.009475	Significant
Perceived Organizational Support	0.264128	0.091105	2.899158	0.005766	Significant
Organizational Citizenship Behavior	0.111788	0.055932	1.998653	0.051709	Insignificant

Dependent variable: Organizational Commitment.

MODEL # 01:

Organizational commitment = 1.191031+ 0.020047 Training and development + 0.239668 group cohesiveness + 0.264128 organizational support + 0.111788 organizational citizenship behavior R-Square= 0.545

Hypothesis 1

Training and development, perceived organizational support, group cohesiveness, and organizational citizenship behavior are significant predictors of organizational commitment.

Interpretation of Regression

Training & development, perceived organizational support, group cohesiveness & organizational citizenship behavior are considered as independent variables and organizational commitment as a dependent variable. The equation shows that the coefficient for group cohesiveness is 0.239 units which indicate that for every 1 additive unit in group cohesiveness, we can expect to increase organizational commitment 0.239 units, while other factors remain constant and having P-value 0.009. Another factor that is dominating considered perceived organizational support. The coefficient of organizational support is 0.264 units with P-value 0.005, so by increasing 1 additive unit in perceived organizational support, we can expect to increase organizational commitment by 0.264 units while other factors remain constant. In short organizational support and group cohesiveness are meaningful variables in this model and can have a very significant impact on organizational commitment of the

healthcare units as compared to the other variables such as Training and Development, and Organizational citizenship behavior. Organizational commitment is 54% influenced by the above four factors. ($r^2 = 0.545$).

Table 4: Organizational Performance v/s organizational Commitment

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	-0.51273	0.24794	-2.06797	0.044055	insignificant
Commitment	0.930825	0.093267	9.980203	2.7E-13	significant

Dependent Variable: Organizational performance.

MODEL # 02

Organizational Performance = - 0.51273 + 0.930825 organizational commitment R-square = 0.675

Hypothesis 2

Organizational commitment is independent variable while organizational performance is dependent variable. It has been analyzed through the equation that the coefficient of commitment is 0.931 units which indicate that for every additive unit in the organizational commitment we can expect organizational performance to be increased by an average 0.931 units. The P-value of the coefficient is 2.7×10^{-13} which indicates that organizational commitment is a meaningful variable in this model and having a significant influence on the effectiveness and efficiency of the performance of the healthcare units. The result shows that organizational performance is 67% influenced by organizational commitment in this study as R square or $R^2 = 0.675$.

ANOVA

Table 5. Organizational Commitment Vs all other factors:

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	10.25186	2.562964	13.4782	2.67157E-07
Residual	45	8.557033	0.190156		
Total	49	18.80889			

ANOVA table for organizational commitment, as compared to other factors (training and development, perceived organizational support, group cohesiveness, and organizational citizenship behavior) shows the f statistics are 13.4782. The probability of observing a value greater or equal to 13.4782 is 2.671577×10^{-7} less than 0.025. There is strong evidence that $\beta_1 \neq 0$.

Table 6. Organizational Performance v/s organizational Commitment

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	16.29667	16.29667	99.60444	2.70258E-13
Residual	48	7.853467	0.163614		
Total	49	24.15014			

Interpretation of ANOVA

ANOVA table for organizational performance v/s organizational commitment shows that f statistics is 99.60444. The probability of observing a value greater or equal to 99.60444 is P-value 2.70258 X 10⁻¹³ less than 0.025. There is strong evidence that B1 ≠ 0.

Limitations

This study is conducted only in public hospitals situated in the city of Karachi; Pakistan due to a limited period. Recommendations and conclusions will be beneficial for healthcare service providers in Pakistan.

FUTURE LINE OF STUDY

Here we have conducted a detailed study on correlating Organizational commitment and Organizational performance by considering some factors of organizational commitment such as training and development, perceived organizational support, group cohesiveness and organizational citizenship behavior but some other factors are required to be considered such as Organizational Culture, Motivation, Leadership Style. The above factors must be considered in the future study.

CONCLUSION AND RECOMMENDATIONS

Researchers believe that commitment affects individuals' behavior that influences the overall performance of the organization than formal rules and regulations. The research study confirms the findings of Bakiev's (2013), the intensity of organizational commitment is influencing the performance of the organization working in healthcare units. Through the modification and emphasizing commitment, healthcare units improve the sustainable growth level which will affect the overall efficiency of the organization. Faster growth can be attained through committed employees. It has been observed that creative and sophisticated plans and programs defined by the top-level managers remain unexercised without organizational commitment. The research found that the factors committed to the performance of the organization much be considered sensitively in the extensive competitive environment. The evaluated results through

SPSS presented meaningful relationships existing between the organizational commitment and organizational performance which is positive. It is also observed that training and development, Organizational Support, Group Cohesiveness, and Organizational citizenship behavior are also playing a vital role to attain organizational commitment and side by side performance in healthcare units. It can be interpreted that employees' observation regarding the performance of their organization affects their organizational commitment which influences the overall organizational performance; the level of organizational commitment is also affecting how the employees are observing the performance of their organizations however these findings of the research study cannot be generalized to all healthcare units because it is conducted in a publicly owned hospital in Karachi. The functioning of healthcare units varies from place to place and also influenced by the ownership either public or private. Further data can be collected from the private hospital to evaluate the relationship between variables.

Moreover, other associated concepts related to organizational commitment like job satisfaction, motivation and culture can be additionally studied to further obtain clarity related to the relationship between the hypothesized concepts and assess whether the relation between the organizational commitment and performance is affected by mediating or moderating the additional variables. Similarly, it can be further evaluated from health care sector, whether the positive organizational performance has an effect on associated factors like satisfaction and motivation. In this research the projected impact of organizational commitment was evaluated in the health care units' performances. Further studies in the same field may obtain the reverse outcome with the same hypothesis i.e. influence of organizational commitment on the overall performance of the organization.

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NEED OF GUIDANCE PROGRAM AT SECONDARY SCHOOL LEVEL IN DISTRICT RAHIM YAR KHAN

Zakia Khan*, and Dr. Muhammad Athar Hussain**

ABSTRACT

The investigation entitled “Need of Guidance Program at Secondary School Level in District Rahim Yar Khan.” was intended to discover the need for Guidance at the secondary school level. The focal point of the study was to find the need for Guidance in Govt. Schools; to dissect the views of educators and understudies about direction. Two polls were utilized, one for understudies and one for educators to hear their views about the need of direction at the school level. Due to constrain of time and assets, the examination was delimited to Rahim Yar Khan District which has Four Tehsils. From each Tehsil, Six Govt. schools with Eight understudies of ninth class and Two Secondary School Teachers instructors were arbitrarily chosen as a test of study. The absolute sample was Two Hundred & Forty included One Hundred Ninety-Two understudies and Forty-Eight educators. Two information sheets were structured in SPSS form Twenty Three. Numerical codes were allocated to the reactions of members. After computation, the result revealed that the Guidance program helps the students in career choices; Students get awareness about different subjects and choose their best interest subjects through guidance. It was prescribed that each school ought to have a useful direction focus on the administrations of expert Guides.

Keywords: *Need, Guidance, Secondary School, Rahim Yar Khan.*

INTRODUCTION

The concept of guidance started fourteen centuries ago and is based on the teachings of the Holy Quran and Sunnah. Here, the real focus is on modifying and developing human behavior with the emphasis on leading

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one's life following the instruction given in the Quran and Hadeeth. Quran (2: 213) says: "Humanity was one network and Allah sent prophets with happy greetings and admonitions and with them. Furthermore, Allah guides whom He wills to the straightway. "On somewhere else, the Holy Quran (6: 161) says: "State O Muhammadﷺ: Truly my Lord has guided me to the straight way, a correct religion, the religion of Ibrahim Hanifa (i.e., the genuine Islamic Monotheism to trust in one God, Allah, i.e., to venerate none however Allah, alone, and he was not from Al-Mushrikun."

The present youngsters are living in an energizing time with an undeniably differing, versatile society, new advances, and extending openings. According to Qhingana (2006), apprentices occasionally do not find education meaningful hence they fed up. As a result they involved in protests, alcohol and drug abuse, disturb discipline, violence, and other fruitless activities. Today they face extraordinary and different difficulties like the individual, instructive, vocational, and public activity. What's more, they live in a century in which social structures and individual qualities are continually evolving. Every one of these progressions influences their own, professional, instructive, social, and psychological wellness, So that each understudy needs direction backing, and openings during pre-adulthood to turn into the up and coming age of guardians, laborers, pioneers, and resident. (Johnson & Kottman, 1992). During these young adult years, understudies are assessing their qualities, aptitudes, and capacities. The greatest impact is their companion gathering. They are looking for a spot to have a place and depend on peer acknowledgment and criticism. They face expanded weights concerning hazard practices including sex, liquor, and medications while investigating the limits of more satisfactory conduct and develop significant connections. They need direction in settling on concrete and aggravated choices (Akos & Galassi, 2004). As per Lapan, Gysbers, and Petroski (2003) understudies are facing issues, for example, quickly changing the business world through globalization and work power; savagery at home at school, and in the public eye; separate; expanding young adult self-destruction rates; chronic drug use and stress. These issues for the most part influence understudies' close to home, social, and scholarly turn of events. Akos (2005) expressed that the juvenile period, going from one training level lessens understudies' exhibitions, the decay of inspirations, decline in confidence, and mental bitterness. The physical, social, and passionate changes found in teenagers during pubescence did

not just purpose enthusiastic clashes between the juvenile and the family, yet also these progressions can prompt insubordination with their folks (Gysbers, 2001). Yaqub et al (2017) concluded that most of the high school students of Pakistan possess appropriate knowledge about guidance, positive attitude but lack of proper practices and they also have concerned in acquiring appropriate career guidance.

The reason for deciding understudies' direction and guiding needs is to set them up forever. Planning understudies forever involves fulfilling their instructive, individual/social direction, and advising needs. An understudy who has fulfilled his/her instructive direction and guiding needs; knows proficient investigation techniques and actualizes them, oversees and utilizes his/her time successfully, figures out how to learn, gets mindful of his/her latent capacity, and realizes how to support it, realizes how to find support from his folks about instructive issues and ultimately, doesn't have variation issues in school (Hay, 2004). Optional school is the last progress into adulthood and the universe of work as understudies start isolating from guardians and investigating and characterizing their Students are choosing what their identity is, their main thing, and what they will do when they graduate They should manage scholastic weights as they face high stakes testing, the difficulties of school affirmations, the grant, and money related guide application cycle and passageway into a serious activity market. Thus we have to plan direction program at the Secondary school level. Varalakshim and Moly (2019) state that guidance assists learners in making educational, training and occupational choices. According to Nastasi (2003), school psychologists increasingly suggesting to implement programmes that improve the wellness atmosphere in institutions, curriculum that reduces the conflicts, mentoring, counselling, and providing guidance services. Bucy, Meyers and Swerdlik (2002) stated that, education reform initiatives in the U.S. have suggested to address academic, social, and emotional and health issues of young juvenile. An African study by Mwamwenda (2004) showed that in most African schools guidance and counselling services are provided to secondary school learners. Naryana (2016) clarified direction as help gave by specialists to people to urge them to settle on their own decisions and choices about their lives and modify them in condition serenely and Siddiqui (2008) clarified that direction as a help gave by the educator to the understudies to encourage learning challenges. The reason for this investigation is to decide the need for a Guidance program for optional school understudies.

Significance of the Study

Life is becoming complex day by day and one has to face so many issues especially the students. In the field of education, a young entrant finds himself amid in conflicting claims of educational as well as career options. It is a problem that most parents face. When their wards reach the secondary stage of school education, parents find them on the cross-road as regard the course of study their ward ought to choose as their future career. They require guidance which is rarely available to them; the result is that our education system produces square pegs in round holes. An understudy, having a fitness for Arts subjects, select science subjects, he is additionally squandering his vitality. It is uncovered that each individual or understudy required Guidance. To resolve all the above-mentioned problems of guardians, understudies, educators, school organizations, policy producers, and the general public and to provide guidelines to them the study was conducted.

Statement of the Problem

The under-investigation issue is identified with the need for direction programs for optional school understudies. In Pakistan, this level begins from sixth class and finishes to the tenth class. The understudy enters the auxiliary school at the age of 10 years. At this stage, he/she faces huge numbers of issues, for example, mental instructive, social, enthusiastic, strict, sexual, professional, and better utilization of recreation time. All the previously mentioned issues need legitimate consideration and approach to determine. For all these new and unsure physical, enthusiastic changes and choice of the appropriate field as indicated by their advantage youthful one needs the assistance of an accomplished and senior individual who direct him and help him to take care of these issues.

Objectives of the Study

Objectives of research were given as under:

1. To survey the need and significance of Guidance in Govt. Auxiliary Schools.
2. To assess the impression of educators and understudies about direction.

RESEARCH METHODOLOGY

As the study was descriptive, so the survey technique was adopted.

According to David and Sutton (2004) survey is suitable where researchers want to get point of view of respondents to state the nature of the current situation.

Population

The populace of the study was comprised of:

- Rahim Yar Khan District.
- All Four Tehsils of Rahim Yar Khan District.
- All girls and boys' High schools of Rahim Yar Khan.
- All girls and boys' students of the 9th class of selected Schools.
- All the teachers from selected schools.

Sampling

A random sampling technique was used to select the sample. There are 04 Tehsils in District Rahim Yar Khan. Initially, 06 secondary schools (03 Boys School and 03 Girls Schools) were identified from each Tehsil. From each sampled school 08 students of 9th class and 02 teachers were randomly selected as the sample of the study. Total Sample (N) was 240, (192 students and 48 teachers) from 24 schools of District Rahim Yar Khan.

Research Instrument

The analyst applied a blended strategy to explore the structure. For information assortment, surveys were utilized. Surveys were comprised of two areas A and B. Segment A included statistic data about members and area B included data about need and significance of direction for youthful ones.

Legitimacy and Reliability

The next significant advance was to test the legitimacy of surveys. To approve things, it was mentioned to the board of specialists to refine the things, in organization and language to make the surveys straightforward and justifiable. In the light of proposals prescribed by the accomplished people, the apparatuses were finished.

Reliability Analysis of Research Tool

Reliability of the teacher's questionnaire

No of items	Chrome Batch Alpha
20	.721

Reliability of student's questionnaire

No. of items	Alpha
20	.713

Data Gathering Procedure

Structured questionnaires were delivered personally to 192 students and 48 teachers of selected schools. Permission to survey the district was obtained from the CEO (Chief Executive Officer) Education Rahim Yar Khan. The anonymity of the respondents was guaranteed by the researcher (verbally). Thus, research ethics were respected. Upon completion of the questionnaires, the researcher personally collected from respondents.

Data Analysis

Before the analysis, the researcher validated, coded, and tabulated the information. It was done in Statistical Package for Social Sciences (SPSS) software. Descriptive statistics were done to get quantitative results. The mean on each set of responses was calculated. Further Mean of each set of responses was compared with the accumulative mean of that table. The researcher applied inferential statistics lie one sample t-Test.

DATA ANALYSIS IN THE FORM OF TABLES

Data Collected from Teachers

Table 1: Personal Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
1	Students get confidence through guidance.	3.48	0.000
2	Guidance helps Students to release mental stress due to unanticipated corporeal variations.	3.06	0.000
3	The guidance program develops Self-recognition quality in students.	3.17	0.200
4	Students share their feelings in a balanced way through the direction.	2.17	0.290
5	Students comprehend the weedy points of their personality through guidance.	3.23	0.000
Accumulative mean score		3.02	

The table reveals teachers' opinions about the Personal guidance of Students. It appears that Guidance boost up student's confidence (announcement mean 3.48 > Table mean 3.02). Guidance plays a positive role to release mental stress due to unforeseen bodily fluctuations in students (Declaration mean 3.06 > table mean 3.02). Guidance program develops Self-recognition quality in understudies (statement mean 3.17 > accumulative mean 3.02). Students do not share their feelings in a balanced mean through guidance (statement mean 2.17 < accumulative mean 3.02). Students comprehend weedy points of their personality through guidance (statement mean 3.23 > accumulative mean 3.02). t-Test was administered and the results were significant except the concept students do not share their feelings in a balanced mean through guidance.

Table 2: Educational Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
6	Guidance increases the student's involvement in extracurricular events.	3.10	0.000
7	Students improve their results due to effective direction.	3.29	0.000
8	The guidance program helps students to adjust and cope with school life.	3.19	0.000
9	Guidance program provides opportunities for interactions with guest speakers from higher learning institutions	2.46	0.000
10	Appropriate Guidance enables students to share their difficulties with teachers.	2.94	0.000
Accumulative mean score		2.99	

The above Table expresses teachers' opinions about the Educational guidance of Students. It appears that Guidance increases the student's involvement in extracurricular events. (Question mean 3.10>Total mean 2.099). Students improve their results due to effective direction. (Announcement mean 3.29>table mean2.99). The guidance program helps students to adjust and cope with school life (declaration mean 3.19>table mean2.99). The guidance program does not provide opportunities for interactions with guest speakers from higher learning institutions (Question mean 2.47<Table mean2.99). Appropriate Guidance does not enable students to share their difficulties with teachers. (Declaration mean 2.94<Table mean2.99). t-Test was applied and the results were significant.

Table 3: Vocational/ Professional Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
11	The guidance program keeps the understudies up to date about available career occasions.	3.21	0.000
12	Guidance helps the learners to get awareness about different professions to earn money.	3.29	0.000
13	Students get consciousness related to different subjects through the direction.	3.25	0.000
14	Instructions program facilitates the students in career choices.	3.35	0.000
15	Guidance develops professional skills in students.	3.25	0.000
Accumulative mean score		3.23	

Above Table express teachers' opinion about vocational/ professional Guidance of Students. It shows that the Guidance program does not provide information to the students about available career opportunities (declaration mean 3.21 <table mean 3.23). Guidance helps Students to get awareness about different professions to earn money (question mean 3.29> accumulative mean3.23). Students get consciousness related to different subjects through direction (announcement mean 3.25>table mean3.23). The guidance program helps students in career choices (question mean 3.35>table mean 3.23). Proper Guidance develops professional

skills in understudies (statement mean 3.25>3.23accumulative mean 2.99). Further t-Test was administered on all the concepts and the results were significant.

Table 4: Social Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
16	The guidance program keeps up to date about the demands of society.	3.00	0.000
17	Guidance develops the best ethical values in students.	3.27	0.000
18	Guidance involves the students in healthy & creative activities in their leisure time.	2.31	0.200
19	Guidance helps students to cope with changes held in their daily lives and environment.	3.00	0.000
20	Guidance helps the students to adjust themselves in society.	3.04	0.000
Accumulative mean score		2.92	

Above Table express teachers’ opinion about Social Guidance of Students. It shows that the Guidance program keeps up to date about the demands of society (statement mean 3.0>total mean2.92). Further t-Test was applied and the results were significant. Guidance develops the best ethical values in understudies (declaration mean 3.27>table mean2.92) and t-Test was applied and the results were significant. The guidance does not involve the students in healthy & creative activities in their leisure time (assertion mean 2.31<table mean2.92).t-Test was drawn and the results were not significant that rejects the idea. Guidance helps understudies to cope with changes held in their daily lives and environment (question mean 3.00>table mean 2.92) and the results of the t-Test support the concept. Guidance helps students to adjust themselves in society (announcement mean 3.04>table mean 2.92) and the values of t-Test strengthen the statement.

Data Collected from Students

Table 5: Personal Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
1	Students get confidence through guidance.	3.26	0.000
2	Guidance helps the Students to release mental stress due to unanticipated corporeal variations.	2.20	0.000
3	The guidance program develops Self-recognition quality in the students.	3.07	0.200
4	Students share their feelings in a balanced way through the direction.	2.39	0.000
5	Students comprehend the weedy points of their personality through guidance.	3.19	0.000
Accumulative mean score		2.82	

The above Table reveals students’ opinions about the Personal guidance of Students. It appears that Guidance boost up student’s confidence (declaration mean 3.26> table2.82). Guidance does not help understudies in releasing mental stress

due to surprising corporal deviations (announcement mean 2.20 < total mean 2.82). Guidance program develops Self-recognition quality in the students (message mean 3.07 > accumulative mean 2.82). Students do not stably discuss their sentiments through guidance (message mean 2.39 < table mean 2.82). Students comprehend the weedy points of their personality through guidance (announcement mean 3.19 > table mean 2.82) and t-Test was calculated and the results were significant.

Table 6: Educational Guidance

Sr. #	Questions	Average	Sig. (2-tailed)
6	Guidance increases the student's involvement in extracurricular events.	3.28	0.000
7	Students improve their results due to effective direction.	3.24	0.000
8	The guidance program helps students to adjust and cope with school life.	3.20	0.000
9	Guidance program provides the opportunities of interactions with the guest speakers from higher learning institutions	2.34	0.000
10	Appropriate Guidance enables students to share their difficulties with teachers.	3.30	0.000
Accumulative mean score		3.18	

Table express students' opinion about Educational guidance of Students. It appears that Guidance increases the student's involvement in extracurricular doings (message mean 3.28 > table mean 3.18). Students improve their grades due to operative direction (statement mean 3.24 > accumulative mean 3.18). Guidance program helps students to adjust and cope with school life(statement mean 3.20 > accumulative mean 3.18). The guidance program does not provide the opportunities of interactions with the guest speakers from higher learning institutions (statement mean 2.34 < accumulative mean 3.18). Appropriate Guidance enables students to share their difficulties with teachers. (Statement mean 3.30 > accumulative mean 3.18). Further t-Test was applied and the results were significant that support the ideas.

Table 7: Vocational/ Professional Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
11	The guidance program keeps understudies up to date about available career occasions.	3.18	0.000
12	Guidance helps learners to get awareness about different professions to earn money.	3.19	0.000
13	Students get consciousness related to different subjects through the direction.	3.25	0.000
14	Instructions program facilitates the students in career choices.	3.30	0.000
15	Guidance develops professional skills in students.	3.16	0.000
Accumulative mean score		3.17	

Above Table express students' opinions about Vocational/ Professional Guidance of Students. It shows that the Guidance program keeps the understudies up to date about available career occasions (statement mean 3.18>accumulative mean 3.17). Guidance helps the learners to get awareness about different professions to earn money (statement mean 3.19> accumulative mean3.17). Students get consciousness related to different subjects through direction (statement mean 3.25> accumulative mean3.17). Instructions program facilitates the students in career choices (statement mean 3.30> accumulative mean 3.17). Proper Guidance develops professional skills in students (statement mean 3.23>accumulative mean3.17). t-Test was calculated and the conclusions were significant that support the concepts.

Table 8: Social Guidance

Sr. #	Statements	Mean	Sig. (2-tailed)
16	The guidance program keeps up to date about the demands of society.	3.27	0.000
17	Guidance develops the best ethical values in students.	3.32	0.000
18	Guidance involves the students in healthy & creative activities in their leisure time.	2.21	0.125
19	Guidance helps students to cope with changes held in their daily lives and environment.	3.24	0.000
20	Guidance helps the students to adjust themselves in society.	3.18	0.000
Accumulative mean score		3.04	

Above Table express students' opinion about Social Guidance of Students. It shows that the Guidance program keeps up to date about the demands of the society (statement mean 3.27>accumulative mean 3.04). Guidance develops the best ethical values in students (statement mean 3.32> accumulative mean3.04). The guidance does not involve the students in healthy & creative activities in their leisure time (statement mean 2.21< accumulative mean3.04). Guidance helps students to cope with changes held in their daily lives and environment (statement mean 3.24> accumulative mean 3.04). Guidance helps the students to adjust themselves in society (statement mean 3.18>accumulative mean3.04). t-test was applied and the results were significant except the statement guidance involves the students in healthy & creative activities in their leisure time.

DISCUSSION AND CONCLUSION

The idea that was focused on this research was to survey the need and significance of guidance in govt. secondary schools. Instruction is a key to individual and national advancement, the Guidance has the possibility

of recognizing people's possibilities and prompting them fittingly for appropriate subjects and professional decisions. A school for some, understudies is the primary wellspring of dependability and direction in their lives. Braddock (2001) stated that direction and advising in schools are to improve scholastic accomplishment, encourage positive investigation frames of mind and propensities, increment acquisitions and utilization of compromise aptitudes, and reduction of school dropouts. Secondary school students are in the adolescent stage, some of them end up doing bad things if not guided well. Guidance helps individuals to discover their needs, benefits, and abilities to develop their targets and make strategies to achieve these tasks. The conversion from infant to maturity is a difficult one, even for the most balanced child. In short, it is the responsibility of families and schools to assist young learners in their self-growth towards becoming a self-fulfilled and well-adjusted adult. In this study different areas of interest were taken. These areas such as Personal, educational, vocational, and social were based on the need for guidance at the school level. All these aspects were chosen after reviewing literature related to guidance needs at the secondary school level. These aspects were presented in the shape of questions and questions were organized in the form of questionnaires. Due to the increasing order of complexities of our lives, the need for counseling is increasing day by day. When an individual faces issues like personal, educational, social, and occupational guidance program easily solved it. The results of the study show that Guidance boosts up student's confidence and Guidance program helps the students in choosing their subject combinations. Learner's development is an important issue that required a joint effort by the school, educators, the principal, and the community at large for the development of young ones.

The findings of the study affirmed that proper guidance attracts student's attention towards studies. It is exciting to know that students develop good study habits because of the guidance program. This is the fact that the majority of students in schools face difficulties in findings a proper career because they have no one an experienced and educated person in their families who guide them in the selection of their career. To make judicious occupational choice these students need mature help.

Shareen and Amina (2017) stated that most of the universities have career guidance centers but only few of them are implementing the activities which they meant to do Career guidance is essentially a soft

rather than a hard policy intervention. It is the need of the hour that Guidance services should be provided in the institutions to facilitate students in vocational development and enable them to gain knowledge about themselves, their abilities, and interest. By providing them opportunities for self-exploration of the world of work within the school, their transition from education to work can be facilitated. The main focus of the guidance is the all-round development of individuals so that they can be easily adjusted in society.

There were some statements related to learning problems and academic performance. The results of the study express that students withstand their learning problems through proper guidance and it helps students to adjust and cope with school life.

Sahin KESICI (2017) stated that secondary school students need Guidance and Counselling. The purpose of the study was to determine the Guidance and Counselling needs of secondary school (9th and 10th grades) students from their points of view by using qualitative research techniques. The findings of the study reveal that students need counseling to solve domestic problems (parental attitude, problems with siblings, and insistence on responsibilities) and the current study not only provide the guidelines to students about their personal or domestic life but also guide them about educational, vocational and social life.

The positive activities in which students spend their leisure time not only affect their academic achievements but personal growth also. According to the opinion of teachers and students Guidance does not help the students to spend their leisure time in healthy & creative activities.

A survey carried out in New Zealand in 2018, reported that only 15% of career counselors were qualified for career related education.. The interaction with keynote speakers and guests from higher-level institutions motivates students in their overall development. According to the responses of teachers and student's guidance program fails to provide the opportunities of interactions with the guest speakers from higher learning institution.

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EARLY CHILDHOOD CARE AND EDUCATION IN SINDH: COMPARATIVE ANALYSIS WITH PUNJAB AND KPK

Imran Ali Mangrio*, and Dr. Saima Tabassum**

ABSTRACT

This research has been conducted with a view to investigate the current status of Early Childhood Care and Education in Sindh, its comparative analysis with Punjab and KPK, highlighting, Gaps and Challenges in ECCE, such as Lack of proper legislation, Restrictive Budget for ECCE, In-adequate Infrastructure, Lack of Awareness Regarding ECCE Schooling System, No Standardized ECCE Curriculum, Recruitment of ECCE Teachers, Absence of formal ECCE teaching cadre, No vigilant Monitoring and Evaluation, Poverty Syndrome. Role of Deeni Madrasah, less Enrollment, Quick Dropout of Students, No Female Teacher Availability, Burdening Role of Private Schools in Providing Costly ECCE Schooling. To determine practical solutions for improving and promoting Early Childhood Education. For this purpose of the study, the provincial education managers collected data, and in the three provinces, the research findings and recommendations provide strategic guidance to the stakeholders of Sindh province to sustain Early Childhood Education. All recommendation of implementation of NEP 2009/2017, increasing ECCE budget, recruiting of ECCE cadre teachers on merit, improvement of existing ECCE schooling system by providing basic facilities along with study material of ECCE if complied in letter and spirit ecce schooling will boost and produce educated gentry in fact an educated nation.

Keywords: Early Childhood Care, Education, Sindh, Punjab, KPK, Comparative Analysis.

INTRODUCTION

Education plays an obligatory role and tantamount a gross significance

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in nation building. It is vividly accepted universally that the development of a nation depends upon excellence in education that rather tends to be much eminent among the people. Education, is, therefore, deemed as recognition to curb the menace of poverty, rising production, improving standard of living, and making progressive nation. Education has remained the major concern of government in Pakistan since independence. However, no successful intervention has been made in the field of education though half-hearted endeavors have been made in the past and the present situation has assumed an alarming one.

Officially, first formally documented policy for institutional and integrating *Katchi class* was announced for 1998-2010 where ECCE was included in its 15-year National Plan of action as one of the three priorities to achieve “EDUCATION FOR ALL”.

Subsequently, connecting to National Education Policy 2009, funding was reflected in Education Sector Reform Programs (ESR) where financial resources were provided to the Provinces in the purported areas. The first Curriculum for ECCE was drafted in year 2002, revised in 2006, which included through 12 schemes of studies but unfortunately remained unimplemented at provincial and federal level.

Presently provincial and regional pilot projects have been made where ECCE centers established in the country, which is segment of Education sector plan of Provincial educational departments.

Education Policy 2009 determined age for ECCE as 3 to 4+. As per data of Education for 2015-16, total enrolment (pre-primary class and un-registered children) was 87 lacs, and Gross Enrolment Ratio (GER) 74%. Majority of these enrolled children are above 5 years' age. Out of these, 42lacs are in private sector and remaining in public sector educational institutions. *Katchi class* is an added as primary education. No separate classrooms for ECCE or separate specific teachers for ECCE in public sector schools. Whereas in private school's separate classrooms and dedicated ECCE teachers are employed. (NER) net rate of enrollment of ECCE children in Pakistan is around 36% (rural 61%: urban 42%).

Recent study and surveys indicate that infrastructure and services for ECCE are in-adequate, in the country. In total, 2/3 of public primary schools do not have the basic capacity of separate classroom for '*Katchi*' or ECCE class.

The conditions ECCE schooling of rural areas is more miserable as compared to urban. The survey states that more than 70% primary schools do not have basic ability to teach in “Kachchi” or ECCE classes. ECCE children need separate classrooms, fixed with colorful pictures, audio video learning aids especially intended for this age group. Each ECCE classroom needs dedicated teacher, well trained in methodologies for ECCE.

Global and countrywide obligations of for ECCE (*Katchi*)

Pakistan is signatories of international treaties, covenant and conventions, for ensuring fundamental rights of children, including their healthcare, education, and protection against harassment and violence.

International Covenants

a) *Convention on the Rights of the Child (CRC)*

In the year 1990 Pakistan signed this convention. This Convention related to child rights and development of child through inculcating education and providing basic health facilities.

b) *United Nation’s SDGs*

UN presented goals/targets for underdeveloped/developing nations in year 2015. Pakistan being its signatory have to achieve targets including SDG no. 4 which is pertaining to education while. SDG no. 4.2 is especially for ECCE schooling: we have to achieve target of ECCE schooling by 2030.

Federal and Provincial Governments are developing measures to attain SDG’s education goals.

National Obligations

The subsequently policy drafted for ECCE schooling which not only covers international obligations but also fulfils national commitments.

a) *Execution of Article 25-A 1973 Constitution*

To fulfill constitutional requirements every province of Pakistan including federal capital drafted policies and enacted laws for provinces for provision of free of cost education up to age of 16 years especially to pre-primary and early childhood education (up to age of three years’ children).

b) *Provinces Commitments (PESP)*

In line with NEP 2009 requirements, the provinces have formulated long-term educational projects with international partners. In all

these educational projects, the promotion of school education and the quantitative objectives of ECCE are considered in the respective provinces.

Goals/Targets of National & International Commitments

a) *United Nations SDGS*

It is mandatory being signatory to UN SDGs to make all necessary arrangements in providing quality education with special emphasis ECCE schooling by the year 2030

b) *Incheon Declaration 2030*

Pakistan has ratified this declaration where in every signatory country is bound to provide one ECCE schooling for the development of child

c) *Targets of NEP (2017)*

Recently updated NEP 2009 which is known as NEP policy 2017 which also pay especial emphasis on provinces to provide ECCE schooling free of cost and achieve targets by the year.

Significance of the Study

Pakistan being signatory to UN SDGs to make all necessary arrangements in providing quality education with special emphasis ECCE schooling by the year 2030

In addition to international responsibilities and the need for NEP 2009/2017, the governorates have formulated long-term educational projects with international partners. All these educational projects include the promotion of ECCE education in the respective districts and objective objectives are also reviewed e.g. ECCE Policy (2015) in Sindh and the ECCE Policy (2017) in Punjab.

As per ASER 2018, the national enrollment of ECCE in last four years is static between 39 in 2014 to 36% in 2018. While in Sindh it has increased from 37% in 2014 to 44% in 2018. In Punjab ECCE enrollment is also slide to 52% in 2018 as compared to 55% in 2014. In KP, it is 30% in 2018, while in 2014 it was 38 %.

The aim of this study is to build a comprehensive rationale to overcome this gap by making changes in policy, implementation plan and bridging the important gaps.

The findings of this research will be useful for insight development of all stakeholders in understanding the policy and its implementation in Sindh province.

Delimits of the Study

Due to paucity of the time and resource constraints, the research study was surrounded to secondary source of available in the education departments of Sindh, Punjab and KPK and material available on websites searched on Google.

Objective of the Study

The objectives of this study as follows: -

- To examine the current status ECCE in Sindh and its comparative analysis of with provinces Punjab and KPK ECCE systems
- To find gaps and challenges in ECCE in Sindh if any with recommendations of workable solutions
- To formulate recommendations and implementation mechanism for addressing ECCE related issues in Sindh.

LITERATURE REVIEW

This part presents review of the related literature, which include concept of Early Childhood Education (ECCE) Schooling, importance of ECCE, benefits of ECCE, national policies, reports, studies and provincial/ regional scenario of pre-primary schooling (ECCE) in Pakistan.

Concept of Early Childhood Education (ECCE) Schooling

ECCE schooling mainly relates to in the early years schooling of infantile children. ECCE Schooling has perspectives and experiences that aim to effect developmental change before officially entering classrooms, classrooms, or elementary schools. Children do not develop in size; they are developing people, things and their challenges in their environment.

All children benefit from early-time development through the ECCE schooling, however, children's role in structure and quality education learning varies from one to another.

ECCE schooling is important not only to what is happening inside the child, but also what sort of care is needed by child which will boost the development of child for healthy development of child basic health care facility and proper care and interaction is (NEP, 2009/2017).

The Importance of ECCE schooling

Strong foundation /base is necessary for erecting long structure in building house Likewise, before a child comes to primary school, A strong foundation should be laid on the needs of their families, their communities and their cultural values, including their physical, mental, emotional development in young children. The effective ECCE schooling of child lays strong base.

Learning process starts since birth. Researchers and available literature states that almost 80% of the brain of child is developed in the initial years, (birth to age of 8 years).

The significance of ECCE is well-acknowledged fact globally. It is now widely recognized that the effects of initial developments of child through ECCE a lifetime further more as child receive care, education from parents, teachers and caregivers determine how a child learns and relates in school in particular, and life in general.

In the early years, children typically develop emotional intelligence, confidence, inquisitiveness, objectivity, self-discipline, cooperation, competence, and cooperation.

Analysis of data and accessible literature states that of early development support produce positive results not only in instant means for the child and parents, but also in terms of the child's capability to pay to the society, introduction of ECCE Schooling in the primary years of childhood offer remarkable prospect to shun weak learning problems and to bring long-lasting impact to individual and the society.

Status of ECCE Schooling in Pakistan

It is generally accepted now, that first three years of a child life has long life impact due to primary care earned through parents, teachers and caring ones, in school and home. This holistic development defines a child socially physically and emotionally in later years his personality composite.

The primary learning benefits in social and economic concepts of society on human discrimination on wealth and status, and investment in poverty ridden children can make a tangible change through ECCE to discourage abnormal social behaviors and make capable mentally to connect to the outside world.

Policy Framework of ECCE in Pakistan

The ECCE concept was as *Katchi classes* till 1970s in rural areas of Sindh and Punjab to attend schools informally for enrolment in next year where Rota method was practiced.

First National Education Policy was drafted in 2009 wherein Federal Education Department and Provincial Education Departments were directed to prepare educational plans keeping in view of International Obligations mentioned in the policy with special emphasis on early childhood education. Responding this, Firstly Sindh developed policy in 2015 and notified in 2017 focusing on establishment of necessary pre-primary learning methods to improve child outcome. Likewise, Baluchistan created policy in 2015 and Punjab in 2017.

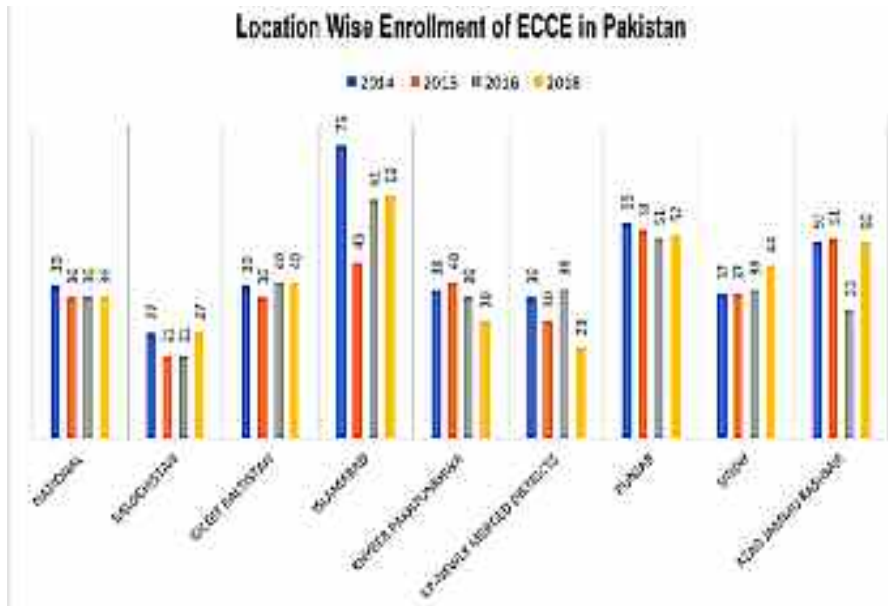


Figure 1. Location wise Enrollment of ECCE in Pakistan¹

Status of ECCE Schooling in Province of Sindh

Sindh is the second largest province with 47.9 m population spreading on area of 14091.4 sq.Km of Pakistan having urban and industries as major component. The increase at the rate of 2.41% annually in population since census 1998 is multiplying due to migration and other factors, affecting density per sq. km from 43 per sq. km to 340 per sq. km in 2017.

¹Source: ASER- 2018

Table 1: Demography of Sindh

Area of Sindh	140914 sq.km
Population	47.9 million
Urban Population	52%
Rural population	48%
Districts	29
Talukas	121
Avg. Household Size	6
Avg. Birth per Woman	2

*Source: Population Welfare Department Sindh

Table 2: Students Enrollment Data of Sindh

Level	Enrollment		
	Boys	Girls	Total
Primary	2,016,185	1,386,206	3,402,391
Middle	117,146	111,686	228,832
Secondary	376,766	253,571	630,337
Higher Secondary	146,523	81,126	227,649
Total	2,656,620	1,832,589	4,489,209

Source: SEMIS 2009-10²

This table refers to. Teachers-Student Ratio, Student-school Ratio and Student-Classroom Ratio with comparison to rural urban divide across all levels from pre-primary till higher secondary.

Table 3: Teachers-Student Ratio, Student-School Ratio and Student-Classroom Ratio

Year	Student / Teacher			Student / School			Student / Classroom		
	Urban	Rural	Overall	Urban	Rural	Overall	Urban	Rural	Overall
2006	24	36	30	232	64	148	43	43	43
2007	24	37	30	198	70	134	41	44	43
2008	23	35	29	210	70	140	40	44	42
2009	24	37	30	221	72	147	42	45	44

The ECCE enrolment in public schools in Sindh is 704,570 with 81% rural. The Pakistan Education Task force survey reveals that private schools in urban area have larger enrolment than public schools with 82% as per AEPAM 2008-09 reports.

²Source : SEMIS 2009-10

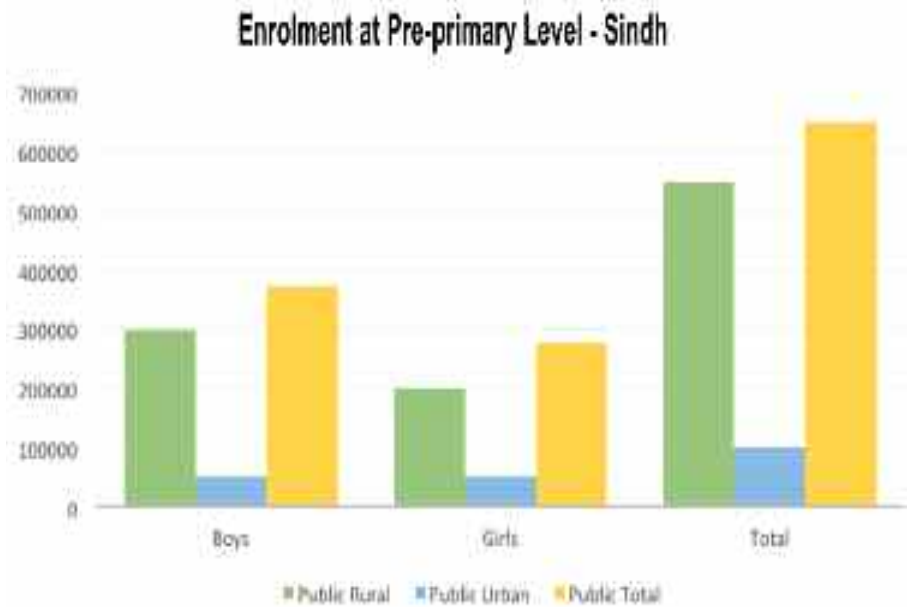


Figure 2: Enrolment at Pre-primary level - Sindh

Role of Private Sector in ECCE Schooling³

Non-Government private institutes are speeding in ECCE to provide Montessori teacher trainings prominently just like:

- I. Institute of Education Resource and Development Centre (ERDC),
- ii. Institute of AKU (Agha Khan)
- iii. Institute of (AKU-IED),
- iv. Institute of Teachers Resource Centre (TRC), Teachers Development Centre (TDC).

There are few institutes which have adopted their own ECCE curriculum such as:

- i New Century Education (NCE),
- ii Association for Academic Quality (AFAQ),
- iii. Oxford University Press (OUP) and Book Group.

The commitment of private NGO in education sector is rather noteworthy, which is in brief given below (Table 4):

³Source: Education for All & Sindh. (December 2009). Directorate of Literacy & Non Formal Basic Education, Department of Education and Literacy. Government of Sindh.

Table 4: Contribution of NGO sector at ECCE level

Organization	Contribution
Teachers Resource Centre (TRC)	Development of National ECE curriculum; Training of teachers in ECE area
Agha Khan Education Services, Pakistan (AKES,P)	Establishment of quality schools with ECE emphasis with thriving ECD classes and Montessori section
Health & Nutrition Development Society (HANDS)	Working in 10,000 villages of 5 districts of Sindh, focusing on ECD
Human Development Programme (HDP) of AKU	Focusing on ECED 0-8 years, target of intervention include teachers, caregivers, lady health workers (LHWs)
Agha Khan University – Institute for Educational Development (AKU-IED)	Teacher training and continuous professional development through certificate and master programme, development of material for ECE classes, research on ECE.
Other Organizations Include: CGN, HOPE, PAVHNA etc.	Provision of ECED and advocacy
Children’s Global Network-Pakistan (Formerly Children’s Resources International (CRI))	Provided technical and financial assistance to a programme titled Child-Friendly School Programme along with UNICEF.

Status of ECCE Schooling in Province of Punjab

To further the National education policy of 2009, Punjab Government through Punjab Education Sector Reforms Program (PERSP) included ECCE schooling with funds transition at provincial and district level out of its own budget.

Following measures have been taken in Punjab for promoting ECCE: -

- a) Free learning materials including storybooks are given to ECCE children.
- b) Parent’s involvement is encouraged and they are motivated to send their children to schools.
- c) International donor agencies and NGOs are encouraged to provide facilities for launching ECCE classes in all public and private sector primary schools.
- d) Government has introduced and institutionalized formal ECCE at primary school level.
- e) Funds have been provided to Parent Teacher Council to construct additional rooms in primary schools. ECCE Rooms have been established in 1225 schools.
- f) Training has been imparted to ECCE teachers and head masters of the concerned ECCE schools, members of school councils and

education managers of districts regarding ECCE. Teacher training sessions for one or two days have been organized for 1225 ECCE schoolteachers.

- g) Caregivers have been hired in children primary schools to facilitate ECCE teachers and to look-after. Punjab government has transferred caregivers' funds for one year in School Management Council (SMC) accounts for 1250 primary schools. Caregivers have been appointed on cash incentive basis. The scholarship of Rs.3800/- per month by School Management Councils (SMCs) has also been allocated.
- h) Atmosphere of the existing classrooms is made more eye-catching through colorful painting on the walls with some themes for learning at initial years.
- i) A day care center is established in Directorate of Staff Development (DSD) to look after children of female teachers and managers who come for training in DSD.
- j) Table 5. Shows that net intake rate in ECCE is currently 76% in Punjab and the target is to reach 100%.⁴

Table 5. Net Intake Rate in ECCE in Punjab

	Public	Overall	Target
	2012	2012	
NIR			
ECE		76%	
Primary	93%	96%	100%
Middle	72%	61%	75%
Secondary	38%	44%	40%
Survival Rate			
Primary	57%	75%	100%
Middle	86%	91%	100%
Secondary	59%	73%	85%
Transition Rate			
K-Primary	68%	82%	90%
Middle	92%	95%	95%
Secondary	100%	100%	100%

⁴Source: National Institute of Population Studies

Projected Additional Children in Punjab:

Table 6: Shows projected additional children in schools in Punjab

Additional Children in Schools						
	2013-14	2014-15	2015-16	2016-17	2017-18	Total
ECE	230472	252197	276086	302356	331246	1392357
Primary	671719	499673	1627006	711070	922942	4432410
Middle	233129	341901	219533	219533	219433	1233529
Secondary	139548	242838	131025	129801	129801	773013
Total	1274868	1336609	2253650	1362760	1603422	7831309

5

Table 7: Shows Level Wise Out of School Children in Punjab

	2011	2012	2013	2014	2015	2016	2017
ECE	27%	35%	33%	29%	26%	22%	18%
Primary	6%	13%	21%	19%	8%	5%	1%
Middle	45%	46%	42%	36%	34%	31%	28%
Secondary	64%	77%	75%	71%	68%	66%	64%
Total	29%	39%	40%	36%	30%	27%	23%

6

Status of ECCE Schooling in Province of Khyber-Pakhtunkhwa

Following National Educational Policy, ECCE was included as major component for educational change by the Government of KPK. In the (Education Sector Plan) 2010 to15, it was decided to “**introduce and institutionalize formal Early Childhood Education (ECCE) at the primary school level**”. Later on, ESP 2015-20 stressed upon urgency of preprimary education for both boys and girls alike.

Khyber Pakhtunkhwa issued notifications to admit four plus age group children in all public sector primary schools. The early-childhood and *Katchi classes* are included in primary education. Consequently, primary cycle consists of seven grades instead of five grades. Apart from this, there is a class of un-enrolled students which exists in almost every public sector primary schools. These kids usually come to school along with their siblings. The parents send them to schools to make acquainted them with school atmosphere. Khyber-Pakhtunkhwa government is facing the

⁵Source: National Institute of Population Studies

⁶Source: National Institute of Population Studies

challenge of million out of schoolchildren; therefore, government is taking all possible steps to bring these children in schools.

Following steps have been taken in Khyber Pakhtunkhwa for promoting ECCE: -

- i. Corporal punishment for ECCE students has been completely banned.
- ii. Free text books, reading materials and story books are provided to children enrolled in ECCE.
- iii. Parents' involvement is promoted and they are motivated to send their children to schools.
- iv. International donor agencies and NGOs are encouraged to provide facilities for launching ECCE classes in all public and private sector primary schools.
- v. More than 400 ECCE rooms were supposed to be constructed in 2015.

METHODOLOGY

This study was qualitative in nature. Data was collected from all the relevant Education Departments of Federal and Three Provincial Governments (Sindh, Punjab and KPK) and those concerned who are working Early Childhood care and Education across Sindh, Punjab, and KPK. Document Analysis was conducted which includes reports and studies on Early Childhood Care and Education in Sindh, Punjab and KPK. Data collected from the recorded facts in form of documentation available on early childhood care and education. Comparative analysis has done based on reports, assessments, facts and figures obtained from Sindh, Punjab, and KPK.

RESULTS

ECCE which is pre-primary (*Katchi*) education system in Sindh, Punjab and KPK province of Pakistan having almost same issues with reference to not attaining international and national commitment goals/targets.

These are the gaps /issues in non-provision of ECCE to the children of Sindh, Punjab and KPK provinces of Pakistan.

Lack of proper legislation by Federal/Provincial legislative assemblies in the line of international commitments and set targets:

Proper legislation has not been done by federal government except

national education policy (2009/2017) which should cater the needs of international standards of early child hood education, provincial governments of Sindh, Punjab and KPK has also not shown any seriousness in legislation for giving legal cover to foundation education system.

Restrictive Budget for Education department by Federal and Provincial budget ECCE is negligible:

Very meager budget just 2.2 % GDP is reserved for education for the financial year 2017/2018 which is low as compared to previous year budget allocation (2.3% of GDP in Financial Year 2016), which is the lowest in the South Asia. Federal govt. allocated Rs 10.12 billion for ECCE and primary education affairs in budget Financial Year2018/19 which is meager.

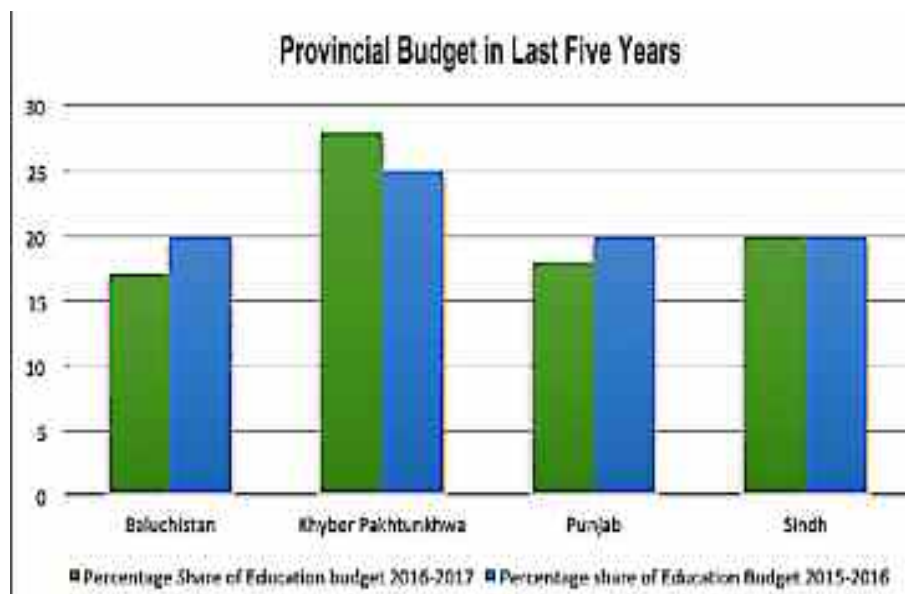


Fig. 3: Status of provincial budget in last five years

In-adequate Infrastructure for ECCE Schooling

There are many public schools' buildings, which are devoid of ECCE schooling system such as no any separate classroom for ECCE system, conditions of public schools mostly in rural areas of Sindh Punjab, and KPK are devoid of basic facilities of life such as drinking water, electricity and toilet facility.

Lack of Awareness Regarding ECCE Schooling System

Early child hood education previously known as *Katchi* or pre-primary with leased facilities now renamed as ECCE with most sophisticated tools

for children aged 3 to 5 years. Most of people in rural areas of Sindh, Baluchistan, and Punjab are not aware of ECCE system of schooling and its importance.

No Standardized ECCE Curriculum

Since independence, ECCE schooling was not paid proper heed. After formation of national education policy in 2009 and subsequently in 2017. The National ECCE Curriculum 2017 formulated with covering international obligations but still lag behind in being implemented.

Recruitment of ECCE Teachers

Recruitment in federal and provincial education department mostly done by political influences and no any meritocracy is adopted in the process.

Absence of formal ECCE teaching cadre, Special Training to ECCE Teachers

Mostly teachers given additional assignment of ECCE schooling who are already appointed on political references and need special training which is also mandatory in national education policy 2009/2017.

No any specialized ECCE curriculum related training is given.

System of vigilant Monitoring and Evaluation

National educational policy at federal and provincial plans lacks proper system of vigilant monitoring and evaluation of ECCE schooling.

Poverty Syndrome

Country is inflicted with plethora of social, political and economic problems, among the economic problems the most glaring being that of poverty which is eating our social fabric like termite. Poverty is also cause of not sending children to schools rather child labor is produced.

Role of *Deeni Madrasah*

As mentioned above that poverty is cause of most of the ills in the society so to avoid this syndrome most of the poor parents send their children to free of cost *Deeni Madrasha* which also cater the religious needs and also feed their children along with religious education. This trend keeps children away from ECCE schooling.

Lack of Awareness regarding ECCE schooling system

Due to dearth of ECCE schooling know how in general public. Parents

are unwilling to send their kids to schools and prefer to keep them with their grand parents.

Issue of Enrollment

ECCE schooling just recently has momentum so percentage of its enrollment is also low at federal and provincial level especially very low in Baluchistan KPK and Sindh.

Dropout Students

The meager enrolled ECCE children are dropping out slowly due to less facility of so young children which needs special care/baby care, especial toilets/diaper etc.

At Coeducation ECCE schooling No female teacher available

Keeping in view the early aged children aging from 3 to 5 years female ECCE teachers are required which can handle the kids properly but unfortunately there is dearth of female teachers at federal and provincial level.

Role of Private Schools in Providing Costly ECCE Schooling

System of ECCE schooling with most sophisticated methods equipped the modern furniture for audiovisual learning for ECCE children is adopted but with high cost which few families living in urban areas can opt for.

CONCLUSION

The provisions of education policy (2009/2017) regarding ECE have not been implemented in letter and spirit in all three provinces/region. Hence, provincial/regions Education Departments have started ECE classes in public schools in accordance with their own consideration.

Other reasons include lack of financial resources with department is an aspect and distance of school from training institution is one of the important reasons of not getting appropriate ECE Training.

The implementation of NEP 2009/2017, increasing ecce budget, recruiting of ECCE cadre teachers on merit, improvement of existing ECCE schooling system by proving basic facilities along with study material of ECCE if complied in letter and spirit ecce schooling will boost and produce educated gentry in fact an educated nation.

RECOMMENDATIONS

- i) Federal and provincial governments should develop strategy for**

implementation of provisions of National Education Policy 2009/2017 on ECCE - Quality & Access in letter and spirit

- a. Holistic development via Play
 - b. Age Group 3 to 5 years
 - c. Universal Access by 2019
 - d. ECE Classes attached to Primary Schools
 - e. ECE Teachers undergo 2 years training
- ii) Increase in Budget share for Education department by Federal and Provincial budget for ECCE schooling**
Increase in budget share at least 5% of GDP. Currently low budget of just 2.2 % GDP is reserved for education for the financial year 2017/2018 Federal govt. owed Rs 1012 million for ECCE and primary education affairs in budget for Financial Year 2018/19 which is meager should be increased.
- iii) Building classes/ Infrastructure for ECCE Schooling**
There are many public school buildings, which are devoid of ECCE schooling system such as no any separate classroom for ECCE system. Establishment of at least one classroom for ECCE in every primary school with all facilities.
- iv) Creating Awareness among masses regarding ECCE Schooling System**
Massive Community Mobilization regarding Early child hood education (*Katchi* or pre-primary) in the entire country and Utilize health centers/hospitals to conduct awareness sessions and its holistic development benefits on child's personality development and its importance of ECCE system of schooling.
- v) Unified Standardized ECCE Curriculum,**
As Since 1947, ECCE schooling was not paid proper heed. After formation of national education policy even in 2009 and subsequently in 2017. The unified National ECCE Curriculum 2017 formulated with covering international obligations this be implemented unified in all provinces.
- vi) Meritocracy in Recruitment of ECCE Teachers**
Recruitment in federal and provincial education department must be done on meritocracy in ECCE Schooling. Third party testing &

recruitment guide lines must be established.

vii) Formation of ECCE teaching cadre / Capacity building, / Imparting of Special Training to ECCE Teachers

Especial cadre teachers (Caregiver) ECCE schooling be appointed and special training which is also mandatory in national education policy 2009/2017 be imparted Qualification criteria for ECE teachers in the initial implementation be required, Diploma& Certificate in ECE/Montessori/Nursery.

viii) Effective Monitoring and Evaluation mechanism

Effective mechanism of monitoring and evaluation at federal and provincial level be adopted in ECCE schooling.

ix) Make more effective social protection mechanisms to alleviate Poverty Syndrome

Pakistan is inflicted with plethora of social, political and economic problems, among the economic problems the most glaring being that of poverty which is eating our social fabric like termite. poverty is also cause of not sending children to schools rather child labor is produced so social protection mechanism be made effective to alleviate poverty by doing needful in the following departments/projects.

- a. Zakat (cash transfer, private contribution)
- b. Pakistan Bait ul Maal (cash/in-kind support, fed budget)
- c. Workers' Welfare Fund (cash/in-kind support, housing, employee's contribution)
- d. EOBI (pension, grants, employee's contribution)
- e. Public Works Program (Federal budget)
- f. Microcredit (small loans, credit line by donors)
- g. Provincial Social Security (health services, cash support, employee's contribution)
- h. BISP (cash transfers, federal budget)

x) Role of Deeni Madrasah be limited to religious education

As mentioned above that poverty is cause of most of the ills in the

society so to avoid this syndrome most of the poor parents send their children to free of cost *Deeni Madrasha*, which should be limited to the religious needs and trend of ECCE schooling be enhanced.

xi) Efforts to increase ECCE students Enrollment

ECCE schooling just recently has momentum so percentage of its enrollment is also low at federal and provincial level especially very low in Baluchistan KPK and Sindh.

xii) Efforts to stop Dropout Students at ECCE

The meager enrolled ECCE children are dropping out slowly due to less facility of so young children which needs special care/baby care, especial toilets/diaper etc.so maximum efforts be made to provide basic facilities and provide learning materials.

xiii) Recruiting female teacher Coeducation ECCE schooling

Keeping in view the early aged children aging from 3 to 5 years female ECCE teachers be appointed who can handle the kids properly.

xiv) Check on Private Schools in fees structure in providing ECCE Schooling

System of ECCE schooling with most sophisticated methods equipped the modern furniture for audiovisual learning for ECCE children is adopted but with high cost which few families living in urban areas can opt for.

xv) Role of NGOs in promoting ECCE schooling

Local and international NGOs be encouraged and contacted for promoting ECCE schooling.

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ACADEMIC EFFICACY MEDIATES TEACHING METHODOLOGY AND ACADEMIC PERFORMANCE OF BUSINESS EDUCATION STUDENTS

Muhammad Naeem Shahid*, Muhammad Abrar**, and Faisal Aftab***

ABSTRACT

The article aims to investigate academic self-efficacy as a mediator between teaching methodology and students' academic performance. The teaching methodology includes three factors: assessment methods, English language & communication and teaching styles, while the performance is investigated in quantitative modules. The sample is drawn from post and undergraduate students of business from public-sector higher education institutes of Pakistan. To achieve the objectives, structural equation modeling is employed to the data obtained through questionnaire from 300 questionnaires. Overall measurement model confirms convergent, internal consistent reliability and discriminant validity which is legitimate and valid for further investigations. Path coefficients show that T-statistic values are significant therefore, there exists a significant-positive connection between teaching methodology and performance. The results also show that academic self-efficacy mediates the relationship between Teaching style and performance, Assessment method and performance and English language & communication and performance.

Keywords: *Academic Self- Efficacy; Academic Performance; Business Education; Teaching-Styles; Quantitative Courses.*

INTRODUCTION

In today's education, the accountability of classroom teachers has increased strongly while the achievement of students has become a hot topic for debate in the field of education. To become a successful teacher, it is

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crucial to define the factors affecting students' achievements (Pooja, 2017). A successful and well-known educational system must have high quality, reputed, and shining teaching staff. Teachers play a very crucial role in their students' life (Latif et al., 2012). Thus different aspects of the personality of the teachers may improve the academic performance of the students (Zakariaand & Dewa, 2015; Yousef, 2017; Khan et al., 2017; Guirguis & Pankowski, 2017). Therefore, the current study examines the influence of teaching/training methodology on the academic excellence of students in quantitative courses/subjects through academic efficacy as a mediating agent.

According to the accreditation standards of the National Business Education and Accreditation Council (NBAEC) of Pakistan, a significant proportion of quantitative courses should be included in the curricula of business schools such as Statistics, Management studies, and decision sciences (NBAEC, 2016)¹. On the other hand, the higher education commission (HEC)² of Pakistan incorporates different quantitative subjects like Quantitative Decision Making for Business, Business Statistics, Statistical Inference, Research Methodology and Productions & Operations Management (Naqvi et al., 2012)³. HEC makes the quantitative courses as a compulsory prerequisite for BBA and MBA programs. During class, the primary communication channel is English as textbooks, case studies, learning resources and all other adopted learning materials for these programs are in English. All the learning material in the domains of management sciences reflects the culture and intellectual experiences of the West. However, almost all students in Pakistan are Urdu native speakers. Previous studies argue that students of business studies took quantitative courses most difficult and challenging (Mukherjee, 2000; Brookshire & Palocsay, 2005; Blaylock & Hollandsworth, 2008; Naik, 2009; Yousef, 2017). The adverse attitude towards quantitative subjects puts numerous negative consequences for

¹*Educational professional body the "National Business Education Accreditation Council (NBEAC)" is being run under the umbrella of "Higher Education Commission". "NBEAC" accredits educational programs of educational institutions of Pakistan, the programs include Management Sciences programs, Public Administration and Public Administration.*

²*The "Higher Education Commission (HEC)" is a self-governing, sovereign, and constitutional body for prime funding, supervising, regulating, and recognizing the higher education institutes operating in Pakistan.*

³*In the field of Education, Curriculum of subjects is termed as a nation's "throbbing pulse". A nation's steps and phases towards socio-economic development can be judged through viewing curriculum. The HEC after a regular time intervals holds a democratic arrangements by involving DAIs/Universities, R&D institutes and local CC&I (Chamber of Commerce & Industry) to refurbish and revamp the curriculum. HEC also invites contributions and rational feedbacks by emigrant Pakistanis employed in technically-advanced countries in educational and R&D institutions and incorporate their views wherever consider appropriate and approved by "National Curriculum Revision Committee (NCRC)".*

administrators, educators, and especially students (Yousef, 2017). Regardless of the significant impact of assessment method (Lebcir et al., 2008), English language & communication (Asrar et al., 2018; Hussain 2017) and teaching style (Pooja, 2017) on students' academic performance in quantitative courses of business curricula, an extensive review of the literature shows that very little attention has been given in this area of research (Dinu-Bajracharya, 2015; Yousef, 2017). Previously, some studies investigate the direct relationship between teaching methods and academic performance of the students, but the role of academic self-efficacy in learning has ignored (Talsma et al., 2018). Academic self-efficacy is an individual's self-confidence that he/she can attain desired academic goals successfully (Nasa, 2014). Academic self-efficacy has received great attention from researchers as it is considered as a core element of human activity and an extensive thought to be optimistically associated with academic success (Bong et al., 2012; Talsma et al., 2018). Thus the current study aims to inspect the impact of the three-factors model (namely teaching-style, English language & communication, and assessment methods) of Lebcir et al. (2008) on the academic excellence of non-native English under/postgraduate students in quantitative subjects through mediating role of academic self-efficacy. These subjects include Quantitative Decision Making for Business, Business Statistics, Statistical Inference, Research Methodology, and Productions & Operations Management. Previously, researchers correlated the profound teaching style to the preferred learning style in getting upper grades in exams (Canfield, 1992; Miglietti, 1994; Matthews, 1995; Tulbure, 2011), hence revamping the desire and achievement of students (Cafferty, 1980; Wetzel et al., 1982; Welborn, 1986; Miller, 2001; Stitt-Gohdes, 2003). Although, some studies investigate the relationship between teaching methodologies and students' performance, the mediating role of academic self-efficacy remained hidden (Harb & El-Shaarawi 2007; Yousef, 2012, 2017; Lebcir et al., 2008). Therefore, the current study is the first of its nature that fulfill this gap.

Thus, the study boosts the literature on education by first time linking the academic efficacy as a mediator between teaching styles and academic performance of the students. The remaining part of the article is ordered as the next part is comprised of a relevant literature review followed by methodology and data analysis and the last part consists of discussion and conclusion.

LITERATURE REVIEW

Teachers working in higher education institutions duly emphasize students' desires to pursue success in their careers. Competent tutors should communicate their lessons in such a way that improves the learning skills of students regardless of the diversity of courses (Thompson et al., 2004). The top-quality education systems and teachers execute a vital role in the different civilizations of the world (Latif et al., 2012) through the academic achievements of the students (Lebcir et al., 2008; Yousef, 2017).

Assessment Methods, English Language & Communication, Teaching Style, and Students Performance

According to research by Ganyaupfu (2013), different teaching methods are available based on teacher-student interaction and required appropriate implementation standards. The teacher-centered methods enable the students to explore new learning opportunities by realizing their interests. Therefore, learning has adopted a more goal-oriented approach. Finally, teacher-student interaction is used to attract students and led by teachers for a certain period. Although this meta-analysis explores a variety of evidence-based teaching strategies, that allows the students not only to learn but also to develop their primary concerns. But teachers have limited abilities to practice such strategies. For instance problem-solving, co-teaching, reciprocal teaching, inclusion, collaboration strategies depend on interaction with heterogeneous students and faculty to achieve multiple perspectives (Guirguis & Pankowski, 2017).

Enhancement of students learning behavior is reported by several researchers when information is communicated according to students' wishes (Keller, 1987, Miller, 2001, Laight, 2004). In the past, teaching style remained a burning issue among scholars. It is referred to as an inclination towards teaching behavior and conformity between coaching behavior and coaching faith of tutor (Heimlich & Norland, 1994) or with the manner a tutor deals a learning exercise (Davis et al., 1994). Besides "some teaching styles are specified as a label associated with the various identifiable sets of classroom teaching behaviors, which are consistent with the taught content even though such content may be subject to change (Conti & Welborn, 1986)". However, style maybe one's comprehensive tutorial qualities which lasts whatever the set of conditions. The common feature that comes out of these various descriptions is the learning process and teaching manners (Spoon & Schell, 1998). A thematic framework is presented by Lebcir et al. (2008), comprised of three distinctions teachings

styles i.e. English language & communication and assessment methods which are considered to have an impact on students' academic performance. It is evident from the research that English language skills, the pace of lectures, level of details given in lectures, internet sources, individual or group evaluation, and quantitative/qualitative contents of evaluation are key factors regarding academic excellence of overseas students in quantitative modules. According to (Michel et al., 2009), earlier studies find that learning of students is highly affected by active teaching tactics as compared to the passive approach of teaching. Kang'ahi et al. (2012) infer that style of teaching during the lecturer has encouraging impacts on the achievements of students in academia. Ganyaupfu (2013) concludes that the academic achievements of students are significantly and positively influenced by teaching methods.

On the other hand, to become a good teacher requires various skills. Ehindero and Ajibade (2000) suggest that teachers need specific skills for effective teaching e.g. good classroom management, good communication, knowledge updating, and personality development. Unless these basic teaching skills are available, no one can teach effectively. In formal or informal situations, teaching involves a process of communicating basic knowledge and skills that can change behavior (Osakwe, 2009). Because students view communication skills as the characteristics of a good teacher (Zakariaand & Dewa, 2015). According to Khan et al. (2017), student success is directly linked to effective teacher communication. Liberante (2012) believes that the relationship between students and teachers has an unlimited impact on learning.

Therefore, good communication skills are required for better academic performance. Harb and El-Shaarawi (2007) find that English reading, writing, and speaking skills are exhibiting noticeable effect as an instructional language on the academic achievements in business modules of students. In project management courses, (Lebcir et al., 2008) find the English-language as a vital forecaster of academic excellence of overseas students at a British University, and similar findings are reported by (Yousef, 2012) in introductory quantitative courses of non-native English students. Effective teaching requires teachers to have excellent skills in all these areas. Good communication skills are necessary for teachers to interact with their students, classroom management, and carrying out educational activities properly. To teach according to students' abilities, teachers need to use these communication skills to stimulate students (Sng

Bee, 2012). Between English proficiency and academic achievements of students, Feast (2002) find a significant association. Several other researchers find a positive and significant association between language proficiency and academic excellence assessed through TOEFL grades, but the correlation is weak (Heil & Aleamoni, 1974; Riggs, 1982; Abadzi, 1984; Burgess & Greis, 1984; Vinke & Jochems, 1993). According to Pepperl and Trevelyan (1997), English proficiency is the second strongest predictor of overall performance after the GMAT score. English language skills have the highest predictive value of 10% of the variance of performance measures (Ho & Spinks, 1985).

It is the responsibility of a teacher to teach the students to prepare them practically so, that they can cope with all kinds of situations. Teacher communication skills have an important role in students' academic achievement. Therefore, effective communication is essential for student and teachers' success (Osakwe, 2009). Communication skills build relationships between students and lecturers to understand each other and to promote common interests. Communication plays an important role in building the career of students and to motivate them to increase their abilities. Therefore, it is important and necessary for teachers to communicate effectively with students (Asrar et al., 2018).

When it comes to assessment methods, classroom assessment guides students to determine what is important to learn according to their self-perceptions of motivation and ability (Crook, 1988), which gradually shape their attitudes. An individual study is undertaken to reinforce the practice further and to develop continuous learning strategies and skills. The adopted assessment method has been documented to influence students' diverse learning patterns (Schouler, 1998). In contrast, perception of students towards assessment technique of teachers influences the approach of students to learn their modules (Struven et al., 2005). In learning environment, especially web-based learning, "formative assessment strategy" strongly influence the students' achievements (Wang et al., 2006). Qualitative/quantitative content of group or individual assessment and evaluation are significant forecasters of international student's academic achievements in project-management courses (Lebsir et al., 2008) Similarly, Yousef (2012) concludes that academic excellence of non-native English students is influenced by assessment techniques in quantitative modules. Also, Yousuf (2017) finds no impact of assessment methods on academic excellence of students of business administration in

quantitative modules at UAE universities. The following hypothesis are developed on the basis of above discussion;

H₁. Teaching style has significant impact on Academic achievement of students of business administration in quantitative modules.

H₂. English language & communication have significant impact on achievement of students of business administration in quantitative modules.

H₃. Assessment techniques have significant impact on achievement of students of business administration in quantitative modules.

Academic self-efficacy

According to Klassen and Usher (2010), self-efficacy improves performance through different ways: people having high self-efficacy often set more complex goals, give extra efforts, face challenges bravely and show flexibility in hard times. These successes in return increase self-efficacy that outcomes in excellent performance (Stajkovic et al., 2018). Self-efficacy theory (Bandura, 1977) proposes that academic self-efficacy might differ in the performance of job/task complexity. According to Dunbar et al., (2018), self-efficacy is strongly interconnected with academic performance. A meta-analysis of Richardson, Abraham, & Bond, (2012) also concludes the strongest correlation between academic self-efficacy and academic performance. Therefore based on the discussion in section 2.1 and 2.2, we construct the following hypotheses:

H₄. Academic self-Efficacy have significant impact on Academic achievement of students of business administration in quantitative modules.

H₅. Teaching style has significant impact on Academic self-Efficacy of students of business administration in quantitative modules.

H₆. English language & communication have significant impact on Academic self-Efficacy of students of business administration in quantitative modules.

H₇. Assessment methods have significant impact on Academic self-Efficacy of students of business administration in quantitative modules.

The study of Schneider & Preckel, (2017) find academic self-efficacy as a strong predictor of academic performance. There are rare studies that have examined the mediating role of academic self-efficacy. Stajkovic et al., (2018) have explored the mediating role of academic self-efficacy between personality traits and academic performance. The study of Liu, et al., (2018) explores the mediating role of self-efficacy between teacher

support and math engagement. Hoigaard et al., (2015) investigate the mediating role of self-efficacy between school psychological climate and academic achievement, while little is known about the mediating role of academic self-efficacy between teaching methodology and academic performance. Therefore the current study aims to investigate the mediating Role of Academic Efficacy between the Teaching Methodology and Academic performance. Based on the above discussion, the study postulated the following mediating hypotheses:

H₈. Academic self-Efficacy mediates the relationship between English language & communication and performance of students of business administration in quantitative modules.

H₉. Academic self-Efficacy mediates the relationship between Teaching Styles and performance of students of business administration in quantitative modules.

H₁₀. Academic self-Efficacy mediates the relationship between Assessment methods and performance of students of business administration in quantitative modules.

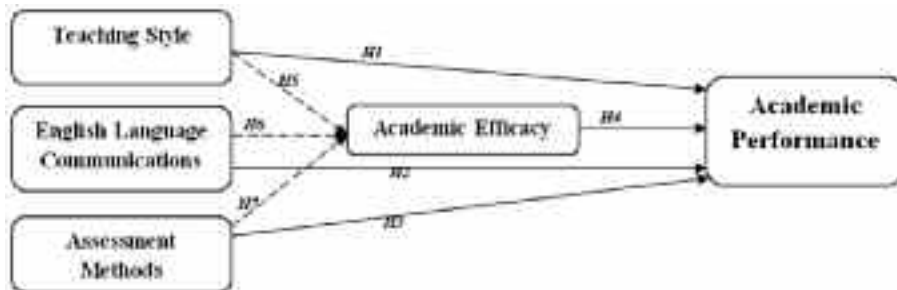


Figure 1: Hypothesized Research Model

DATA AND METHODOLOGY

Students of final years in business studies (belong to major universities in Islamabad, Pakistan) are selected as the population in the current study. As these students have completed their quantitative courses, so they best defined the population. A sample of 400 students is chosen by using a convenience sampling technique and data is collected through a questionnaire personally. 300 out of 400 questionnaires with a 75% response rate are filled by the students. 24 responses are excluded due to incomplete information, so the final respondents are 276 for analysis.

The instrument consists of three parts. The first part contains the items related to quantitative courses and is adopted from (Yousef, 2017). The second part consists of 24 items, 16 items are adopted from the study of Lebcir et al. (2008) that measure teaching style, English language &

communication, and assessment methods. The rest 8 items are adopted from the study of (Muris, 2001) to measure academic self-efficacy. All items are measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) see Appendix –I. To measure the academic performance of the students in introductory quantitative courses, quality points (GPA-grade point average) are used. Structural equation modeling is employed to interpret the relationships through PLS. The quantitative subjects for which GPA is taken to examine the variables of the study are Operations Research, Quantitative Methods for Business, Operations and Production Management, Statistics for Business 1 and 2.

Table 1: Confirmatory Factor Analysis (Cross Loading)

	Academic self-efficacy	Assessment method	English language and communication	Performance	Teaching style
Assessment method	0.731	0.447	0.59	0.021	0.485
	0.673	0.591	0.437	-0.008	0.297
	0.517	0.54	0.432	0.036	0.469
	0.639	0.586	0.368	0.013	0.419
	0.87	0.829	0.717	0.022	0.579
Academic self-efficacy	0.618	0.72	0.579	0.004	0.459
	0.718	0.846	0.425	0.03	0.357
	0.406	0.505	0.155	0.005	0.201
	0.782	0.879	0.596	0.034	0.687
	0.79	0.741	0.63	0.013	0.545
	0.641	0.814	0.66	0.017	0.519
	0.744	0.819	0.536	0.02	0.401
	0.46	0.786	0.612	0.018	0.388
English language and communication	0.664	0.653	0.824	0.013	0.578
	0.564	0.519	0.798	0.022	0.52
	0.599	0.664	0.704	0.022	0.498
	0.526	0.599	0.638	0.02	0.544
	0.451	0.453	0.637	0.01	0.382
	0.48	0.455	0.604	0.01	0.51
Performance	0.026	0.026	0.023	1	0.039
Teaching style	0.377	0.381	0.381	0.008	0.547
	0.456	0.575	0.618	0.021	0.84
	0.46	0.583	0.57	0.041	0.778
	0.364	0.347	0.386	0.037	0.671
	0.669	0.589	0.623	0.032	0.805

Table 2: Item’s Loading, Internal-consistency & AVE

	Item Indicators	Loadings for each Indicators	(Reliability) Composite	AVE
Assessment method	AM1	0.731	0.794	0.441
	AM2	0.591		
	AM3	0.54		
	AM4	0.586		
	AM5	0.829		
Academic self-efficacy	ASE1	0.618	0.883	0.645
	ASE2	0.718		
	ASE3	0.406		
	ASE4	0.782		
	ASE5	0.79		
	ASE6	0.815		
	ASE7	0.744		
	ASE8	0.66		
English language and communication	ELC1	0.824	0.855	0.498
	ELC2	0.798		
	ELC3	0.704		
	ELC4	0.638		
	ELC5	0.637		
	ELC6	0.604		
Performance	P1	1	1	1
Teaching style	TS1	0.547	0.853	0.542
	TS2	0.84		
	TS3	0.778		
	TS4	0.671		
	TS5	0.805		

Where TS = Teaching Style, ELC = English Language & Communication, AM = Assessment Method & ASE = Academic self-efficacy

Table 3: Discriminate Validity

	Academic self-efficacy	Assessment method	English language and communication	Performance	Teaching style
Academic self-efficacy	0.803				
Assessment method	0.764	0.664			
English language and communication	0.784	0.598	0.726		
Performance	0.026	0.026	0.023	1	
Teaching style	0.66	0.59			1

RESULTS AND DISCUSSION

CFA (confirmatory factor analysis) is applied to confirm discriminant validity,

convergent validity as well as reliability of items. Items loadings are presented in Tables (1 & 2). As (Anderson & Gerbing, 1988; Bagozzi et al., 1991; Gefen et al., 2000) propose, Loadings of all variables are greater than the “perilous threshold of $\geq .50$ ”. As for as the reliability is concerned, the value of composite reliability must fulfill the requisite threshold value of $\geq .70$. In the current study, the value of composite reliability is greater than the mention threshold value. Such responses from respondents reveal the entire significance of constructs (Bagozzi et al., 1991; Chin, 1998). As recommended the value of AVE is higher than 0.5 for academic self-efficacy and teaching style but around 0.5 in the case of the English Language & communication and Assessment method which is acceptable as studies suggest if AVE approaching 0.5, alongwith a composite-reliability greater than 0.6, the convergent-validity is still acceptable for each construct (Huang et al., 2013). The average variance lies between 0.441 to 0.542 and composite reliability is above 0.7 (Huang et al., 2013). For establishing discriminate validity, the square root of AVE for every latent variable is taken and this value should be greater than other correlation values (Fornell & Larcker,1981). In Table 2, the AVE value for the assessment method is 0.441 and the square root of this value is 0.664 (see Table 3). Table 3 shows all variables (Academic self-efficacy, Assessment method, English language and communication, Performance, and Teaching style) having the square root of AVE is higher than AVE values of the respective variables therefore, the discriminate validity is confirmed and accepted. The overall measurement model confirms convergent, internal consistency reliability, and discriminant validity which is legitimate and valid for further investigates.

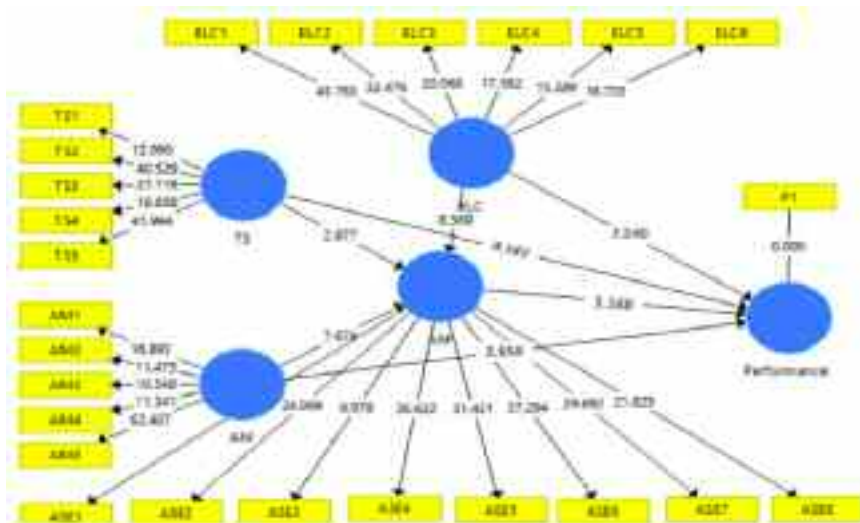


Figure 2: SEM model of study, Where TS = Teaching Style, ELC = English Language & Communication, AM = Assessment Method & ASE = Academic self-efficacy

Table 4: Results for Hypotheses testing using SEM Approach via Mediator

	Hypothesis	ST-DEV	T- Stat	Verdict
Teaching Style → Performance	H1	0.028	3.187	Supported
English language and communication → Performance	H2	0.441	7.540	Supported
Assessment method → Performance	H3	0.037	2.650	Supported
Academic self-efficacy → Performance	H4	0.054	3.168	Supported
Teaching style → Academic self-efficacy	H5	0.045	2.877	Supported
English language and communication → Academic self-efficacy	H6	0.053	8.569	Supported
Assessment method → Academic self-efficacy	H7	0.045	7.674	Supported
Assessment method → Academic self-efficacy → Performance	H8	0.019	5.467	Supported
English language and communication → Academic self-efficacy → Performance	H9	0.023	4.469	Supported
Teaching style → Academic self-efficacy → Performance	H10	0.007	8.447	Supported

The path coefficient can be used to infer and interpret the possible causal relationship between variables in the SEM approach. Table 4 shows that T-statistic values are significant therefore there exists a significant and positive relationship between teaching style and performance, English language/communication and performance, Assessment methods and performance, Academic self-efficacy and performance, teaching style and Academic self-efficacy, English Language & Communication and Academic self-efficacy, Assessment methods and academic self-efficacy. Thus all hypotheses from H1 to H7 are supported and the results of the study are similar to the studies of (Lebcir et al., 2008; Yousef, 2012; Yousef, 2017; Hussain et al., 2017; Schneider & Preckel, 2017). It is also clear from Table 4 that the coefficient can be used to examine the possible mediating linkage between variables in the SEM approach. The results show that academic- self-efficacy mediates the relationship between Teaching style and performance, Assessment method and performance, and English language & communication and performance. Therefore, H8, H9, and H10 hypotheses are supported. The results are supportive of the findings of previous studies (Hoigaard et al., 2015; Stajkovic et al., 2018; Liu, R. D. et al., 2018). Table 5 represents descriptive statistics and correlation, it is clear from the table that the higher mean values show respondents' reactions are more inclination near the agreement side indicating teaching style, English language communications, and academic efficacy significantly influence the academic performance of the students.

Moreover, the correlation among variables is also less than the cut-off value of 0.85 as recommended by (Kline, 2005). The correlation results reveal that there is a positive and significant relationship among variables.

Table 5: Summary Statistics alongwith Correlations

Variables	Mean	S.D	TS	ELC	AM	ASE	Performance
TS	3.67	0.82	1				
ELC	3.74	0.69	.548**	1			
AM	3.86	0.71	.520**	.597**	1		
ASE	3.79	0.77	.615**	.567**	.573**	1	
Performance	3.73	0.82	.568**	.523**	.548**	.545**	1

Where TS = Teaching Style, ELC = English Language & Communication, AM = Assessment Method & ASE = Academic self-efficacy

CONCLUSION

The current study is the first of its nature that introduces academic self-efficacy as a mediator between teaching methodology and students' academic performance. The teaching methodology includes three factors namely assessment methods, English language & communication, and teaching styles (Lebcir et al. 2008). The sample is drawn from students of the final year from business and management feild from public sector higher education institutions of Pakistan. To achieve the objectives, the structural equation modeling is employed by using smart PLS. The overall measurement model confirms convergent, internal consistency reliability, and discriminant validity which is legitimate and valid for further investigations.

Path coefficients show that T-statistic values indicate significant positive relations between independent variables (teaching style, English language/communication, and assessment methods) and dependent variable (performance). Thus all hypotheses from H1 to H7 are supported. The results also show that academic self-efficacy mediates the relationship between Teaching style and performance, Assessment method and performance, and English language & communication and performance. Therefore, H8, H9, and H10 hypotheses are also supported. The study has some implications, the universities must require students to have English proficiency before getting admission to business studies. The teaching faculty should prepare and deliver well-structured lectures at an equitable pace to allow appropriate time for students to understand them. Good use of Web learning platforms can also enhance the performance of students. Moreover, the teachers should engage the students in quantitative courses

through class discussions and encourage the students to participate. Universities should deploy more economic resources to such subjects. Future studies can utilize the methodology in other disciplines of the academic program. The researchers can use the model of this study to compare the performance of a business and non-business students. Private and public sector institutions may also be compared with the model used in the study. Future studies may introduce the moderating impact of gender between teaching methodology and students' performance. Future research may employ mediating role teachers' foreign qualifications between teaching methodology and students' performance, but we rest all these to future research.

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INNOVATIVENESS ON OPERATIONAL PERFORMANCE OF GOVERNMENT LEVEL FIRMS (GLCS). MODERATING ROLE OF TOP MANAGEMENT SUPPORT

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ABSTRACT

Corporate Entrepreneurship (CE) is the topic of interest in the field of management sciences since long time. Although most of the studies are done in the context of western world and very few of these have investigated the impact with respect of GLCs. In fact the elements indicated by initial studies Covin and Slevin (1991) are not investigated properly in the context of Asian countries. However, the construct of CE for private sector companies overlaps with government sector and innovation is one of the initial variables of CE which is till inconclusive with respect to results and its significance (Bierwerth et al., 2015). Therefore, CE by GLCs might produce worthwhile effects on organization as well as on economy hence there is a need to investigate impact of innovation on performance of GLCs. The purpose of this study is to explore the innovation with respect to products and technologies of GLCs (i.e. innovativeness) on operational performance. SMRT PLS has been used for analysis and sample size was of 150 and results indicated that innovativeness is treated as one of the most impactful variables of CE for operational performance of GLCs of Pakistan.

Keywords: *Corporate Entrepreneurship, GLCs, Top Management Support, SMART-PLS & Pakistan.*

INTRODUCTION

Entrepreneurial organization is one which bear risk in market to innovate products so to surpass its rivals in competition (Moghaddam, Khorakian & Maharati, 2015). Studies underlines firm level entrepreneurship or corporate entrepreneurship (CE) gain massive

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attention in the literature of managerial studies (Dess, Ireland, Zahra, Floyd, Janney & Lane, 2003). The postulate is valid as CE is an important tool for organizational and economic development as well as wealth creation (Antoncic & Hisrich, 2004).

In fact, one of the latest studies on the theme indicated CE as the entrepreneurial behavior of the firm to sustain in the competitive market (Bavil, 2017). Therefore, studies like Gartner (1988) and Wortman (1987) highlighted increase of research work on entrepreneurial activities with in established firms. The initial model of corporate entrepreneurship proposed by Covin and Slevin (1991) has three main components i.e. innovation, risk taking and proactiveness and these three are still part of model for corporate entrepreneurship given by Banda and Kazonga (2018). However now corporate entrepreneurship is not only a way to innovate products, services and processes within a firm but it has also be used to generate new form of business with in a firm (Bavil, 2017). Therefore, the contemporary model indicated by Banda and Kazonga (2018) includes some other variables as new product development, new business venturing, competitive aggressiveness, self-renewal and strategic renewal. There are several studies which indicated benefits of CE (Ambad & Wahab, 2016; Banda & Kazonga, 2018; Ozdemirci, 2011 & Umrani, Kura & Ahmed, 2018).

However, some of the important contributors are Simsek and Heavey (2011) Zahra and Covin (1995) and Zahra and Garvis (2000) etc. who highlighted financial as well as non-financial benefits. Similarly, Bierwerth Schwens Isidor and Kabst (2015); Heavey and Simsek (2013) and Phan Wright Usbasaran and Tan (2009) revealed the impact of CE on overall performance, financial strengthening & acquisition of strategic benefits. However, there is a subsequent lacking of studies associated with CE from the eastern side of the world (Kuratko, Hronby & Covin, 2014) and public sector firms (Bornis, 2002), especially from the perspective of government level companies (GLCs) of Pakistan (Nayyar, 2017). Therefore, there is still requirement to check the initial model of CE presented by Covin and Slevin (1991) with reference of GLCs from Pakistan, especially when innovation does not have much value to GLCs due to lack of competitive pressure (Bornis, 2002). However recent literature of CE activities associated with service sector is majorly dependent upon emergence of innovation in the literature (de Lurdes Calisto & Sarkar, 2017; O’Cass, & Sok, 2013 & O’Cass, Song

& Yuan, 2013). Therefore, this study will check the impact of innovation of performance of service oriented GLCs of Pakistan in order to contribute to the body of literature as well as to academic and pragmatic world.

STATEMENT OF PROBLEM

It has been noticed by George Kotha Parikh Alnuaimi and Bahaj (2016) that developing economies have scarcity of firms pursuing entrepreneurial orientation, especially in comparison to developed economies. Similarly, most of the studies which explored the impact of variables associated with the construct of CE on firm's performance are focused on firms of western world (Adeoti & Asabi, 2018).

Therefore, there is a legitimate need to conduct study on corporate entrepreneurship with respect to eastern world (Kuratko, Hronby & Covin, 2014). Especially when the impact of various predictors of CE e.g. innovation, strategic-renewal and corporate venturing are inconclusive on firm's performance (Bierwerth et al., 2015). However, innovation in service sector is multi-dimensional and more impactful on organizational perspective as compared to the production sector (Van Ark & Piatkowski, 2004).

On the other hand, Nayyar (2017) indicated the requirement of workable models for CE activities associated with GLCs of Pakistan however GLCs are more complex and their open system creates massive hindrance in the process of innovation (Bornis, 2002). Contrary to this Entebang and Harrision (2019) indicated innovation in GLCs might reduce competitive pressure and also induce process of decision making. Studies further exemplifies that innovation is the characteristic of CE which provides edge over competitor (Ahmed & Shepherd, 2011) and public sector innovation is majorly associated with innovation of processes (Diefenbach, 2011).

In fact, innovation in products and technologies on continuous bases is the major predictor of CE (Ambad & Wahab, 2016) which is actually termed as innovativeness (Ozdemirci, 2011). However, support of top management support is essential for creative process as it fosters flexible planning and objectives (Carter & Jones-Evans, 2006). Hence this study will explore the effect of innovativeness as the predictor of CE in GLCs on firm's performance with the moderation of top management support.

THEORETICAL FRAMEWORK

According to Diefenbach (2011) the construct of corporate entrepreneurship includes similar variable inventory for public sector entrepreneurship and private sector entrepreneurship. On the other side complex structure of public sector monopolies will reduce their ability to innovate (Kearney, Hisrich & Roche, 2008). Similarly, employees who favor organized administration are not inclined towards innovation and creativity (Khakha, 2014). On the other hand, indicators of firm's performance include increase in revenue, profitability, market share, overall performance and satisfaction of customers (Coulthard, 2007).

Though to incorporate subjective analysis (not based on financial ratios) one must gauge human aspects and other human aspects which indicate non-financial performance (La Nafie, Nimran, Musadieg & Suyadi, 2014). However, corporate entrepreneurship might be evaluated through staff level entrepreneurial activities (Ireland & Webb., 2009). Supported by Carter and Jones-Evans (2006); Moghaddam et al. (2015); Umrani Ahmed and Memmon (2015) Umrani et al (2018) who collected data from top and middle level employees. However, lack of support from top management was highlighted as one of most devastating hindrance for corporate entrepreneurship (MacMillan, Block & Narasimha, 1984). On the other hand Carter and Jones-Evans (2006) indicated that support is required from top as well as middle management for executing future plans and directions of the firm. Therefore, the study will explore the impact of innovativeness as the contributor of CE on the operational performance with the moderating effect of top management support.

LITERATURE REVIEW

Innovativeness and Its Role

Initial studies related with domain Covin and Slevin (1991); Knox (2002) and Lumpkin and Dess (1996) etc marked innovation as the freshness to work processes, operating services and work principles. Schumpeter (1994) defines innovation as the hybrid of new products, new markets, new methods of production, new ways to incorporate raw material and pursue monopoly etc.

Hence firms which are inclined towards innovation yields better results in comparison to the others in competition (Jimenez-Jimenez & Sanz-Valle, 2011 & Thornhill, 2006). This relationship has also been evident by Kraus (2013); Kraus Rigtering Hughes Hosman (2012) and Su Xie and Li

(2011) etc, therefore innovation must be carried through incorporating new processes, services and work structures (Currie, Humphreys, Ucbasaran & McManus, 2008).

Similar has been indicated by Ahmed and Shepherd (2011) that innovation yield competitive edge however in government sector innovation mainly deals with improvement of processes rather than components (Diefenbach, 2011). Although one of the current studies by Entebang and Harrison (2019) indicated that innovation is also beneficial for GLCs & might not aids only in decision making but also aids in release of market pressure though. However, to gain competitive edge there is a requirement of continuity in launch of new products and technologies (Ambad & Wahab, 2016). Thus, word innovativeness is used by Ozdemirci (2011) as most important category of innovation and CE that will aid substantially to growth and profitability of the firm Ambad & Wahab, 2016). Contrary to this Wilson (2019) posited that in public sector innovation is not termed as the potent predictor of growth development and productivity. The statement seems to be valid as of less flexibility of managers in public sector corporations. Moreover, innovation in public sectors firms might contradict with traditional values e.g. procedural requirement and accountability (Kearney, Hisrich & Roche, 2008).

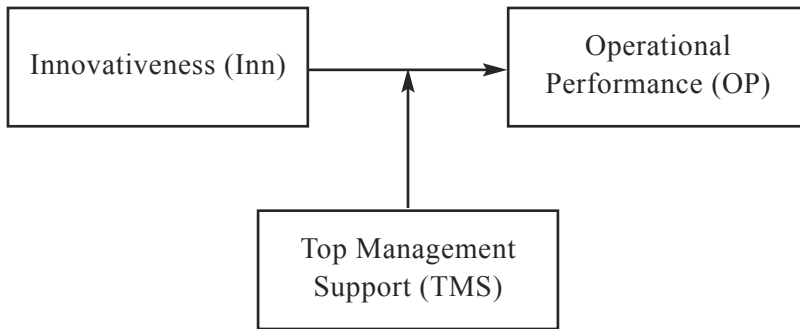
H_{1A}: Innovativeness does affect operational performance of GLCs of Pakistan.

Top Management Support

Kuratko Morris and Covin (2011) indicated several factors which affect firm's performance and among them support of top management to company's vision and entrepreneurial actions lies at the top. Carter and Jones-Evans (2006) use the term "sponsors" for top management who has to support the creative process through flexible planning so to march towards new direction at the time of need. Thus, it is believed that sponsors motivate others for involvement in entrepreneurial process, conduct follow-ups, allocate flexible budgets, resolve internal/departmental issues and ensure faster compilation of projects (Moige, Mukulu & Orwa, 2016).

H_{2A}: Top Management Support in GLCs of Pakistan does moderates the relationship between innovativeness and operational performance of the firm.

RESEARCH MODEL



RESEARCH METHODOLOGY

Research Methodology is science to describe the way for conducting research in a systematic manner. In which there are various stages explaining ways scholar used to study research problem, supplemented with reasons behind these acts (Kothari, 2004). Thus, define general logic & theoretical processes used to find answer to research questions (Sileyew, 2019). There are several parts which research methodology must cover i.e. research design, sampling design, data collection and method of analysis (Ayob, 2005 & Sekaran & Bougie, 2016)

Research Design

It is defined as strategy, plan and structure used to find answers of research questions. It will provide outline of gist of the study grasped by research from assumption till data analysis (Kothari, 2004). Hence it is optimal to discuss the philosophical as well as methodological assumptions which underline this study:

The philosophy linked with the study is epistemology as its purpose is to increase knowledge regarding the role of innovativeness in GLCs of Pakistan rather than challenging reality (Saunders, Lewis & Thornhill, 2012 & Saunders, Lewis, Thornhill & Bristow, 2015).

Supported by de Gialdino (2007) that philosophy is sued to carryout continuous and creativity that might be renewed tome and time again whenever researchers tries to uncover something unique. However, realism is research stance to pursue towards data collection and analysis (Zukauskas & Vveinhardt & Andriukaiteiene, 2018) as realism can be used for qualitative designs & designs if found coherent with the subject of the study (Saunders, Lewis & Thornhill, 2012). Similarly, Edwards

O'Mahoney and Vincent (2014) indicated that critical realism is linked to qualitative as well as quantitative designs.

Therefore, study uses critical realism as world is layers in different phases of reality and linear causal relationship among variables might be observed in closed experimental setting. This scenario is mostly related with quantitative studies especially when researchers are not trying to discover how this relationship has been formulated (Vincent & O'Mahoney, 2018). The research strategy is survey, (Saunders, Lewis, Thornhill & Bristow, 2015), as this study has been done through collecting data from middle and top-level managers of renowned GLCs of Pakistan.

The strategy was used most of the prior studies on the theme of corporate entrepreneurship from Pakistan e.g. Nayyar (2017); Nayyar and Mahmood (2014) Umrani Mahmood and Ahmed (2016) and Umrani et al (2018). The approach used for conducting study is deductive (Saunders et al., 2015) the purpose of research is descriptive (Kothari, 2004) method of data collection and analysis is mono-method (Saunders et al., 2015) and the time horizon was cross-sectional (Saunders et al., 2015 & Sekaran & Bougie, 2016).

Sampling Design

The study takes the reference of Carter and Jones-Evans (2006); Moghaddam et al (2015) Sebora and Theerapatvong (2010) and Umrani et al (2018) etc, to implement non-probability sampling. Though studies like Carter and Jones-Evans (2006) and Moghaddam et al (2015) etc collect data from top management only in order to gauge level of corporate entrepreneurship. However, in GLCs managers are not flexible as in private sector (Kearney et al., 2008) and therefore GLCs are termed as bureaucratic structures that are not focused towards CE or innovation (Moghaddam et al., 2015). Hence in this study we use loose quota sampling to include top & middle managers in the frame of sampling. This has been done as middle management are also capable of playing significant role in the process of CE (Kanter, 1988; Peters & Waterman, 1982; Pinchott, 1985 & Quinn, 1985).

These statements are also validated from Carter & Jones-Evans (2006) that support for strategy of CE may come from top as well as middle management. Thus, the inclusions of middle as well as top managers are effective to validate research as well as the moderating variable. Survey has been conducted managers of Pakistan International Airline (PIA),

Pakistan Railway (PR) and Pakistan Customs (PC). At initial phase 250 questionnaires were circulated however due to spread of COVID-19, quarantine and busy schedule the number of received responses is much lesser than the expectations. Therefore, the study has been done on the sample of one hundred (150) respondents.

Questionnaire and Software

The instrument used for this study is an adapted one although it is a junction of several studies in order to make respondent understand the gist of the question and reply effectively. The questionnaire has been developed through taking reference of Adeoti and Asabi (2018) who use Likert scale for compilation of questionnaire. Elements of innovativeness has been extracted mainly from Adeoti and Asabi (2018); Karacaoglu, Bayarkdaroglu and San (2013) and Ozdemirci (2011). Major elements of operational performance have been derived from Ikenna Julius and Ngozi Ursula (2017). However, to extract elements for the support of top management the study of Ireland Kuratko and Morris (2006) has been used.

For the purpose of analysis SMART PLS has been incorporated which has also been used by prior studies on CE, e.g. Umrani et al. (2018). However very few studies explored the effect of CE with reference to GLCs (George, Kotha, Parikh, Alnuaimi & Bahaj, 2016) especially with the context of firms from eastern world (Bierwerth et al., 2015). Hence it is legitimate to use SMART PLS as the study is associated with theory building approach (Hwang, Malhotra, Kim, Tomiuk & Hong, 2010) and smaller size of the sample is will not be issue for research and analysis. The study has four elements for innovativeness, three elements for top management support and six elements for operational performance. Therefore, through linking Wang Wang Wang Zhang and Liu (2012) and Schumacker and Lomax (2004) study uses sample size of 150 respondents as minimum sample size for study is based on 1-15 respondents per element.

STATISTICAL TESTING AND ANALYSIS

Covariance Based Structural Equation Modeling (SEM) was the most potent tool for the analysis of complex models until 2010 although after that PLS-SEM getting popular and now it is preferred in almost all the domains of management sciences. Several studies indicated the major benefit of using PLS-SEM is the absence of distributional assumptions and hence can work on smaller as well as skewed (non-normal) data sets.

Moreover, it is found appealing to several researchers as it provides solution of complex models with different variables through structural paths. Software uses two different forms of measurement models i.e. formative models and reflective models for the purpose of analysis and p-value for hypotheses testing for each path-coefficient. SMART PLS also (Benitez, Henseler, Castillo & Schuberth, 2020). Moreover software also has the ability to link descriptive measures as well as inferential measures to both forms of measurement models (Hair, Risher, Sarstedt & Ringle, 2019).

Outer Loadings

Table 1: Outer Loadings

	Innovative- ness	Moderating Effect 1	Organizational Performance	Top Management Support
Inn1	0.798			
Inn2	0.699			
Inn4	0.655			
Inn6	0.673			
Innovativeness * Top Management Support		1.006		
OP1			0.604	
OP2			0.622	
OP3			0.829	
OP4			0.864	
OP5			0.855	
OP6			0.824	
TMS1				0.920
TMS2				0.909
TMS3				0.646

Table 1 is used to indicate outer loading for each element associated with the construct of result of innovativeness on operational performance of the firm. The least weight for any element is 0.604 which is valid to be included as per Afthanorhan (2014) who indicated that values less than 0.6 must always be deleted if the study is not the exploratory one. However, for exploratory designs values of 0.4 are even acceptable (Hair Jr, Hult, Ringle & Sarstedt, 2016). However, deletion of any item having outer loading 0.6 or less is legitimate only when it aids to reliability of overall construct (Afthanorhan, 2014)

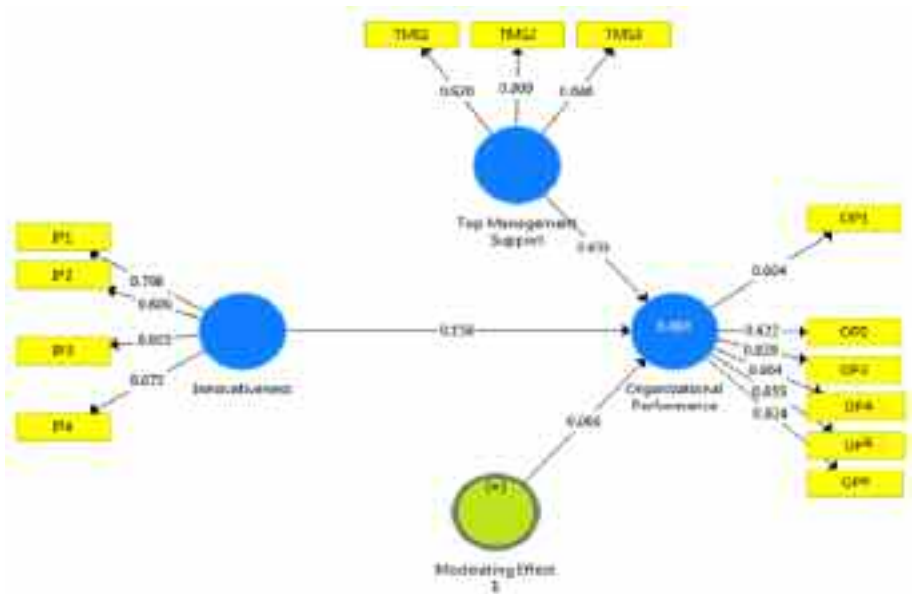


Figure 1: highlighting p-values to highlight confirmatory factor analysis (CFA) for the model showing effect of innovativeness on operational performance of the firm

R Square

Table 2: Predictive Accuracy (Quality Criteria)

	R Square	R Square Adjusted
Operational Performance	0.637	0.598

Table 2 is used to indicate the variance caused by independent variable on dependent variable. Termed as predictive accuracy and purpose of the tool is to indicate predictive variance caused by independent variable through ordinary least square (Benitez et al., 2020). Pattern for analysis is same for the tool as analysis method for regression (Andreev, Heart, Moaz & Pliskin ,2009) while least accept value for relation is 0.26 and 0.75 or above indicates substantial relation (Cheah, Memon, Chuah, Ting & Ramayah, 2018).

Although in this study the value of R^2 is 0.598 which is lesser than 0.75 and indicates moderate (fit) relationship (Henseler Ringle & Sinkovics, 2009 & Hair Ringle & Sarstedt, 2013). Similar has been indicated by another study that values between 0.3 and 0.6 for R^2 are treated s moderate (Vargas-Sanchez, do Valle, do Costa Mendes & Silva, 2015). Thus, rounding off the value of R^2 in table will yield 0.6 and confirms the moderate fit of the model used to measure innovativeness in GLCs of Pakistan.

Construct Reliability and Validity

Table 3: Convergent Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Innovativeness	0.712	0.729	0.800	0.502
Moderating Effect 1	1.000	1.000	1.000	1.000
Organizational Performance	0.862	0.886	0.898	0.599
Top Management Support	0.766	0.762	0.871	0.697

Table 3 is used to indicate construct reliability through Cronbach's Alpha (α), Dillon-Goldstein's rho & AVE (Sijtsma, 2009a&b). However, rho is better predictor of reliability than Cronbach's Alpha (Ravand & Baghaei, 2016). Table is also highlighting convergent validity which actually estimates the extent to which parameters associated with one latent variable are measuring same construct (Benitez, Henseler, Castillo & Schuberth, 2020).

Similar might be observed through the values of composite reliability and AVE, the two most important elements associated with composite reliability (Ab Hamid, Sami & Sidek, 2017). However, AVE is the element which has the ability to reflect convergent validity on individual bases. Study also provides the minimum range for the values of AVE and indicated that minimum of 0.5 is required as to reflect convergent validity (Benitez et al., 2020).

Discriminant Validity

Table 4: Discriminant Validity via Heterotrait-Monotrait Ratio (HTMT)

	Innovative-ness	Moderating Effect 1	Organizational Performance	Top Management Support
Innovativeness				
Moderating Effect 1	0.106			
Organizational Performance	0.431	0.120		
Top Management Support	0.376	0.296	0.813	

Table 4 indicating discriminant validity through Heterotrait-Monotrait Ratio (HTMT), the purpose of discriminant validity is to reflect lack of correlation in the variables of same construct (Cheung & Lee, 2010). Similar has been explained by Benitez et al. (2020) that purpose of discriminant validity is to indicate that two latent variables which are different on theoretical measures are also different with respect to statistical measures. Study further indicates that Heterotrait-Monotrait Ratio (HTMT) is the

measures which must be considered by researchers in order to highlight discriminant validity in their models. However, 0.85 is the maximum value which might be achieved at the junction of two latent variables in order to assure discriminant validity (Hair Jr, Sarstedt Ringle and Gudergan, 2017).

Table 5: Total Effects through Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Innovativeness → Organizational Performance	0.158	0.168	0.069	2.307	0.021
Moderating Effect 1 → Organizational Performance	0.066	0.061	0.079	0.830	0.407
Top Management Support → Organizational Performance	0.651	0.660	0.068	9.511	0.000

Table 5 along with Figure 2 is highlighting impact of innovativeness on operational performance of GLCs of Pakistan. Both of these are highlighting the impact through inferential statistics which is used for hypotheses testing (Benitez et al., 2020) and premier criterion of effective measurement models in SMART-PLS (Hair et al., 2019). Table 5 used for hypotheses testing (Hair et al., 2019) uses t-values (Durate & Amaro, 2018) as well as p-values (Kock & Hadaya, 2018) to indicate relationship among variables of the construct. Though least t-value require to indicate relationship between two variables is 1.97 (Hair, Ringle & Sarstedt, 2011) and higher values are there to indicate stronger relationships (Duarte & Amaro, 2018).

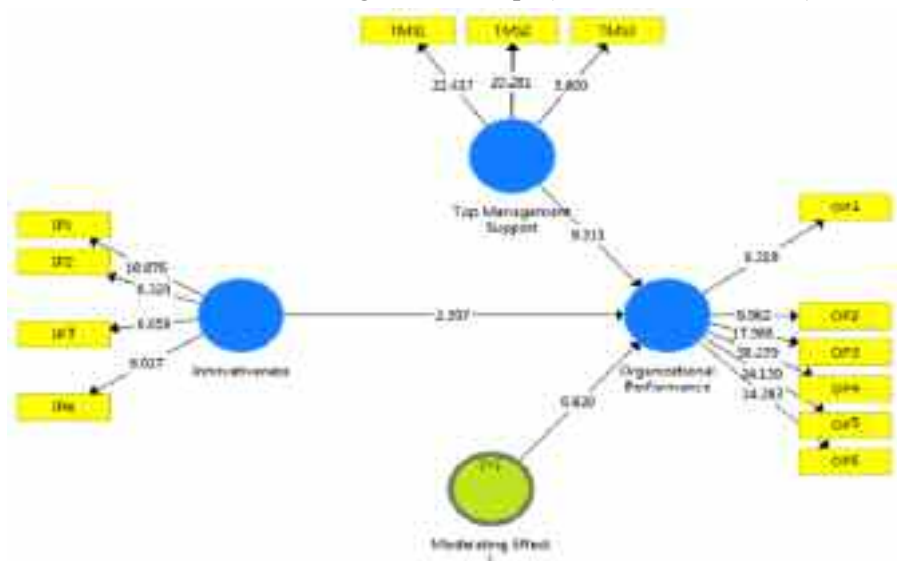


Figure 2 highlighting t-values in order to highlight path analysis for model of innovativeness on operational performance of GLCs of Pakistan

Therefore, in the light of these parameters it is deterministic to indicate that innovativeness is perceived as the component which might results in the optimization of operational performance of GLCs in Pakistan. Similarly, top management support is also perceived as the variable which is required to optimize operational performance of GLCs. However, moderation of top-management support for GLCs of Pakistan is nullifying the impact of innovativeness from the operational performance of the firm.

CONCLUSION AND DISCUSSION

Results of the study are found coherent with the study of Entebang and Harrison (2019) which indicated the usefulness of innovation in GLCs.

Thus, on the bases of results obtained it is true to indicate that innovativeness is believed as variable which might induce performance of GLCs in Pakistan and might also reduce market pressure. Similarly, the findings of the study are also consistent with Ambad and Wahab (2016) that it has also been perceived that innovativeness is the element which is required to consistent launch of new technology and products so to have edge over rivals. Hence the findings oppose the indications of Wilson (2019), as top and middle managers of different GLCs of Pakistan are treating innovativeness as the potent predictor of optimized operational performance. On the other side findings of the study are also consistent with Kuratko et al (2011) as top and middle management of leading GLCs of Pakistan treat top-management support as influential variable for optimized level of performance for GLCs. Therefore, senior managers of GLCs must follow indications of Carter and Jones-Evans (2006) in order to support other managers in compiling their work effectively. This will also require senior management to be considerate and allocate flexible schedule, budgets, render training, development and motivation to other managers as indicated by Moige et al. (2016).

Thus, affirms the indications made by Carter and Jones-Evans (2006) that role of top management are critical in fostering process of innovation through flexible processes for planning and setting of objectives. However, moderation of top management support nullifies the perceived impact of innovativeness from the operational performance of GLCs. Thus, found coherent Kearney, et al. (2008) that innovation in public sector may create contradiction as it is against traditional values and procedures. Hence also found coherent with Bornis (2002) that GLCs are complex structures which might create severe hindrance to the process of innovation. Therefore, legitimate to declare lack of top management support in GLCs in Pakistan as the major hindrance to the process of innovation. Similar

was highlighted by MacMillan et al (1984) as major hindrance to corporate entrepreneurship. Though GLCs are free from complete pressure (Bornis, 2002) but presence of problem indicated by MacMillan et al (1984) in GLCs of Pakistan in 2020 is really an issue which requires proper attention. Therefore, it is the need of the time to indicate that the study has been conducted to incorporate workable models of CE as indicated by Nayyar (2017). However, after statistical analyses it has been determined that lack of top of management support is one of the top hurdles which create hindrance in the process of innovation in GLCs.

POLICY IMPLICATIONS

Kuratko et al. (2014) indicated that CE is required not only for the growth of the organization but also for the economy and wellbeing of the nation. Therefore Nayyar (2017) highlighted the requirement of more workable model of CE for GLCs of Pakistan. However, lacking of top management support as indicated by MacMillan et al (1984) which is an issue require special consideration from government. Especially after COVID-19 as virus caused 0.8 % to 1.3 % decrease in GDP and also resulted in economic growth to 2.5% from 3.3% (Sareen, 2020). On the other side country is facing tremendous challenge as performance of GLCs is found significantly low. In fact, the loss accounted by PIA for 2014 is around 250 billion and accumulated loss of Pakistan Steel Mill for 2014-2015 is around 130 billion.

These Losses will not only produce negative impacts on Pakistan's economy but also produces negative impacts on public and support which they need from government. In fact, study also highlight requirements of effective corporate entrepreneurship, autonomy of board of directors (BoDs) and requirement of entrepreneurial behaviors from BoDs (Iftikhar, 2015). Therefore, in the light of these indications there is a special requirement of innovativeness in technologies as well as products of GLCs in order to optimize performance of the firm and also to support economy of the country.

AREA FOR FUTURE RESEARCH

Keeping in view requirement posit by Nayyar (2017) more studies might be conducted through considering models given by Covin and Slevin (1991) in the context of GLCs of Pakistan. This study only worked on only one variable which was not only inconclusive as per Bierwerth et al. (2015) however there is still requirement of studies which may inquire impact of other variables associated with construct of CE. Especially which remains inconclusive LIKE strategic-renewal and corporate Bierwerth et al. (2015) or indicated by Banda and Kazonga (2018) in the contemporary model of CE.

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DETERMINANTS OF TRADE CREDIT SUPPLY FOR THE LISTED NON-FINANCIAL FIRMS OF PAKISTAN

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ABSTRACT

Firms generally prefer to sell goods on cash than on credit, but the competitive environment compels them to offer credit to most of their customers. Although non-financial firms have better access to the financial channel, they still rely on trade credit to increase the market share. This research aims to find out the determinants of Pakistani listed non-financial companies' Trade Credit Supply. The data was collected from 2014 to 2019 for 162 non-financial firms. By using fixed-effect panel estimation the study found that the variables such as firm size, credit rating, and, short term bank financing are significant determinants of trade credit supply. Whereas, profitability is found to be an insignificant determinant of trade credit supply. The study recommends policymakers to develop and encourage the trade credit channels to enhance and promote the trade credit in the economy and build trust and better customer relationships by discouraging the conventional mechanism.

Keywords: Trade Credit Supply, Short Term Bank Financing, Credit Rating, Non-Financial Sector

INTRODUCTION

In finance, the empirical literature has highlighted several factors related to the financing decisions of the companies. One of the major factors has however been highlighted in the context of short-term liabilities, known as, Trade Credit. Trade Credit (TC) is created when firms buy goods and services on account, i.e., without paying immediate cash. This sort of liability is termed as “Accounts Payable” in the balance sheet. Two important factors differentiate TC from alternate sources of

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financing. The key difference is that the TC is obtainable by non-financial firms, whereas financial institutes may propose loans that are interest-based and are longer-term. The second major difference is that the worth of TC changes widely, whereas the actual cost of organizational credit remains near nominal cost. The only reason it becomes an unattractive financing tool is when the duration of TC is extended (Nilsen, 2002). But despite the cost, an appealing feature of TC is the provision of higher financial flexibility as compared to bank financing. Danielson & Scott, (2007) argue with liquidity issues, it is more economical for firms to make late payments to suppliers as compared to re-negotiate loan terms and conditions with banks. Also, if a firm encounters financial issues suppliers incline to follow a more tolerant liquidation policy than banks (Huyghebaert et al., 2007). Another appealing factor is that it helps consumers to confirm that their procurements accommodate the undertaking terms and conditions and to verify that all goods and products are delivered as agreed. If the products don't fulfill the agreed terms and conditions, the customer has the right to either return or refuse to make payment to the supplier (Dwyer et al., 1987). Furthermore, trade credit gives firms the possibility to chop back their payment uncertainty (Ferris, 1981). There are mainly two comprehensive theories regarding it, financing, and transaction theory. According to the first theory, the demand for TC depends on the implied rate of interest of the credit and the worth of various sources of financing; whereas the second theory states that trade credit helps to minimize both transaction costs and thus the requirement for purchasers to hold high cash balances or convert assets into cash (Schwartz, 1974).

In Pakistan, Trade credit is different from corporate and other financial debts. First of all, most of the suppliers use those products that are not directly in cash in the transaction. Secondly, trade credit is not backed by financial institutions like banks and is not served as the formal agreement between the seller and the buyers. The relationship is usually created between both parties with oral consent. Thirdly the Non-financial firms of Pakistan use it as financial means. Most of the firms and also the different economies use different bases of financing. Among all, TC is considered as an important basis of finance for all the level of firms. Non-financial firms of Pakistan mostly face financing problems. There is always a need for external finance for firms to solve the problem of the shortage of finance. Most of the time TC is used to finance this sector. The

textile industry of Pakistan is one of the biggest trading sectors, financed by TC. Similarly, sectors like Motor vehicle, Cement sector, Chemical sector, Sugar industry, etc. are also financed by TC. On the other hand, banks always required security on granting the credit. In this way, it becomes difficult for most of the customers to get loans from banks and TC becomes an important source of finance in Pakistan. It also increases the market value of the firms as well as also an indicator of the growth of the firm (Kashif, n.d.).

Khan et al., (2012), have investigated Trade Credit Demand (TCD) and Trade Credit Supply (TCS). They worked on determinants of the TCD and the TCS in the Textile sector of Pakistan. The independent variables used in their study were Internal cash flow, access to capital markets, KIBOR, the growth rate, and size of firms. The results showed that only access to capital markets, cash flow, and size have a significant impact on TC. This is one of the first studies published about the use of the TC in the context of Pakistan. But the study ignored other non-financial sectors like manufacturing companies, belonging to other industries, where TC is extensively used.

Therefore, current research is designed to broaden the investigation of the key factor of TC financing perspective. First, the study collects the data of all the listed non-financial companies of all the sectors of Pakistan. Secondly, it explains the behavior of nonfinancial firms of Pakistan towards the use of TC. Thirdly, it highlights the dynamic phenomenon used by non-financial firms to make TC financing decisions. The rest of the paper is divided into further four parts, Literature Review, Method, Results, Discussion, and conclusion.

LITERATURE REVIEW

This research tries to analyze the determinant of TC in the nonfinancial firms of Pakistan. There are two types of sources of financing. One is the primary source of finance and the other is the secondary source of finance. The bank loans and financial markets are the primary sources of finance. Trade Credit is considered a secondary source of finance (Burkart & Ellingsen, 2004). Non-financial firms have different ways to generate capital for their businesses. The TC is the external source of funding of corporate finance for a short period, could be used in both terms demand and supply. TC gives benefits to both, buyers as well as sellers (Schwartz, 1974). Firms use TC in two perspectives, one is

accounts receivable and the other is accounts payable. Firstly, accounts receivable is generated when funds are provided to customers in rendering goods and services on account. Secondly, accounts payables are created when funds are provided by suppliers, by providing goods and services. The firms determine their credit policy, according to the accounts receivable and account payable. Short term financing is less profit-generating, but it gives edge against the crisis of the firms. If the customer faces risk, he should always prefer to move to the easy way of financing like short term financing because it is more attractive for customers (Yang, 2011). According to the theory of asymmetric information, it arises some of the issues in the market. Asymmetric information creates when one of the suppliers is fully informed about the product as compared to the other supplier in the same market. So, short term financing like TC is the other way to solve this issue.

The use of TC is explained by three theories (Petersen & Rajan, 1997). First, the financial theory, the suppliers can get financial information and can monitor their customers through the information provided by financial institutions (Schwartz, 1974). The price discrimination theory is the second theory that explained the usage of TC. It gives incentives to suppliers to make extra sales. Price discrimination allows suppliers to provide the facility on payment to both the customers and the suppliers. The customers who make an early payment are given the discount and who delay in payment gives the facility of an extended contract through the term and conditions of the TC contract. The third theory, Transaction cost theory, also indicates that the use of TC involves low transaction costs (Yang, 2011). This theory is already discussed in the introduction.

The trade-credit is essential for the seller and buyer where both the parties are interested to expand their businesses when the financial markets are inefficient (Coulibaly et al., 2013). This also gives higher growth rates to the companies that can be beneficial for the users of the trade credit. Emery, (1984) states that firms that have a low level of sales use TC as a marketing tool because it offers to increase sales growth. In Pakistan, (Ahmed et al., 2014) have also worked on the determinant of the trade credit by using different variables like liquidity, size, price, inventory, and sales growth. They have applied three different models. According to the theory of TC, it is considered as a beneficial signal in the market when compared to the banks or other financial institutions. When both the parties i.e., buyers, and sellers, want to expand their businesses TC is the

best financial tool (Coulibaly et al., 2013). During the financial constraint, small and medium enterprises easily approached to the TC and get the loan as compared to the financial institutions. (Giannetti et al., 2011), argue that the TC provides finance to the company externally and it gives a discount on every early payment. Nonfinancial firms prefer to use TC because they have full information about the market. Firms also have the advantage against financial institutions. By using their resources efficiently can get more output. Such as, Eickmeier et al., (2018) states that already established companies are more interested in debt financing in the manner as developed countries are interested. Elliehausen & Wolken, (1993), studied about the Federal Reserve Board shows that TC is about 20 percent liabilities of non-bank, non-farmers, businesses and it has also up to 35 percent of total assets. After them, Rajan & Zingales (1995) argue that all the American firms in 1991 have on average 17.8 percent of the total assets represented by the TC. Kohler et al., (2000), also states that 70 percent of the total STD, and 55 percent of the TC, that is received by the firms in the United Kingdom. Study of Baños & Caballero, (2010), based on European firms' data. They obtain the opposite results. They argue that the old firms have a greater reputation among the business partners, no need to give TC to increase the partners. This is due to the relationship between the TC and sales growth that give the opposite results. After that they also investigate the different European countries, they also obtained different results due to different economic situations and also the different financial systems (Beck et al., 2008).

Size: According to the inventory management model, firms with large sizes have a good financial position of liquidity when compared with small firms. Firms with large size prefer more credit sale transactions. As the findings of Wilson & Summers, (2002) states, that firms with Large size have leverage over small firms because of their higher production rate. It might allow them to make use of scale economies to increase their market share the above explanation justifies the following hypothesis.

H₁: There is a positive and significant impact of firm size on TC supply

Short Term Bank Financing: The accessibility of banking financing (short term) to firms influence their usage of TC funding (Petersen & Rajan, 1997). Few recent studies stats that TC supply makes accessibility of short-run bank financing easier for the firms. According to Vaidya, (2011), both Bank short-term Financing and TC supply are directly related

to each other. Agostino and Trivieri (2014), too reported the same results. The above explanation justifies the following hypothesis:

H₂: There is a positive and significant impact of short-Run bank financing on TC supply.

Profitability: As the fund access from the capital market is easier for financially unconstrained firms as compare to financially constrained firms due to which their ability to extend the trade credit also increases which helps them to increase their profitability. On the contrary, financially constrained firms due to the unavailability of funding from the capital market may have to lose the investment opportunities in TC. Ultimately their market share along with the profitability decrease. Several studies demonstrate that financially constrained firms may drop the positive capital value in investments (Coulibaly et al., 2013). The above explanation justifies the following hypothesis:

H₃: There a positive and significant impact of profitability on trade credit supply.

Credit Rating: A company’s credit rating shows the view of the rating agency about the company’s overall credibility and ability to fulfill its financial liabilities (Partnoy, 2002). According to Shaheen and Javid, (2014) credit rating agencies (CRAs) have a vital role in assessing the firm’s risk of default. Credit rating agencies evaluate companies based on information accessible by the public. Credit ratings, convey the reviews of credit rating agencies on the issuer’s ability to pay its liabilities. A good corporate credit rating is seen as a symbol of high-quality, financial capacity, and a sound reputation. The creditworthiness of the firm serves the concern of investors, issuers, intermediaries, lenders, and institutions similarly. The above explanation justifies the following hypothesis

H₄: There is a significant impact of credit rating on TC supply.

Table 1: List of Variables & Sources

Variable	Name	Measurement	Sources
DV	Trade Credit Supply	<i>Trade debt/sales</i>	Oh & Kim (2016)
IV	Profitability	<i>net income/ Total assets</i>	Vaidya (2011)
	Firm Size	<i>Ln (TA)</i>	Canto Cuevas (2015), Pala Sanchez Vaidya (2011)
	Short Term Bank Loans	<i>short term bank loans/sales</i>	Mateut et al. (2011)
	Credit Rating	<i>AAA= 1 to D=0.05</i>	Chou, Yang & Lin (2011)

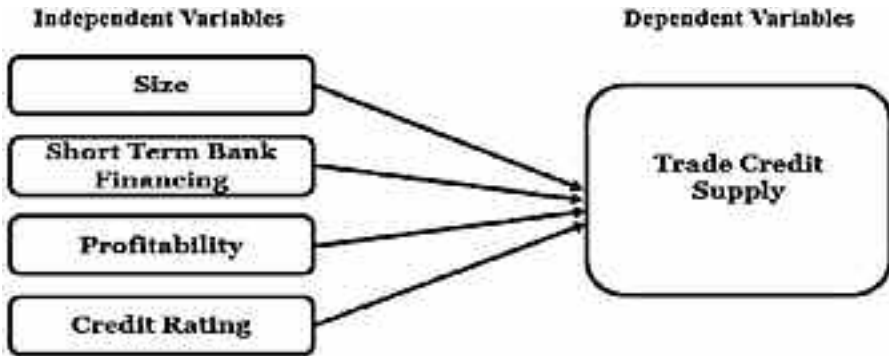


Figure 1: Conceptual Framework

METHOD

Participants: The universe of this study consists of all non-financial firms of Pakistan that are listed on the Pakistan Stock Exchange (PSX).

Sample: The sample size for this study consists of the data of companies of non-financial firms of Pakistan. It consists of 162 companies and from the year 2014 to 2019. The study includes firms from all sectors of Pakistan. These sectors include Oil & Gas, Steel industry, refinery industry, textile, Telecommunication industry, food industry, and cement industry, etc.

Procedures: For data collection, financial statement analysis (FSA) published by the State Bank of Pakistan (SBP) is used. As TC deals with the non-financial sector that's why only data of non-financial firms were included in the study. In 2019, a total of 369 nonfinancial firms were listed on the Pakistan Stock Exchange (PSX). In this study, only 162 firms' data were used for the TC. The textile sector is the largest sector of the nonfinancial firms of Pakistan that are using the TC. Pakistan Credit Rating Agency (PACRA) and Japan Credit Rating Agency-Vital Info Services (JCR-VIS), agencies websites are used to collect the credit rating information associated with non-financial companies. Each expresses its opinions in terms of rating i.e.,

- **AAA:** Credit rating is highest as risk negligible. It is risk-free more than the debt of the government.
- **AA+, AA, AA-:** It has high credit quality due to strong factors of protection but due to the risk of the economic condition, it is modest.

- **A+, A, A-:** It has the fair quality of credit where factors of production are suitable and due to the variation in economy risk factors are fluctuating.
- **BBB+ BBB, BBB-:** In this category, credit quality is satisfactory as factors which protect are enough and reasonable.
- **BB+, BB, BB-:** obligation i.e., the production factors have the capacity of weakening in case if there is any change in the economy.
- **B+, B, B-:** Obligation fulfilled if production factors have a flexible capacity in case if there is any change in the economy.
- **CCC:** A high-level uncertainty for an obligation in case if the production factors are is risky.
- **CC:** There is a high chance of default risk.
- **C:** Very risky
- **D:** It looks towards bankruptcy

Table 3, defines the criteria of credit rating which can be useful for analysis. Here, weightage to credit rating is allocated for sake of analysis the study used the criteria set by Shaheen and Javid, (2014) in the following manner.

Table 3: Table of Credit Rating Process

Weightage	Ratings	Weightage	Ratings
1	AAA	0.5	BB+
0.95	AA+	0.45	BB
0.9	AA	X0.4	BB-
0.85	AA-	0.35	B+
0.8	A+	0.3	B
0.75	A	0.25	B-
0.7	A-	0.2	CCC
0.65	BBB+	0.15	CC
0.6	BBB	0.1	C
0.55	BBB-	0.05	D

RESULTS

The statistical behavior of data is captured by using descriptive statistics. Descriptive statistics include mean which provide the average of data, median which divides the data set into two equal segments and it

is the mid-value of the data set, standard deviation provides the information that how much the data differ from the mean value. Mean and standard deviation must be used together if used separately both will be meaningless. The positive and negative spread of data captured by using the skewness but kurtosis infers about the flatness of data spread. By using the descriptive statistics, we capture the acute inferences of variables.

Table 4: Descriptive Statistics

	TCS	SIZ	SBF	PR	LIQ	CR
Mean	6094538.	15.81250	0.425220	0.045911	3.898772	0.815226
Median	454803.0	15.64402	0.129185	0.042735	1.216736	0.800000
Maximum	2.524008	20.61120	153.0086	0.669636	1705.339	1.000000
Minimum	-885711.0	11.32837	0.000000	-3.728058	0.000000	0.400000
Std. Dev.	25984803	1.699638	5.052686	0.167679	55.06903	0.131750

In table 4, the mean value of TC supply is 6094538 and its standard deviation is 25984803. The maximum and minimum are 2.524008 and -885711.0. The mean value of SIZ is 15.81250 and its standard deviation is 1.699638. Its maximum and minimum are 20.61120 and 11.32837. The mean value of SBF is 0.425220 and its standard deviation is 5.052686. Its maximum and minimum are 153.0086 and 0.000. The mean value of PR is 0.045911 and its standard deviation is 0.167679. Its maximum and minimum are 0.669636 and -3.728058. The mean value of LIQ is 3.898772 and its standard deviation is 55.06903. Its maximum and minimum are 1705.339 and 0.000. The mean value of CR is 0.815226 and its standard deviation is 0.131750. Its maximum and minimum are 1 and 0.40000. The results show that the maximum credit rating is AAA and the minimum credit rating is B2b.

Correlation analysis is used to capture the degree of strength among variables. This tool also deals with the direction of the relationship between variables. Correlation analysis among variables indicates the positive and negative relationships among different variables. Its range lies from -1 to +1. A low correlation between two variables shows low chances of multicollinearity while high correlations between two variables indicate high chances of multicollinearity. Table 5, is showing the correlation between dependent and independent variables. Pearson tests were conducted to provide the strength and direction of the relationship between IV and DV.

Table 5: Correlation Matrix

	TCS	SIZ	SBF	PR	LIQ	CR
TCS	1					
SIZ	0.441894	1				
SBF	-0.01293	0.051747	1			
PR	0.04514	0.149342	-0.0288	1		
LIQ	-0.00736	-0.01322	-0.00412	-0.00658	1	
CR	0.144178	0.102728	-0.06402	0.025805	-0.03066	1

Trade Credit Supply (TCS) is Positively Correlated with Firms Size (SIZ), Profitability (PR), and Credit Rating (CR). It means they move in the same direction. Liquidity (LIQ), and Short-Term Bank Loan (SBF) show a negative relationship with trade credit supply (TCS). Firms Size (SIZ), is Positively Correlated with Short Term Bank Loan (SBF), Profitability (PR), and Credit Rating (CR). And negative correlation with the Liquidity (LIQ), Short Term Bank Loan (SBF) shows a negative relationship with Profitability (PR), Liquidity (LIQ), and Credit Rating (CR). Profitability (PR) is positively correlated with Credit Rating (CR).and shows a negative relation with Liquidity (LIQ). The correlation between Credit Rating (CR) and Liquidity (LIQ) is negative.

The panel data set consists of both time-series data and cross-sectional data, the same has been applied to this study. To evaluate the accuracy of the results, two models are used in this study, the Fixed and the Random Effects Model so that suitable and accurate results could be found of the given data. Accordingly, the hypothesis is analyzed. The first model is the Fixed Effect Model which states that intercept is different for all cross-sections. In this study, specifically, the model for trade credit Supply can be written as follows:

$$(TCS)it = \beta_0 + \beta_1(Size)it + \beta_2(CR)it + \beta_3(Sales)it + \beta_4(PR)it + \beta_5(LIQ)it + \beta_6(SBF)it + \mu_i \dots eq(1)$$

This model explains the variation among the different companies. It offers the following benefit

General equation of random effect model:

$$Yit = \alpha + \beta_1(X)1it + \beta_2(X)2it \dots + \beta_k(X)kit + (vi + \mu it) \dots 2$$

Where (above all equations),

Yit is a dependent variable like account receivable respectively, used as a proxy for TC supply and X is the list of independent variables, i represent different firms at time t and u represents error term.

This test is used to decide between random and fixed-effect models. If the F stat. and Chi-square of the cross-section is less than 0.05 than the fixed effect model is used if P-value is insignificant than the common random effect model is applied. In this study as a p-value of cross-section F and Chi-square is (0.0000). Which is less than 0.05 so the fixed effect model is used for the correlation analysis of the variables

Table 6: Hausman Test

	Test Summary	Chi-Square statistic	Chi-square df.	Prob.
TCS	Cross-section random	16.442898	4	0.0025

Table 7 is showing the effects of different firm-specific on TC. Size is measured as the natural logarithm of the total assets. In table 4, the positive coefficient of size at p-value 0.0000, showing significant relation with TC supply. It indicates that firms with large size prefer more credit sale transactions. The finding of this study confirmed the empirical findings of Wilson and Summers, (2002). The higher production rate of large firms helps them to capture more market share as compared to small firms. Positive and significant values of bank loans (SBF) signifying that there is a supportive relationship between TC supply and short-run bank financing i.e., with bank loan availability, firms give more TC to their customers and thus increase their account receivables. The increase in TC supply has also been observed during and after the financial crisis. The finding of this study confirmed the empirical findings of Ahmed et al., (2014). and Yang, (2011). Whereas due to the consequences of the financial crisis, we observe substituting the relation between TC financing and short-run bank loan. The reason for this is that during the financial crises’ the banks set high thresholds to finance business due to which non-financial firms focus on TC for their growth.

Table 7: Effect of independent variables on the dependent variable (Trade Credit Supply)

Variables	Coefficient	Std. Error	t-statistic	Prob.
C	-1.58E+08	795210	-12.59	0.00000
SIZ	10410531	7486.13	13.092	0.0000
SBF	642121.1	2751168	-7.458	0.0000
PR	2778316	1.3E+07	1.0099	0.29331
CR	3757789	8027902	-0.468	0.0439
R-squared			0.831735	
Adj.R-squ			0.797288	
F-statistic			24.1458	
Prob(F-statistic)			0.000	
Durbin-Wat stat			1.383477	

Similarly, Profitability (PR) is showing a positive coefficient, which means highly profitable firms have more focus on TC financing when compared to internally generated funds. Previous literature suggests that better investment prospects are available for growing firms and they require greater financing for these new investment prospects. It is supposed that TC may be used as a contributing source of financing for these growing companies. The findings of this study confirmed the empirical findings of Abor, (2005). Results further confirm that PR is insignificant at ($p= 0.2933$) which can be interpreted as firms with different characteristics, have different profitability patterns to invest in TC supply (Abuhomous, 2017). The credit rating (CR) of firms has a positive coefficient with its p-value ($p= 0.04398$). It indicates if a 1 percent variation occurs in credit rating, TC supply to firms will change in the same direction. According to Shaheen and Javid, (2014), credit rating agencies (CRAs) play a significant role in assessing the firm's risk of default. Creditworthiness conveys the view of credit rating agencies on the issuer's ability to pay its liabilities. A good corporate credit rating is seen as a symbol of good quality, financial strength, and a sound reputation. The R-squared value shows that 83.17% of variation occurred in TC (dependent variable) is explained by independent variables (SIZ, LIQ, PR, SBF & CR) which is quite a good explanation.

DISCUSSION AND CONCLUSION

This paper strives to capture the deterrents of TC concerning the non-financial firms of Pakistan listed on the Pakistan Stock Exchange. For this purpose, balanced panel data have been used that consist of 162 non-financial firms during the periods from 2014 to 2019. Further, this research has tried to sort the supply side of TC prevailing in Pakistan. The paper among other research revealed that TC supply is positively and significantly associated with the size of the firm, credit rating, and short-term bank financing. The positive impact of profitability on TC supply indicates that firms that are more profitable and have more cash stock provide more TC than counterparties. Results of the research indicate that Credit rating has a positive impact on TC i.e., those firms that are financially constrained, they can get the funds in the form of trade credit from supplier to maintain their business operation. Those firms that have higher credit rating they can get supplies on cash. It is also observed that creditworthy firms financially less constrained as a result they can get finance from formal financial institutions like banks. Small firms are more

interested in trade credit. Small firms have financial limitations. Therefore, they use trade credit as an alternative to financial sources. The Important insights that this study gives, is that different business with their different characteristics may choose TC in different ways. mean business with low-quality products may extend their credit period to create strong relationships with their customers.

Based on this empirical evidence, it is the need of the time for legislative authority to improve the mechanism of trade credit and to encourage the small firms that are involved in trade credit. This empirical finding also subsidizes some significant practical policy implications. It provides basic guidelines for policymakers to develop and encourage the trade credit Channel. It is also helpful to enhance and promote the trade credit in our economy and build trust and better customer relationships and discourage the conventional mechanism. Although this empirical study has many practical implementations. But this study also has some limitations and unobserved factors. Firstly, for the accuracy of results, we divided TC into two types, Trade Credit Supply (TCS) and Trade Credit Demand (TCD) respectively. We have just focus on the Supply side of trade credit. secondly, this study only takes into account non-financial firms that are listed at the Pakistan stock exchange that public their financial information regular basis. Furthermore, this study is only limited to the non-financial sector of Pakistan. And results can't be generalized overall Pakistani industries. Many other researchers can conduct the study by the addition of more variables and also the addition of the period. The empirical support for research in the context of Pakistan has inspired future innovations, in research in this area and can be applied to other countries.

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AN ANALYSIS OF LEARNING BY DOING (TEACHING PEDAGOGY) AND ITS IMPACT ON STUDENTS' SCORES AT ELEMENTARY LEVEL

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ABSTRACT

Traditional education system is in common practice in our education system. In this situation students' show zero participation while teacher is only the resource of knowledge. There are so many interactive teaching methods have been presented by different school of thoughts. Learning by doing is one of them, this study carried out to analyze this teaching pedagogy and its impact on the students' academic scores and making them a self-learner. This study also dig out the ways for effective use of this theory. This theory was applied on the sample of 250 students, which was drawn through simple random sampling procedure from 10 primary schools. The pre-test and post-test design was used for data collection. Data was collected through pre-test and post-test, and analyzed by applying statistical packages paired sample t-test, paired samples correlations, one sample t-test and univariate analysis of variance. Major findings of the study show the very significant and positive impact of the learning by doing teaching. The students were engaged in different activities through which they can clarify their concepts, understand the concepts by their own efforts. Result also show that the female got high scores as compared to the males, it means that female learn and enjoy the learning by doing more than male.

Keywords: Teaching Pedagogy, Learning by Doing, Academic Scores, Elementary Level.

INTRODUCTION

Education is considered to be the basic elemental level for providing the baseline skills, communicative ability making an individual perform

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his assigned task successfully. An in depth understanding of educational psychology is indispensable because an educational setting greatly helps in providing insight into human behaviors. Knowing about the capabilities, range and boundaries of one's students is another significant factor. E.A. Peel (2017) emphasizes that educational psychology does not fully encompass the discipline of education and psychology. Educational psychology develops the basic awareness of teaching-learning process in a learning environment. It enables people to understand curriculum, approaches of education, instructional policies and training of the individuals in educational settings.

Educational psychology is beneficial for the teacher in making learning effective by taking into consideration the factors like attention and inspiration. The familiarization of educational psychology helps the teachers in modifying the teaching-learning approaches, for it is the basic aim of educational psychology to determine the learner's future while applying the optimum efforts and work by the teachers.

Major Areas by Educational Psychology

Aggarwal (2011) explain the psychology of development and learning as under:

Teaching – Learning and the Learner

The fundamental status in teaching-learning process is occupied by the learner. The role of teacher is that of a teacher has been an educator, present there as a facilitator, creating the supportive environment for enhancing the child's abilities, innovative ideas and capacities by encouraging and allotting responsibilities to the learners. The variations in individual outlook and attitude might easily be perceived all through the period of evaluating students' performance and growth.

Development of the Learning

Learners seek great help in confidently managing their frequently arouse conflicts through teacher's consideration of their learning experiences. Fundamentally, it is altogether concerned with the various learning theories, ideologies and conceptions, rules, development of learning assistances, etc.

Situation of the Learning

It basically deals with the factors regarding the learner and teacher. Throughout this learning environment, certain dynamics play a very

significant role like providing direction, counseling, methods, assessment practices and procedures.

Situations of the Teaching

These situations help teachers in the development of better learning situations by suggesting them to select the suitable methods according to the learner's understanding of particular topics. Another most important issue to be addressed in order to get knowledge about student's mental capabilities is their ability to read. Thus, some theories are very significant in this regard like cognitivist, experientialism, social learning theories etc. The proper implementation of this process ensures the improvement in academic results. Moreover, knowing something and knowing how to do something are two diverse phenomena. Students feel more excited in a vibrant learning. Similarly, it exercises a tremendous influence on student's learning.

What is Cooperative Learning

It refers to the orderly and organized educational techniques. This approach refers to the efforts of small groups working organized to achieve a mutual end (Williams, 2017). Numerous features incorporated in the classroom learning are as follows:

What is Constructive Interdependence

It improves the collaboration among the learners because all the members work together with enthusiasm, determination and commitment. This further safeguards the success of all the group members instead of one. The greatest benefit of this approach is the enhanced sense of responsibility among members for themselves and for others.

Development of Teamwork

This constructive step guides learners to improve their group activities. Furthermore, it also makes students to tell others about their individual understanding and the manner they try to solve their problems (Jones, & Jones, 2004).

Individual Responsibility

Each individual in a group is given specific duty. This liability endorses better results of their performance. At the same time, it also helps in assessing the existing level of achievement and improvement of the person's effort.

Social Skills

These skills are mandatory for the execution of shared objectives.

Learners are encouraged to support each other and get interconnected (Kizza, 2007). When they work together, it increases their interpersonal skills like active judgment and leadership quality etc. More importantly, these skills are enhanced throughout the positive group learning. The current research was carried out to offer assistance to policy makers and curriculum developers so that they may work on making more operational curriculum and achieve better outcome in learning process. Besides, it is hoped that the findings of the study would help teachers to implement a productive and perfect teaching learning procedure which may lead to an outstanding result.

Group Processing

When the students process in groups the not only complete their task on time but also they become the self- evaluator as they can evaluate their own task and modify it in the light of their evaluation. This process enable them to identify their weaknesses and strengths.

As we know that the teaching methods are the basic tools to modify the behavior, personality and skills of the students, students should teach with appropriate teaching method. This study was conducted to observe the impact of one of interactive teaching method, the learning by doing. The results of this study will guide the policy makers, curriculum developers and all other stake holders about negative and positive impact of the teaching method ‘learning by doing. So they can improve the policy, curriculum, teaching practices and all other learning facilities in the light of the results of this research study.

Objective of the Study

1. To find out the role of learning by doing in building the student self-learner.
2. To highlight the impact of learning by doing on student academic scores.
3. To discover the strategies which support effective implementation of the teaching method, learning by doing.

Research Questions

1. Do learning by doing support the students to make them a self-learner?
2. How learning by doing affects the students’ academic achievement?
3. By what means the learning by doing can be effectively implemented?

LITERATURE REVIEW

Education is the advancement in an individual's awareness, expertise, capabilities and behaviors. In Locke's opinion, as far as the process of cultivation is concerned, it is the developing system of vegetation but individual nurtures with the help of education which takes both the child and the society to greater level of magnificence.

The data has been collected by the human mind through the senses and formation of simple thoughts. It is only by experiences that the assembling of simple ideas progresses the complex ideas. Rousseau endorsed that child needs to be shaped and formed by education. The philosophies mainly centered with child development, formulated by Dewey (Dewey, 1938).

Montessori and Piaget also present the parallel interpretations. Kant, the first intellectual who offered the cognitive process of mind, opened new vistas of understanding to Piaget and some others to promote the notion of cognitive development of mind. Besides, he modernized and established Plato's rationalist theory in his conception of a prior knowledge, emphasizing that mind retains the potentials and capabilities of thought (Monroe, 1925).

Thorndike favors the active learning process to provide a vigorous setting and effective stimuli that may result in a better learning. (Dignath, Buettner, & Langfeldt, 2008). The stimulus response learning theory of Thorndike is also established by the B.F. Skinner who views learning as the development of anticipated actions and opposes the influence of psychological factors (Grinder, 1989).

Maria Montessori favors the unconventional education in primary phase of a child's life, she presented an enlightened theory for early childhood education. Besides, she also put emphasis on providing more chances and unrestricted expressions by indulging them in actions, motivating them to move from their writing tables and regarding kids as individuals. Montessori considers a student's play as an important feature of his personality, by which he gives expression to his self, enhancing intellectual and communal learning. Thus, as a substitute of giving commands to student, teacher is supposed to offer appropriate direction to them. It is acknowledged that improvement can be stimulated with the help of involvements and collective association inside the student's willingness domain (Montessori, 1912).

The Plato' Rationalist theory was refined by Kant. He said that the knowledge which is presented before the experience is called as prior knowledge. He emphasized mind as source of human thought and capabilities. So we can say the he was recognized as first person for cognitive process of mind. Based on his theory, Piaget and different philosopher started work on cognition (Brock & Adrian. 2014).

Principles of the Learning

Rockmare (2005), in order to achieve the most desired consequences, certain learning principles need to be observed in teaching, which have comprehensive strategies for taking the suitable actions. They are as follows:

Principle of Association

Learning process has been considered as continuous which might occur due to any experience. As far as the preceding learning is concerned, it paves the way for the successive phase. In this way, new knowledge is associated with the earlier on account of the successful and satiating reactions.

Principle of the Purposeful Learning

Of vital significance is the fact that the learning objectives need to be important and clear for the learners. If learning is focused, it becomes more operative. Whenever teachers give any assignment, they should be concerned about its being achievable for the participants.

Principle of Motivation

Motivation is the aspiration, making people inspired to accomplish some task. In order to attain it, a great effort is required on the part of learner. Thus the learning scheme must be all-inclusive and complete to provide a thorough and strong parameter to attain the ends and aims of the learner. Teacher motivation is essential for the students to cope with the more challenging learning.

Principle of Attitude and Willingness

The most significant impact exercised on the learner is his willingness to learn. Only in this positive and favorable environment, learning takes place more effectively.

The Self-Movement Principle

Of vital significance is the fact that the door of learning is sealed from

inside and only learner can open it, otherwise the process of learning never occurs this is a dynamic approach. The teacher inspires the learner with the development of stimulating learning condition. Proper activities must be undertaken like conducting the demonstration, which provides an occasion of activity for the learner. There exist various sources that create an effective learning environment by indulging in the learning accomplishments.

Rehearsal Principle

Another significant phenomenon to make an effective learning environment is the active participation of students by performing the task, more specifically the learning by visual and audionic instruments can be enhanced by practically doing it. The suggestion of the important units might be properly systematized into course content while practical theories motivate the learners by offering the practical actions.

Principle of the Students' Learning Abilities

As far as the level of communication and the knowledge about the subject matter is concerned, they should be in an appropriate order as per the student's learning capabilities which vary extensively among individuals.

Understanding of Curriculum through Learning Theories

The psychological effect of curriculums helps us in a better understanding of the theories of learning which are generally categorized into four expansive groups which are as follows:

- Cognitive learning and humanistic learning theories.
- Developmental Learning
- Constructivism
- Behavioral learning

Theories of Development

Psychoanalytic theory has been considered as one of the most influential theories for human development which discovers the features stirring the unconscious conducts of an individual. Sigmund Freud is the originator of the psychosexual theory and psychoanalytic theory of personality.

Theories of Behaviorism

The behavioral conditioning takes place when stimulus response is strengthened. (Dicket et al 2005). It held the belief that reinforcement and

encouragement occur when a stimulus is offered leading to a positive reaction recurring frequently in the future. As far as this theory is concerned, learning becomes more operative on account of teachers' practice, as they frequently utilize during teaching by giving punishment and incentive to the students for their conducts. The fundamental premises of this theory start with the notion that a child comes to this world with an unsoiled tab but with the passage of time it gets polluted due to various events occurring in life (Foxall, 2007).

Intellectual Means

The psychology mainly focused on the area of cognition. There is difference in cognitive and behavior theories of learning. It discusses all the elements of learning and intellectual without discussion the learning environment. It describes the structure and the process of the cognitive development (Rachlin, 2000).

Cognitive Theory of Jean Piaget

This theory deals with the conceptual model of the world that how a child does create his environment. Robert Gange is the central provider to the cognitivist who practice certain cognitive strategies to resolve issues regarding learner's attitudes (Bandura, 1986).

Instructional Strategies of Learning by Doing

Churchill (2003) suggests some strategies for learning by doing. Detail is presented below:

Questioning Purposefully

It is a self-motivated technique because it increases learner's cognitive abilities and grows their engagement. Questions are frequently asked in the class either by the fellow students or their teachers.

Question Posed by the Students

The learning stimulation comes when students ask questions.

- It highlights or identifies the region of misunderstanding and test of their understanding.
- It raises the student association among one another.
- Teacher asks questions
- It improves and refines student's rational skills.
- It measures learner's understanding, abilities and attitudes.
- It frames personal association with the course content.
- When teacher asks questions it helps to provoke learner's concentration and inquisitiveness.

Demonstration in the Classroom

When learners feel difficulty in the application of theory, demonstration occurs in which both teacher and students participate. It greatly helps teachers for the improvement of their instructional strategy. If utilized expertly, it enhances the learner's concentration level and makes the learning extraordinary for the students. Moreover, this strategy is productive for the learners particularly in memorizing and remembering the contents. In short the positive influence of demonstration on students learning might never be denied.

Organization of the Assessments

The educator gives instructions about the subject matter but does not allow learners to write each word but only key words. This has proved to be an effective technique for retention and review and help teachers to realize the defects. However, teachers are required to take two types of assessments i.e. pre assessment and post assessment pre assessment is directed to recognize the misapprehension and it is the preliminary stage for learning and then perceiving the flaws. Teacher explains and provides contents and then conducts a post assessment to analyze the improvement in learning. It has proved to be a very effective technique to know their performance.

Find Recent News Items and incorporate it to Curriculum

The choice of relative current news is another important tool for an effective knowledge. The emergence of existing course with the preparation of brief written synopsis of news items helps teachers to advance great global awareness.

Effective Guest Speaker

Students occasionally feel bored during the whole class duration, thus the proper selection of the guest speaker enhances their stimulation to their work. Students get ready before the arrival of guest speaker.

Transformation of Study Material into Puzzles

In order to incite student's inspiration level, some challenging activities need to be designed. At the preliminary stage, distribute arranged samples and then, ask students to join their puzzles and share them either in small groups or with other class fellows. This would help in finding out the correct answer for the prepared puzzles.

Combined Discussion into Course Projects

As far as class discussions are concerned, these techniques greatly help

students in locating information and formulating convincing argument and counter arguments. Teachers develop the habit of thinking critically and thus they are enabled to give their opinions verbally or on paper.

Instructional Learning Strategy

Another effective role has been played by instructional learning strategy. If it is proficiently planned and assisted, it stimulates learners' concentration and commitment. Besides it also offers pertinent and accurate approaches which are linked with the imperative syllabus for the learner's, experts and professionals alike.

Create Field Trips

In order to achieve an all-inclusive range of effective learning results, an educational tour held in open-air, outside the realm of conventional environment, provides an effective help to learners for achieving reliable information. The academic's abstract material could be refined when learners undertake this trip and convert their abstract knowledge into practice. The nature of this educational study trip could be a simple walk nearby or outdoor campus. It might be short trip to observe an art museum or an environmental location which boosts learner's concentration, their eagerness so it has positive impacts learning.

Obstacles in Active Learning

There have been certain obstacles encountered by teachers for active learning process. They are as follow:

The most important among them is the influence of families on school results because child education is highly dependent on parents' actions and behaviors. The role of family is quite significant in creating an environment which promotes various skills. When parents interrelate, children imitate their conversation, recognize objects, and inquire about new words during communication. Parent's attitudes towards reading has an important influence on children's view of reading and their engagement with the literature process (Alshaboul, 2004).

RESEARCH METHODOLOGY

This research study was conducted to check out the impact of teaching theory learning by doing. The quantitative approach was used to conduct this study. Pre-test and post-test was developed for the collection of data to know the academic achievement.

This theory was applied on the sample of 250 students, which was

drawn through simple random sampling procedure from 10 primary schools (05girls and 05 boys), selected through simple random technique. 25 students enrolled in grade 7th each school were selected.

The pre-test and post-test design was used for data collection. Data was collected through pre-test and post-test, and analyzed by applying statistical packages paired sample t-test, paired samples correlations, one sample t-test and univariate analysis of variance.

RESULTS

The data collected through pre-test and post-test was analyzed to make inferences. Data was analyzed by applying different statistical packages as under:

Paired Samples Statistics

A paired sample t-test was conducted to compare the results of pre-test and post-test and analysis is presented in following table

Table.1: Comparison of Pre-Test and Post-Test Scores

	Mean	N	Std. Deviation	Std. Error Mean
Pre_Test	26.38	250	9.825	.621
Post_Test	45.78	250	3.468	.219
Difference	19.40	250	9.979	.631

Above data indicated that the pre-test mean scores was 26.38 and post-test mean scores was 45.78.

It means the teaching pedagogy learning by doing greatly affects the students' academic scores.

Paired Samples Correlations

To find out the relation b/w pre-test and post – test, Paired Samples Correlations was conducted. Result is as under

Table 2: Correlation between pre-test and post-test scores

		N	Correlation	Sig.
Pair 1	Pre -Test & Post - Test	250	.132	.038

Above data show that pre-test and post-test correlation = 0.132. Moreover this correlation show +ve correlation, the students got high scores in pre-test also show high scores in post-test and this correlation was significant $p = .038$.

One Sample t –test

To measure the significant level between the pre-test and post-test, one Sample t –test was conducted

Table 3: One Sample t –test

	Paired Differences		t	df	Sig. (2-tailed)	
	Mean	95% Confidence Interval of the Difference				
		Lower				Upper
Pair 1 Pre-test – Post-test	-19.400	-20.643	-18.157	-30.737	249	.000

This table show the $p = .000$, there was significant difference in the scores of pre-test and post-test.

Univariate Analysis of Variance

Table 4: Dependent Variable Difference

Gender	Mean	Std. Deviation	N
Female	20.70	10.004	125
Male	18.10	9.824	125
Total	19.40	9.979	250

Above data show that the $M = 20.70$ for female, and $M = 18.10$ for male. It means that the learning by doing has greater effect on females as compared to the males.

DISCUSSION

This study was conducted to highlight the impact of learning by doing teaching pedagogy on the students. The results of the study show the very significant and positive impact of the learning by doing teaching. The students were engaged in different activities through which they can clarify their concepts, understand the concepts by their own efforts. In this method the teacher play her role as a facilitator just. Before the intervention through learning by doing the researcher take the pre-test of the sample students, after applying the intervention for 1 month, the post-test was administered. There was significant difference ($p = .000$) in the pre-test and post-test scores. This significant difference show that students learn a lot through learning by doing.

Results of the study also demonstrate that the students who got high

marks in pre-test show very high scores in post-test scores. Each of the student show high scores in post-test as the results display the positive correlation value between the scores (.132).

When the scores of females and males in post-test were compared, the results show that the female got high scores as compared to the males, it means that female learn and enjoy the learning by doing more than male.

CONCLUSION

From all above discussion and the results of the study it was concluded that student should be engaged in learning activities, to make them an active partner in teaching-learning process. Students get bored to just listen the teacher, and even when they try to acquire knowledge by themselves, they understand the concepts in depth and their misconceptions and misunderstandings were got cleared on time. So in this era there is greater need to engage the students in interactive teaching pedagogies for better results.

RECOMMENDATIONS

Educational Policy Need More Attention

As Pakistan came into existence 72 years ago, but still the education system is very poor. The number of skilled youth is very little. Education is the source of human resource who serve the society for its betterment. So there is greater need to give more attention to the educational policy, as educational policy provide the guideline for running the education system.

Teaching methods should be the part of the education policy, education policy should also focused on the content for each level of education system.

Life Skills Programs and Appropriate Learning

EFA and MGDs 2000 emphasized on universal education, comprehensive education, ensuring the learner needs and life skill programs for young students. But still after passing about 19 years, the goals are unachievable. Life skills programs should be explained and developed. Teachers should be trained to inculcate life skills among the students.

Learning by doing is one of the approach which support the achieving of the EFA and MGDs goals. Similarly other interactive pedagogies will

be very fruitful. There is a greater need to implement the new teaching pedagogies in the classrooms.

Motivate the Teachers

The teachers in our education system feel easy to use traditional teaching methods, as the use of teaching pedagogies which engage the students seem difficult to them. Moreover the use of these teaching pedagogies needs special attention.

It is recommended that the teachers should be motivate for using these interactive pedagogies in their classrooms. To motivate them, some incentives in terms of appreciations, reduced workload, increasing salaries should be provided to them.

Teachers Training Programs

Use of interactive pedagogies need some technical support. Thus teachers training programs should be arranged which not only introduce the innovative teaching pedagogies but also provide the techniques to manage interactive classrooms with little and available resources.

Social Orientation

It is common scenario that there is no/little link among all of the education stakeholders, policy makers, curriculum developers, educational experts, teachers, students and parents. It is recommended here that social orientation programs should be arranged to build the attitudes of the stakeholders for opting the interactive pedagogies. This social orientation will assure the success of new pedagogies implementation and production of skillful youth.

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CONSTRUCTIVE FEEDBACK AND STUDENTS' ACADEMIC ACHIEVEMENT: A THEORETICAL FRAMEWORK

Rabia Aslam*, and Najmonnisa Khan**

ABSTRACT

Providing constructive feedback to students is one of the most influential strategy which helps students to boost their self-efficacy, raise students' motivation for the task and improve self-regulation which ultimately help students to achieve their learning outcomes. The aim of the present study is to conduct a critical literature review survey on constructive feedback, propose a theoretical framework and build a conceptual model on the basis of reviewed literature. In this regard abstracts from journals and Dissertations were explored and scrutinized thoroughly for critical literature survey on "constructive feedback and its effects" by using search terms such as constructive feedback, academic achievement, feedback and self-regulation on Google Scholar, ERIC, Elsevier, Springer, Sage, Taylor & Francis. The search covered a total of 221 articles/ books from January 2000 to May 2020 including some older publications as well, by means of snowballing. Out of these, 92 articles were filtered and incorporated in this study. Behaviourism perspective, goal orientation theory, Expectancy value theory, and cognitive constructivist self-regulated theoretical account supported the theoretical framework for the present study and conceptual framework was proposed.

Keywords: *Constructive Feedback, Motivation; Self-Efficacy, Self-Regulation, Academic Achievement.*

INTRODUCTION

Students' academic performance not only depends on the teachers' teaching methodologies but also depends on the quality of assessment (Din

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& Saeed, 2018). The standard-based education system of any country cannot be developed without alignment of assessment with educational standards (Gulzar & Mahmood, 2019). Formative assessment is a process to gather information from students which could improve their learning (Cauley & McMillan, 2010; Ghazali, Abdullah, Zaini, & Hamzah, 2020). Practice and students' engagement are the two distinct features of formative assessment (Dixson & Worrell, 2016) and providing descriptive (constructive) feedback is a key component of formative assessment (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Clarke, 2003; Hattie, 2009; Reddy, 2019; Sadler 1989, 1998), as Hattie and Timperley calling it "among the most critical influences on student learning" (2007, p. 101), which motivate and keep learners busy in their work (Dixson & Worrell, 2016; Javed, 2017; William, & Black, 1996). Feedback increase learners' persistence and satisfaction (Brookhart, 2017; Kluger & DeNisi, 1996), and students embrace more approaches of fruitful learning (Reddy, 2019; Vollmeyer & Rheinberg, 2005).

Researches over the preceding decades suggest that giving constructive feedback to student is one of the most influential strategy which helps them to boost their self-efficacy (Andrade, Wang, Du, & Akawi, 2009; Panadero & Romero, 2014), to adoptive "students' motivation for task value" (Nicol & Macfarlane-Dick, 2006; Pajares, 2003; Zumbunn, Marrs, & Mewborn, 2016) and to improve self-regulation (Cleary & Zimmerman, 2004; Thompson, Wiedermann, Herman, & Reinke, 2020; Zumbunn et al., 2016) which ultimately help students to achieve their learning outcomes (Hattie, 2009, 2012) results the better performance in exams (Harks, Rakoczy, Hattie, Besser, & Klieme, 2014; Hattie & Timperley, 2007; Javed, 2017; Tahir, Khurshed, Ishfaq, & Gul, 2015; Maj-Stepien, 2016; Skipper & Leman, 2017; Din & Saeed, 2018).

As a concern in the Pakistani context, great attention of formative assessment practices is seen in education policies, which is incomplete without feedback. For instance, the National Professional Standards for Teachers in Pakistan (Government of Pakistan, 2009) sets standards for the teachers in which one of the key components of its 5th standard of Assessment is providing constructive feedback. By definition, "feedback is information such as knowledge, skills or attitudes provided by teachers, peers, books, parents, self or experiences of one's performance" (Hattie & Timperly, 2007), basically it is "a Consequence of performance". In Pakistan, quality of an education and students' performance is not up to the

mark and reported to be unsatisfactory (International Crisis Group, 2014; Din & Saeed, 2018). The annual report and gazette of BSEK and DOEE shows discouraging results of grade IX (Science group) and of grade VIII especially from the last three years period of 2017 to 2019. Continued lower achievements of grade IX science group from 74.16% (BS.EK, 2017) to 62.63% (BS.EK, 2019) and of grade VIII from 28.28% to 24.5% (DOE, 2018) in general science subject at Karachi region, creates a great concern for those teachers who teach at elementary or secondary level. Students do not perform well in the final assessment and feel difficulties to solve annual exams paper because no proper formative feedback practices had been followed (Ahmed, Akhtar, & Aslam, 2020).

Hattie (2009) synthesis systematic literature review of 12 earlier Meta-analyses amalgamated 196 studies and 6972 effect size, and concluded that “feedback had a powerful effect on learning outcomes”. John Hattie is the biggest name in the literature available on the feedback, but from the best finding, an irony situation seems that none of the literature available which discuss the practices of any feedback model at any educational level in Pakistan (Din & Saeed, 2018, p. 10). Despite this, the local literature available, only to discuss the feedback effect, irrespective of any feedback model, on students' performance mostly in English Subject at the tertiary level. Therefore, the researcher finds a need to implement an established model of Hattie and Timperley (2007) as a framework for the present study in a science subject at the secondary level as this model allows each pupil who are dependent on their learning criteria to provide differenced and detailed input. Therefore, this study aims:

1. To critically review the past published papers on constructive feedback and its characteristics.
2. To critically review a literature available on effects of constructive feedback on students' academic achievement.
3. To propose a theoretical framework for the study on the basis of reviewed literature.

LITERATURE REVIEW

Concepts of Feedback

In 1983, Ramaprasad well- explained that feedback as information which fills the gap amid the desired level of fulfillment and a cited point. His definition also noted that the information could only be called feedback if it was used to close the gap between the two points. The

conditions necessary for providing feedback are an original reference level (or objective), a required level of attainment, and a mechanism for comparison (Ramaprasad, 1983). Ramaprasad went on to note that feedback can be on just about anything and encourages strong working relationships. Feedback in education is vast term that denotes to a response about a pupil's performance of task and is used as the hinges on academic improvement (McLaughlin, 1992). More specifically teacher feedback is a result, verbally or in written form, that comes either during the process or after students complete a task.

Parr and Timperley (2010) argued that feedback is a significant part of classroom instruction. Sadler (1998) noted that feedback is such a fundamentally distinctive aspect of responsible and responsive teaching that to have teaching and learning without feedback would be tantamount to learning without a teacher. Stronge's (2002) research showed that feedback reliably surfaces as a powerful device to support student learning.

Constructive Feedback

The literature clearly indicates that constructive feedback has the intriguing power to differentiate the level of a student's achievement (Duffy, 2013; Harks et al., 2014; Parr & Timperley, 2010). Nicol and MacFarlane-Dick (2006) argued that constructive feedback can be used to accelerate students' learning. Feedback lets students know how their performance is tracking to pre-determined goals and allows for corrections (Nyiramana, 2017), therefore, allowing for greater opportunity for overall success.

Anderson and Black (1975) Learning for Mastery (LFM) offers another persuasive argument for the delivery of constructive feedback. Constructive feedback is essential for mastery (Black & Wiliam, 2009). LFM underpins the belief that lower ability students can do if they are given greater opportunity to learn and better quality teaching. Feedback was identified as one of the key elements of the LFM strategy, and giving effective feedback is a key element of quality teaching (Ames, 1992). Feedback offers lower ability students chances to get access to better quality teaching. While the research on LFM is inconclusive, much of the research clearly identified that feedback plays a powerful role in mastery success (Guskey, 2019). The next step is to decide what makes up constructive feedback.

According to Hattie and Timperley (2007), Constructive feedback should address three main questions:

- Where am I going? – This question is answered through the provision of a clear set of goals for students.
- How am I going? – The answer to this question comes about through the delivery of effective and timely feedback.
- Where to next? – This question is also answered through effective and timely feedback – it lets students know what they have to do to meet the end goal (ref: Figure 1).

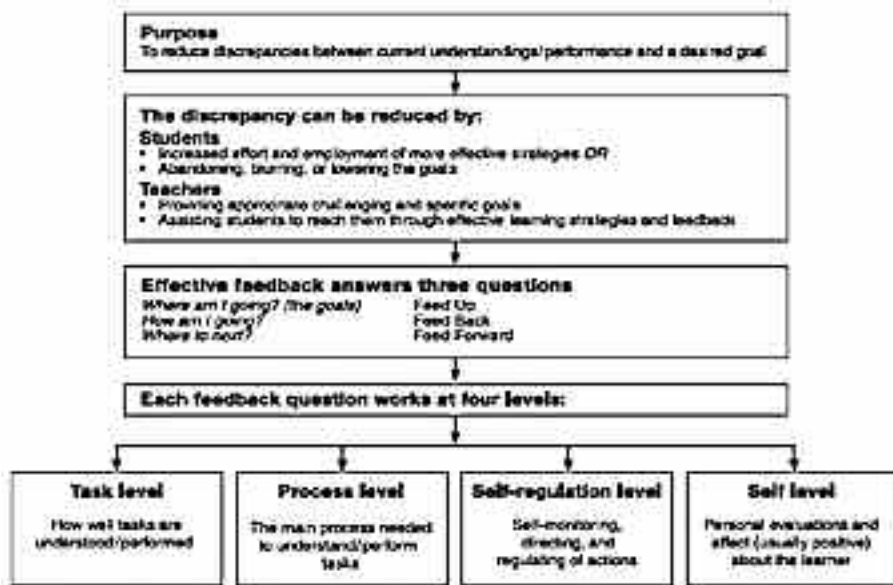


Figure 1. A Feedback model to enhance learning

Hattie and Timperley (2007) identified four major levels of constructive feedback (Figure 1) and stated that the level at which feedback is delivered will have a direct impact on its effectiveness. The four levels of feedback are: Feedback of the task (FT), Feedback of the process (FP), Feedback of self-regulation (FR), and Feedback of self (FS). All of FT, FP, and FR offer constructive support for students that in turn provides them with an opportunity to increase the quality of work (McLaughlin, 1992). Using this system of written, verbal, and peer feedback, or an amalgamation of these, appears to be the best method of delivering feedback.

Feedback which is constructive and meaningful, may result in successful teaching and learning together with to the individual contentment (Altmiller, 2016; Dorić, 2018; Ghazali et al., 2020; Ovando, 1994; Smith, Starratt, McCrink, & Whitford, 2019; Toit, 2012). Constructive feedback is also defined as feedback that is timely, accurate,

constructive, focused on the outcome, supportive, encouraging, and positive (Toit, 2012). Constructive feedback should provide students with a clearly defined end goal (Hattie & Timperley, 2007; Toit, 2012) and must be manageable so it is not overwhelming (Altmiller, 2016; Shute, 2008). It should also focus on what students do correctly as well as letting them know how and what to improve. Parr and Timperley (2010) took this idea further and suggested that to be constructive, feedback must be directed at a deeper level of learning so it triggers cognitive processes.

Providing constructive feedback to students on their performance is crucial to strengthening their learning (Altmiller, 2016; Duffy, 2013; Omer & Abdularhim, 2017), but it is a challenging task (Zehra et al., 2015). Hamid and Mahmood (2010) in their analysis of constructive feedback have drafted the subsequent definition “Where there are agreed standards of behaviour and performance, and two-way communication about what has gone right as well as what has gone wrong, there is feedback that we define as constructive feedback” (p. 224). The characteristics of constructive feedback shown here are that feedback will high spot and reinforce good results, demarcate bad performance, remedial action plans and two parties. (Altmiller, 2016; Hamid & Mahmood, 2010; Omer & Abdularhim, 2017).

Effective Features of Constructive Feedback

During the course of Hattie’s various publications and discourses, he established many primary successful feedback elements, emphasizing the significance of the situation, precisely that feedback would fix understanding errors after information was first presented (Hattie & Timperley, 2007). This point differentiates feedback from the first knowledge presentation in the class, as a reaction to the learner’s success.

Table 1 provides a list of authors who built their study on Hattie’s research (Hattie & Timperley, 2007).

Constructive feedback can be characterized by the following important elements as a structured mechanism to promote positive teaching and learning.

Task-specific

Hattie (2013) defined the learning milieu, especially the specificity of the tasks, “Feedback needs to include information directly relevant to the assignment or learning process that fills [the] void to address this

instructional purpose” (p. 82). In particular, Hatziapostolou and Paraskakis (2010) found the constructive feedback is “directly related to assessment criteria or related to learning outcomes” (p.112). Clark and Mayer (2011) describes Task-specific input ensures that the novice gets important information enabling attention to be centered on a “unique capability deficit,”

Table 1: Features of Constructive Feedback

Features of Feedback	Research	Features of Feedback	Research
Self-regulation	Butler & Winne ,1995; Careless et al., 2011; Embo et al., 2014; Espasa & Menses, 2010; Ferrel, 2012; Furnborough & Truman, 2009; Hattie, 2013; Nicol, 2010; Orsmond & Merry, 2013; Tanner & Jones, 2007.	Praise	Hattie & Timperley, 2007; Burnett and Mandel’s, 2010.
FT/ relevant	Clark & Mayer, 2011; Hatziapostolou & Paraskakis, 2010; Hattie & Timperley, 2007; Nicol, 2010; Schlitz et al., 2009; Tanner & Jones, 2007.	Non-threatening Environment / Supportive feedback	Clark & Mayer, 2011; Hattie & Timperley, 2007; Nicol, 2010; Schlitz et al., 2009; Tanner & Jones, 2007.
Timing	Butler & Winne,1995; Erdman & Chan, 2013; Ferrel, 2012; Hattie & Timperley, 2007; Hatziapostolou & Paraskakis, 2010; Hawk & Shah, 2008; Nicol, 2010; Tanner & Jones, 2007; Schlitz et al., 2009.	Self-reliance	Butler & Winne , 1995; Hattie & Temperley, 2007; Gomez et al., 2013; Schlitz et al., 2009; Timmers & Veldkamp, 2011.
Low task complexity	Hattie & Timperley, 2007.	Positive and negative Feedback	Furnborough & Truman, 2009; Nicol, 2010; Hattie & Timperley, 2007.

Feedback with details on how to improve the work is much more effective than simply showing either the work is correct or not (Nyiramana, 2017). Specific (or elaborated) feedback provides information that does not focus on accuracy but gives students an indication of what needs to be fixed or gone through (Shute, 2008). Feedback becomes even more effective when it offers students a challenge, but has a low-level of complexity (Hattie & Timperley, 2007).

The feedback that is not specific can have a deleterious impact on schoolchildren because it leaves them floundering and wondering about how to give the quality of their work (Butler, 1988; Kluger & De Nisi, 1996). A lack of specificity may cause students to view the feedback as useless and result in them becoming frustrated. The flow-on effect of this is that uncertainty can lead to lower levels of learning (Kluger & DeNisi,

1996). Providing specific, clear feedback for procedural and conceptual learning tasks is a general guideline for teachers (Shute, 2008).

Self-Regulation

This whole section is dedicated to Self-regulation, as an important part of this study's structure. According to Hattie (2013), "students are engaged by the expert teachers to make them learn and develop self-regulation in them; enhanced self-efficacy; involvement in mastery learning; and self-esteem as learners" (p. 11). Feedback can be exchangeable if it will focus on skills, and self-regulatory processes" (Nicol, 2010, p. 512).

Feedback on Task

Hattie and Timperley (2007) described "the difficulty of goals and tasks has also affected feedback ... [having] the greatest effect when goals are precise and demanding, but the complexity of tasks is low." (p. 87). This void in the literature indicates researchers' inability to tackle the problem of meeting and recognizing the feedback-effectiveness needs of the target population of students. Assessing the difficulty of the tasks will require a clear understanding of the skills, abilities, previous experience, and task interpretation of the students.

Feedback Timings

Focused teacher comments can enable learning, but the time given to students for revision makes the feedback more powerful (Duffy, 2013). The timing of the delivery of feedback is also important. Shute, (2008) and Din & Saeed, (2018) identified two considerations about the delivery of feedback: whether the feedback is delivered as immediate or delayed feedback. Immediate feedback is instant and delivered directly after the student has responded to a specific task, whereas delayed feedback can be minutes, hours, days, or even weeks after the completion of a task. Earlier corrective information encourages efficient retention (Din & Saeed, 2018); however, there are arguments for and against each method of delivering feedback.

In Shute's 2008 study it was argued that research showed there appeared to be no stable main effect of timing and the delivery of feedback. Effective feedback is designed to accelerate a student's learning, consequently, it cannot be delivered at the end of a unit, nor can it be delivered instantly, but must be provided during the course of the teaching and the learning process to maximize the student's level of achievement (Nicol & Macfarlane-Dick, 2006; Nyiramana, 2017).

Hattie (2014) proposed that stalled feedback slow down the initial rate of learning, however, it expedited a transfer of skills after the feedback had been processed. Receiving work from students at any stage of the writing process, reading it, then writing feedback for students takes time, but the feedback given is personalised and relevant to each student, therefore making it more powerful (Din & Saeed, 2018).

There was also the issue of how much time it took for teachers to provide high quality feedback. Some teachers stated providing feedback to students was labor-intensive (Sadler, 2010); and time was a barrier to giving good feedback (Carless, 2006). Marie (2016) indicated the time constraints associated with providing high-quality feedback cost students, as teachers who were working to provide feedback on student assignments were, therefore, unavailable to attend to other educational practices. Yet, for students to be able to use the high-quality feedback provided by the teacher, students needed to be adequately equipped to understand the feedback by possessing a certain level of expertise often only associated with the teacher (Sadler, 2010). The divide between teacher intent and student perception also need to be addressed, "Clearly, the gap between the teacher's feedback and the student's appreciation of its practical import has to be reduced or closed" (Sadler, 2010, p. 541).

Positive and Negative Feedback

Hattie and Timperley (2007) discussed feedback that, "the influence of feedback tends to be affected by the direction of feedback about output on a task. In particular, feedback is more useful when it offers knowledge about correct answers rather than incorrect ones" (p. 85). Hattie and Timperley (2007) found negative feedback, particularly when consolidated to task-specific input (TS), had the biggest impact in self-direction (FS). FT has reaped both critical and constructive feedback.

Positive feedback would boost proactive feedback users to use "feedback as a learning method by evaluating it and seeking it into the learning process and to enhance the confidence of learners and building a virtuous circle that helps students to achieve learning goals." (Furnborough & Truman, 2009, p. 412).

Feedback as Praise

Hattie and Timperley (2007) found in his study, "students like praises, not for ability and behavior but specifically for effort and achievement. Most of them favored private praise, as some students viewed it as a punishment if the admiration took place before a peer group that devalued education" (p. 98).

Remarkably, “older students perceived praise after success or neutral feedback after failure as an indication that the teacher perceived their ability to be low” (Hattie and Timperley, 2007, p. 97).

Feedback, in the form of praise, was also investigated in Burnett and Mandel’s (2010) study of feedback in grades 1 through 7, researchers observed several classrooms and found teachers used general praise feedback 71% to 93% of the time and less than 10% on effort and ability (p. 149). The data indicated that 89% of the feedback was positive and 11% of the feedback was negative (p.149). “Key finding of this research was that the primary form of input used by teachers, 77 percent of the time or on average 35 times per hour, was general, non-targeted praise” (p.151). Praise, while often intended to motivate students or to mitigate critical teacher comments rarely provided useful information the student could use to reach the learning goal of the lesson; instead, the praise often diluted the useful feedback message, and in some cases, praise produced levels of learned helplessness in the student psyche (Hattie, 2012). Feedback about the self, typically in the form of praise, was personal and was rarely effective in enhancing learning. Different types of praise could often set students along a trajectory of beliefs about their own ability to learn, as well as their level of intelligence.

Effects of Constructive Feedback on Students’ Learning: A Theoretical Background

The role of feedback in learning has been investigated with massive widely held of studies focused on measuring the effects of feedback. This seems rational given that early, behavioral models viewed feedback as a uni-directional transfer of knowledge from the adept to the beginner to allow learning to progress or extinct (Brooks et al., 2019). Take for granted, Thorndike’s (1933) law of effect, Which are the behavioral consequences (Schunk, 2012), was crucial in the establishing understanding that feedback was a stimulus or message that could lead to learners modifying their initial response. Similarly, Skinner (1963), using optimistic and adverse feedback messages as a motivation to change actions to produce desired results, built on this idea. This use of feedback via punishment or reward as an extrinsic motivator has negative effects on learning (Brooks et al., 2019). According to Thurlings, Vermeulen, Bastiaens, & Stijnen (2013), “Behaviourism focuses on students’ observable behaviour, which can be influenced by stimuli like praise and punishment. In small steps, teachers guide students through the curriculum. Behavioral feedback systems are simple and linear: feedback is given, and an outcome occurs as a result” (p. 4, Fig 2).



Figure 2. Behaviourism Perspective

Following behaviourism perspective, it is clear that motivation is an important element that influences students learning in general and evaluation in particular, either positively or negatively. One of the most distinguished up-to-date theories of psychological motivation is what Ames (1992) calls “*goal orientation theory*”. This theory argues that two separate forms of learning objectives exist: mastery and success. The former are targeted at making schoolchildren “developing new skills, trying to understand their task, enhancing their ability level, or gaining a sense of mastery-based on self-referenced expectations” (p. 262). On the other hand, success targets guide schoolchildren to receive either higher grades or public credit for what they accomplished. Ames determines that mastery objectives are more important than performance because they stimulate schoolchildren “creativity and make them more motivated” (Zahroh, Mujiyanto, & Saleh, 2020).

Interest and understanding of school interest are two factors used to assess the motivation of the students (Eccles & Wigfield, 2002). Following the expectation-value theory of Eccles, impetus differs with the significance given to the goal we want to meet and with our expectations of achievement. In addition, Wolters and Rosenthal (2000) claimed when schoolchildren are persuaded that they have an essential, informative learning strategy, those who are more inclined to make a conscious effort to complete the task and continue for longer. Learners must take into account schoolwork as beneficial for the accomplishment of career ambitions; alternatively their motivation to involve in a self-regulated learning the procedure will most likely diminish.

Atkinson (1957) said that the perception-value principle of encouragement for accomplishment developed. The main premise of this and other expectation-value theories is that behavior hinges on the expectation of achieving a unique result (e.g., target, legitimize) as a result

of conducting specified behaviors and how much one values resulting from them. People judge the likelihood of achieving different results. They're not inspired to pursue the impossible, because they're not chasing outcomes that are viewed as unattainable. Even the expectation of a positive outcome does not produce action unless the outcome is valued. An attractive result, coupled with the conviction it is achievable, motivates people to act.

The cognitive constructivist self-regulation theoretical account viewed this as containing three sub-processes: self-observation, self-judgment, and self-reaction. School children participates in learning programs with specific objectives such as gaining information and skills and finalizing assignments. Pertaining to goal targets in mind, they observe, judge, and respond to their perceived progress towards their target. This traditional perspective was strengthened to highlight the unpredictable nature of self-regulation and included activities that involve pre- and post-task collaboration. This cyclical process reflects the social cognitive focus on reciprocal interactions among individual, behavioral, and regulatory / social factors. The preconceived step supersedes sample report and relates to procedures that pave the way for action, such as setting goals, determining a strategy, and evaluating learning self-efficacy. The performance management step includes processes that occur during learning and affect attention and practice, such as techniques being applied and progress monitoring. During the self-reflection a phase that takes place during breaks and after completion of the task, the learners respond to their efforts by setting new goals, adjusting their strategies, and assigning results.

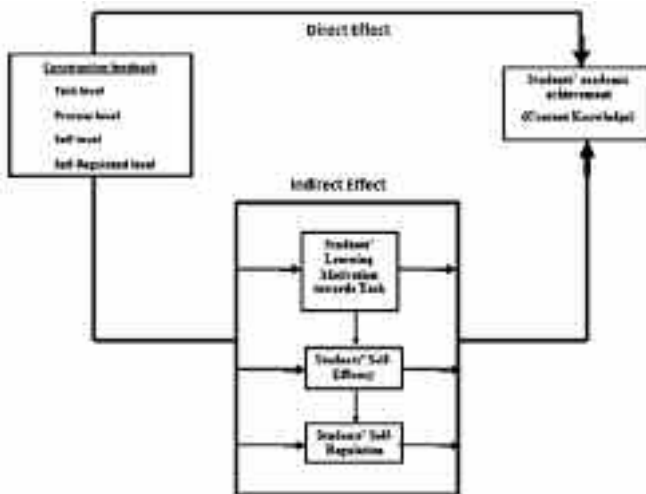


Figure 3. Research Framework

Present-day Constructivist approach and self-regulatory feedback approaches consider the learner an efficient informant in getting, describing, and implementing feedback (Thurlings et al., 2013). Thus, a conceptual framework of constructive feedback (Figure 3) guides the theoretical framework for this study. In the perspective of this study, we can relate the theory-oriented goals to the types of evaluation: achievement goals for summative and mastery goals for formative purposes. The explanation for this is that mastery goals (focusing on understanding the content) are the key distinguishing characteristic of formative assessments while success goals (focusing only on demonstrating skill and having good grades) are closely related to summative purposes. This, in effect, will give us an impression that formative evaluation is superior to summative, because it allows students become more interested in the learning process. However, if formative evaluation and formative feedback are considered successful tools in the learning of students, it is necessary to understand that formative evaluation does not depend solely on learning tasks and the subsequent feedback but “on the broader context about the motivation and the self-perceptions of students” (Black, 1999: 125) And the theory of expectation-value emphasizes the critical part of academic assignment-value convictions in designing pupil learners’ interest (Pintrich, 2003). In their interpretation of the “modern theory of expectation-value”, Eccles and Wigfield (2002) stressed the “central function of task-value for the students’ expectations of success, choices related to achievement, and results”. Theoretically, Wolters and Rosenthal (2000) Say that individuals who are assured that learning activities are likely to be meaningful, remarkable and usable spend more effort and persist longer to complete an activity. In addition, even when students lack self-efficacy, if they value the learning activity, their contributions are likely to begin and carry on (Zimmerman, 2002). According to Thurlings et al. (2013), “Meta cognitivism stresses that learners learn to learn. In this theory of learning, self-regulated learning fits in. In their (self-regulated) learning processes, such as preparation and tracking, teachers direct students, and the learners are responsible for their own learning. This means that at a starting point, the feedback process begins with learners. Teachers then provide input and the students flow on to another level. A loop brings learners back to another starting point as the method is continuous” (p.4). He further explained that, “The focus of social constructivism is on how learners are actively involved in building their knowledge. The starting point for learning is prior knowledge. Learning happens by evaluating different

instances and by de-contextualizing the heuristics. This process is guided by teachers. In the learning processes, peers are involved and students collaborate. This indicates that at a starting point, the feedback process starts with learners. Multiple peers and educators provide input. Then, since the learning is continuing, students transfer to another stage, which becomes a new starting stage.” (p. 4).

METHODOLOGY

A systematic content analysis technique was used to retrieve articles. Schimmel (1983) mention the criteria for systemic content analysis that is; (1) selection of appropriate computerized database (2) identification of appropriate keywords (3) review of abstracts and (4) comprehensive review of selected articles. Current article adapts the same process. First, well-known publishers like Emerald, Elsevier, Springer, Taylor & Francis, and Sage publications have been searched with related keywords (e.g., constructive feedback, academic achievement, feedback and self-regulation; feedback and self-efficacy; feedback and motivation). Second, all ISI journals names with feedback and its effects were also examined. The search covered 221 articles/ books from January 2000 up to May 2020 including some older publications as well, by means of snowballing. Out of these, 92 articles were filtered and incorporated in this study. The criterion of selection was “Search for papers published in peer-reviewed scientific journals in English, Search for papers published in the last 15 years, selected articles contain at least one keyword in their title or abstract, excluding papers related to very narrow aspects or contexts, reading all remaining abstracts and reading all remaining articles in their entirety”. After the selection of most relevant articles, a detail and comprehensive bibliographic analysis have been done.

CONCLUSION

Receiving constructive feedback is linked to improved levels of achievement, motivation, and self-efficacy. It requires students to be active learners in their education, and can help lower ability students achieve more (Bandura, 2001; Butler & Winne, 1995; Kluger & DeNisi, 1996; Schunk, 2012; Vollmeyer & Rheinberg, 2005; Zimmerman & Bandura, 1994). Constructive feedback can also assist in the development of the skills required for students to become self-regulating. However, for students to be able to make the most of any tools designed to improve their learning experience, they must be willing and engaged participants in their own learning.

Motivation and Self-regulation are related and Feedback is an important stimulus for self-regulation. Self-regulations are affected by motivational factors such as goals setting, expectations of outcomes, and self-efficacy, are important motivational variables that affect self-regulation. Taking part in effective self-regulated learning will in effect inspire learners to fix new targets and continue to learn. Certain motivating factors involved in self-regulation include beliefs, goals and assist in the search for i.e. constructive feedback from the teacher. These variables collectively will aid to decide that getting behavior is set off and maintained as pupils make adoptions about the relaxed, place, timing, and outcomes of their learning.

The current study has developed a theoretical framework for the successful implementation of constructive feedback model. After a detailed literature review, it has been revealed that there is very limited theory-based empirical research available. Second, although literature is available in language subject (English) but there is no study available which emphasis about the effects of feedback in science subject. Third, literature covered only one aspect at a time but this study covered all dimensions. This study has developed a theoretical framework on literature base data. Now there is a need to further empirically verifying this framework. This study will imply all level of constructive feedback, and its effects will be observed on students.

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INTERNAL BRANDING IN HIGHER EDUCATION: WHAT EFFECTS COMMITMENT OF FACULTY

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Zaheer Abbas***

ABSTRACT

Under investigated research examined effects of internal branding on professional performance of the faculty and academicians in Pakistanis universities. The present research has been carried out for considering as effecting elements of internal branding tools; training, briefings, group meetings and orientation and-determinants of internal branding includes; vision, core values, internal communication and reward. Three types of commitments including; normative, affective and continuous commitment were examined in the context of faculty working in the higher education institutions. Employed quantitative research methodology, the data analysis reveals that combined effects of internal branding influence employee commitment with 62%. Study also reveals combined effect and individual effect upon all three types of employee commitment by internal branding. Comparing effects of internal branding on all commitment types, found that internal branding has more effects on faculty normative commitment followed by effective and continuous commitment. Analysis of control variables i.e. faculty's working experience and variation of public and private higher education institution has revealed that-experience has influence on faculty's commitment. There is no significant effect of diversity of public and private university on employee's commitment.

Keywords: *Internal Branding, Professional Commitment, Faculty Member, Higher Education.*

INTRODUCTION

With the emergent phenomena of globalization, service sector has

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dominated manufacturing sector, particularly; in the terms of rendering employment opportunities. Similar to industrialize economies, developing countries have also experienced such a paradigm shift. Preceding research studies (Clark, 1960; Fuchs, 1980) reported that there is hasty shift of structural changes from agriculture to manufacture; and manufacturing to service sector. In Pakistan, percentage contribution of; agriculture is 20.9%, industry is 25.8%, and services sector is highest with 53.3%, of total GDP (Central Intelligence Agency, 2009).

Branding is a process of image building regarding a specific marked group. Ideally, organization likes to figure a demonstrative linkage with the identified groups (Karens, Eshuis, Klijn, & Voets, 2016). The major service sectors of Pakistan are four including; distributive, producer, personal and social services- while education sector lies under social services (Ahmed & Ahsan, 2011).

Education is a major source of sustenance and acceleration of development (Colclough, 1982). One of the core functions of education is human resource development. Education is a vital source for an individual that bridge them in meeting other basic necessities like food, health and safety. Education provides the foundation to eradicate lower status, deprived quality of life and to enhance social development (Memon, 2007). Prosperity and success of nations are guaranteed by its educational system. Quality of education in Pakistan is underprivileged; including inadequate trained academic labor force, less and in-appropriate teaching aids (Memon, 2007). One of the important rationales of deprived efficiency of education is ignoring this sector since last several decays. It can be easily evident from the allocation of budget of only 2.7% for education sector in the GDP (Central Intelligence Agency, 2015). Additional major elements of low performance of education system are; poor quality of program implementation, weaker management, monitoring and evaluation and instruction (Memon, 2007). An increased focus on technology and information system has put stress on educating people to keep up with the emerging technologies. So, training plays a vital role in this regard.

Concurrent construction of multiple types of knowledge is most readily achieved through the integration of training with on-the-job learning (Littlejohn, Milligan, Fontana, & Margaryan, 2016). Internal branding to organizational insiders is not yet explored, though little exceptions may be notorious (Judson, Aurand, Gorchels, & Gordon, 2008; Wraas &

Solbakk, 2009). Various experts of the field such as Aula et al. (2015) claimed that university branding is a fundamental internal question of organizational purpose (Mampaey, Schtemberg, Schijns, Huisman, & Arild W[^]raas, 2020).

Education sector of Pakistan has become important with regard of providing quality education. A report (Batool & Qureshi, 2007) showed that general universities in the Pakistan are forty nine, with holding 11,434 faculty members. In the previous three decays, various research studies have been carried out to consider problems, prospects, and issues of teacher education in the country. A hefty number of highly educated professionals and researchers go abroad for a better job opportunity or getting higher education; while return rate is very low causes a giant national loss (Memon, 2007).

Reports from the various research studies (Ganihar & Bhat, 2006) it has been noted that standard of education has a significant linkage among the preparing proficient faculty and academic staff. Faculty members in higher education institutions are expected to take innovative steps and they must dedicate to their occupation and employment. Education has been internationally acknowledged for brining cultural, political, moral, socio-economic and intellectual advancement of nations (Raza, 2010). It has been concluded from previous studies that teacher is the key maker of the society. They bring qualitative changes and enforced educational standards; which motive wellbeing, development and prosperity of the nations. It reveals, standards of employees have a positive impact upon quality of the system. Institutions having skilled full and qualified workforce, can accomplish organizational objectives easily. Competition has been increased in service sector resulted on focus toward internal branding to gain competitive advantage (Balmer, Powell, Punjaisri, & Wilson, 2011). A recent wave of HEC scholarship scheme has ignited the process both at national as well as international level. So, the role of teacher as researcher has added towards their responsibilities. A researcher is also expected to be a good teacher. Moreover, public universities spend limited fund on training programs for teachers as compared to private universities. Training plays a vital role in development of academic staff- and expected to enhance their level of commitment.

At the contemporary era; the concept of “internal branding” gained an immense attention of academicians as well as research practitioners

(Punjaisri & Wilson, 2007). Experts (Mitchell, 2002) have noted that formation of internal branding is possible to exercise through internal marketing. (Wood,2000) focussed that internal branding is resource of generating internal commitment among workforce by adopting the marketing model internally. Internal marketing concept holds that the employees are the primary market of organization. The core intention of the internal marketing task is to maintain commitment and motivation of employees (George, 1990; George & Gronroos, 1989). Key elements in internal branding are mix including; communication, training, education and information (Wirtz et al., 2009). A significant relationship has been noted between internal branding and employee commitment (Burmam & Zeplin, 2005). This study had adapted the concept of internal branding from Punjaisri & Wilson, Mampaecy (2007; Mampaecy, 2017).

Only external brand may flop to make universities live up to their brand promises; required internal legitimation, an external brand will only consist of unsupported external communications by university managers; communications that are ‘decoupled’ from the actual internal activities of academic staff (Mampaecy, 2017).

The current research study has been carried out to look upon a comparison of private and public universities in the Pakistan.

Research Objectives

Following are the objectives of the current research:

- To analyze internal branding tools and determinants
- To investigate three types of employee’s commitment including; normative, affective and continuous commitment in the higher education institutions of Pakistan
- To discover correlation among the internal branding and faculty members of the higher education institutions employee’s commitment.

Related Work

Service branding and brand management definition

Since around middle of 1980s service marketing became the emerging area of research study (Fisk, Brown, & Bitner, 1993). According to; American Marketing Association(AMA), that brand is; name, sign, expression or design that is used to identify one product or service; from other for purpose of differentiating (Keller, 2008). Different researchers Keller (2008) and Reichheld (2001), defined various emotional and rational dimensions of branding. Brand

management of services were explored long ago; however, since last decade, this area gained particular attention and interest of researchers. Services are actions or performances, and intangible in nature (Berry, Conant, & Parasuraman, 1991). Services are complex; includes features of perish-ability, heterogeneity, intangibility, requirement of customer involvement and limitation to be produced and consumed simultaneously (Kariuki, 2012).

Importance of Employees in Service Branding

Due to enlarge struggle in the sector of services, it has resulted to focus on building strong brand to gain competitive advantage (Keller, 2008; Sharp, 1996). Expansion of corporate marketing and internal banding has raised awareness of vital function of workforce in internal branding process (Punjaisri & Wilson, 2007). Literature regarding service branding has tinted the main responsibility of employee in service encounters and it was argued that during service encounter, behaviors and approach of employee effects on consumers (Kimpakorn & Tocquer, 2009). Consumers make perception of service organization based on service employee to whom they encounters (Thomson & Hecker, 2000). It is also argued that excellent brands are vulnerable to harm if any employee of organization acts in way; that is incoherent with fundamental brand standards (Moser, 2003). Researchers claimed that to ensure quality and brand standards- employees must be well knowledgeable (Moser, 2003). Marketing of service brands to external customers is not enough. Internal customers i.e. employees are also important because the product being marketed is service.

In service sector, it is tricky to make brand position due to its intangible and complex offering. People look within the organization for clues. Zeithaml et al. (2006) has described that without involvement of HR initiatives, appropriate recruitment, training and motivation-corporate cannot deliver the brand promise and values to the customers. Internal branding is important to employees within the organization to ensure proper alignment between internal and external brand message (Mitchell, 2002). Proper brand message is achieved through unified behavior of employees (Schiffenbauer, 2001). Schultz and Schultz (2000) has described that there should be proper alignment of external brand promise with the internal brand promise by the employees of organization.

Determinants and tools of internal branding

Determinants and tools of internal brandings are as follows:

- Internal branding tools

- Trainings and developments
- Orientations, group meetings and briefings

In internal branding, internal communication and training program equipment are recognized the chief mechanisms. There are different internal communication tools includes orientations, group meetings and briefings, notice boards newsletters and log books that are used for giving relevant and essential brand information. Internal communication tools are significant to enlarge and reinforce employees' brand-supporting behavior (Punjaisri & Wilson, 2007).

Training

Training, Orientations, group meetings and briefings are good mechanisms of internal branding (Balmer et al., 2011). In general, there is an association between the HR practices and employee commitment. In return, the satisfied employees render a higher quality of service to people. Training plays vital role in individual's capabilities as well as profitability of the organization (Cosh, Duncan, Hughes, & Britain, 1998). There are different reasons for training, enhancing individual skills and competencies, only for job safety or just for appearance sake (Hughey & Mussnug, 1997). Training gives achieve institutional objectives (Wasmer, Williams, & Stevenson, 1997). Training and internal communication makes employees to appreciate the brand and its values (Balmer et al., 2011). Training goal should be in line with company strategic plan that it reinforces the larger mission of institute or company (Hughey & Mussnug, 1997).

Higher education institutions have widely implementing integrated marketing principles. Training has positive impact on job satisfaction, productivity and profitability. Training enhance employees' efficiency- leads toward personal and professional development (Hughey & Mussnug, 1997).

Training reinforces the brand promise and values. Focus of training programs is focusing on modification of employee behavior that helps organization as well as the individual. Training is learning by doing approach (Hughey & Mussnug, 1997), which leads to change in the behavior. This study focuses on effects of training to the academic staff of universities in Pakistan. Organizations need to clearly communicate the brand's purpose to employees through training; to inspire and assist them to understand their role in relation to the brand (Balmer, Harris, & de Chernatony, 2001).

Internal Brandings Determinants

Following are the determinants of internal branding:

Vision

Vision relates to goals and objectives of organization (Rafiq & Ahmed, 2000). Strategic vision is compulsory to underwrite corporate brand (Collins & Porras, 1991). When employees are comprehensible about corporate vision and core values- outcome as employee's commitment (O'Callaghan, 2009) Clear vision is implicit by internal communication (Asif & Sargeant, 2000). Practicing internal communication employees having, better understand of brand vision. Mitchell (2002) said, "It enables employees to "live" the vision in their day to day activities and through their brand living attitude customers are satisfied".

Core values

Second determinant of internal branding is, core values. Whereas, employees are comprehended of brand core values then, they will perform in ways that live up to customer's brand expectations (Punjaisri & Wilson, 2007).

Internal communication

internal branding is internal communication Emphasizes on the importance of effective communication of the service vision and core values (De Chernatony, Drury, & Segal-Horn, 2003). Effective internal communication enhances employee commitment and loyalty (Asif & Sargeant, 2000). Papasolomou and Vrontis (2006) have suggested; internal branding tools i.e. training and internal communication induce employee's brand identification and employee commitment.

Rewards

Hoffman and Mehra (1999) noted that rewards for employees, are consider very effective to retain brand standards. It may also swift motivation and commitment level of employees. From previous studies, it has been noted that- employee's satisfaction and performance showed positive correlation (Khanyapuss Punjaisri, 2007). To ensure that employee is able to deliver brand promise, organization should engage in the activity such as rewarding; that enhances employee ability to deliver service promise (Zeithaml et al., 2006).

Employee's commitment

Commitment is basic level of psychological affection of internal employees

to brand or organization that exaggerate motivation to work for corporate goals (Burmam & Zeplin, 2005). Allen and Meyer (1997) described a positive correlation of job satisfaction and commitment of the employees. Meyer, Becker, and Vandenberghe (2004) defined that employee's commitment keeps them to stay with organization. They attend their duty on regular, full day, protects assets and try their best to achieve determined goals of the organization. Research studies showed if commitment is low, individuals and organizations affects negatively- while it benefits organizations when employee commitment is high (Brockner, Tyler, & Cooper-Schneider, 1992). An association has been noted between organizational commitment and satisfaction (Lok & Crawford, 1999; Meyer et al., 2004).

Dimensions of commitment

The major dimensions of commitment are comprised of; affective, continuance and normative commitment (Meyer & Allen, 1991; Meyer, Allen, & Gellatly, 1990). Definitions of Commitment Types: Definitions of commitment types are described as follow:

Affective commitment

According to Allen and Meyer (1990); it is employee's emotional attachment, identification and involvement in an organization.

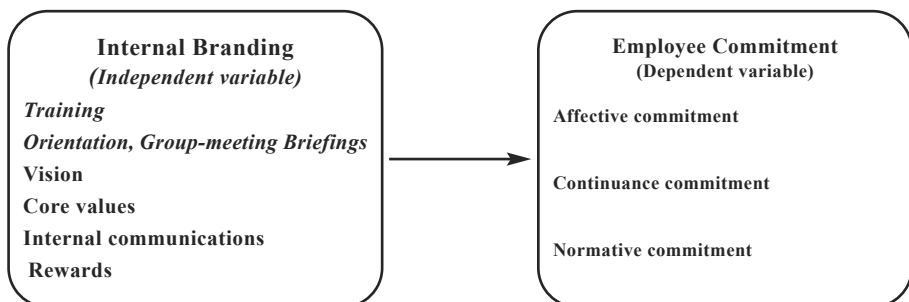
Normative commitment

The degree to which an employee feels some sense of obligation to remain with the organization (Allen & Meyer, 1990).

Continuance commitment

According to Allen and Meyer (1990), employee assessment of the costs associated with leaving the organization. It comprising low perceived alternatives and high personal sacrifice (McGee & Ford, 1987).

THEORETICAL FRAMEWORK



Research hypotheses

Hypotheses for the present study are following;

H₁: there is a positive correlation between internal branding and overall commitment of the faculty members of higher education institution.

H₂: There is a positive correlation between internal branding and affective commitment of the faculty members.

H₃: A positive correlation is expected between internal branding and continuous commitment of the faculty.

H₄: Normative commitment of the faculty members have a positive correlation with internal branding.

H₅: There is difference in the commitment of faculty members of public and private higher education institution and employee working experience.

RESEARCH METHODOLOGY

The present research is designed to explore relationship between internal branding with employee commitment of faculty at universities in Pakistan. For data collection, a comprehensive self-administered questionnaire was utilized. The second research tool has been employed to measure internal branding. First sub section of internal branding contained nine statements designed, to measure training and development of teaching faculty; both public and private universities. Nine items were adopted from training and development, developed by Rogg, Schmidt, Shull and Schmitt (2001). Scale of internal branding tools, developed by Punjaisri and Wilson (2007), is utilized to investigate perceptions of faculty members towards orientation, group meetings and daily briefings.

Second sub section of internal branding, having twenty items of and four sub parts; vision, core values, internal communication and rewards-comprised of Internal marketing scale of Foreman and Money (1995). All four constructs of vision are adapted from scale of internal marketing. Four constructs of core values are used from scale of Pate and Martin (2004), which shows the employee's psychological contracts. It is noted (Berry & Parasuraman, 2004), that internal marketing construct is consist of three elements including; rewards, development and vision.

Last section contained scales of employee commitment which is measured through three variables; normative, affective and continuous commitment. Scale of Allen and Meyer (1990) is used to measure employee commitment toward university. Respondents are asked about agreement and

disagreement by circling a response for each statement from a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

Research Design and Population

Population for present study is faculty members of higher education institutions in Pakistan. Present study was basic and explanatory in nature. Convenient Random sampling method was used to collect data from different departments of four private and four public universities. Sample size was 200 while 103 responded positively with a return rate of 51.5%. SPSS statistic was used for data analysis. For hypothesis testing, Pearson Correlation analysis is used; while to measure commitment of employees, performed Regression analysis.

RESULTS, DATA ANALYSIS AND DISCUSSION

Following is the descriptive statistics of different tables.

Table 1: Descriptive Statistics of Public and Private University

	Frequency	Percent
Valid		
Public University	55	53.4
Private University	47	45.6
Total	103	100

The responses of faculty from public sector universities were 55, comprising 53.4% and responses of faculty from private sector universities were 47 comprising of 45.6% as shown in the table 1.

The frequency from public sector universities is higher than that of private sector universities. Data reveals positive tendency of faculty members in public sector universities in the country. However, results also reveals satisfactory participation of faculty members in private sector universities.

Descriptive Statistics of Gender

Table 2: Descriptive Statistics of Gender

	Frequency	Percent
Male	58	56.3
Female	45	43.7

There are 58 males’ respondents, comprising 56.3%- and 45 female’s respondents comprising of 45% in the sample giving 103 respondents shown in the table 2 above. It reveals that maximum number of respondents, i.e. 56.3 % (total 58 respondents), show their interest in the

current research study. On the other hand, female faculty members shown less interest to participate in the study, as reveals in the table 2 above.

Faculty Qualification

Table 3: Descriptive Statistics of Qualification

		Frequency	Percent
Valid	Master	3	36.9
	M.Phil./M.S	46	44.7
	PhD	19	18.4
	Total	103	100

36.9% of employees holding Master’s Degree, 44.7% faculty members got MS/M.Phil. Degrees while 18.4 percent done PhD degree shown in the above table 3. Highest number of sampled faculty, holding M.Phil. /M.S. degree; i.e. are 46 comprising 44.7%, highest among the total respondents; i.e. 103. The lowest number of sampled faculty, holding PhD. degree; i.e. are 19 comprising 18.4%, among the total respondents; i.e. 103 shown in the above table.

Statistics of Employee Designation

Table 4: Descriptive Statistics of Employee Designation

		Frequency	Percent
Valid	Lecturer	69	69.5
	Assistant Professor	18	17.5
	Associate Professor	7	6.8
	Professor	9	8.7
	Total	103	100

The data shows that 69 % respondents were lecturer, 17.5% are Assistant professors, 6.8% are Associate professors and 8.7% are Professors, as mentioned in the table above. Majority of respondents were lecturers i.e. 69 number, whereas; only 7 respondents were assistant Professors, the lowest number of respondents.

Employee Experience in Existing University

Table 5: Descriptive Statistics of Employee Experience in Existing University

		Frequency	Percent
Valid	0-5 years	66	64.1
	6-10 years	22	21.4
	11-15 years	14	13.6
	21 years and above	1	1.0
	Total	103	100

In the existing university majority, 64.1% of the respondents having in 1 to 5 years of experience and 21.4% of respondents are having 6 to 10 years' experience and 13.6% respondents having experience of 11 to 15 years- and only 1% respondent having more than 21 years of experience in current university as shown in the table 5 above. Experience of respondents of existing and previous university ranging in from 1 year to above 21 years by minimum value of 1 and maximum is 5, with a mean of 1.52 of existing university and 1.07 for other universities and standard deviation respectively of .803 and .350.

Descriptive Statistics of All Variables

Table 6: Descriptive Statistics of All Variables

	Mean	Std. Dev	N
Overall commitment	3.2582	.46019	103
Internal branding	3.2356	.58830	103
Normative commitment	3.3259	.65935	103
Internal branding	3.2356	.58830	103
Continuous commitment	3.1219	.49815	103
Internal branding	3.2356	.58830	103
Affective commitment	3.33483.2356	.56900	103
Internal branding		.58830	103

Descriptive results of correlation between internal branding and employee over all commitment, normative commitment, continuous commitment and affective commitment shows result that total mean is respectively (3.26, 3.3, 3.12 and 3.33), and for internal branding is 3.23 and total number of respondents is 103 shown in the table 6.

Overall Reliability Statistics

Table 7: Overall Reliability Statistics

Cronbach's Alpha	N of Items
.928	61

Cronbach's Alpha value is .989, shown in the table 7 above), suggesting very good internal consistency reliability and it also fulfill basic assumption of correlation and regression. As the values is above .7 acceptable while, value above .8 are preferable (Pallant, 2013); so reliability of all variables is acceptable.

Reliability Statistics of All Variable

Table 8: Reliability Statistics of All Variable

	Cronbach's Alpha	No of Items
Training	.810	9
Orientation, Group Meetings, Briefings	.830	9
Internal Branding Vision	.662	4
Core Values	.753	6
Internal Communication	.708	4
Reward	.855	6
Normative Commitment	.630	7
Continuous Commitment	.544	8
Affective Commitment	.744	8

To check internal consistency, Cronbach alpha is used. The Cronbach alpha coefficient of a scale should be above .7, Ideally (Gliem & Gliem, 2003). All variables are having alpha value above .7 except continuous commitment that is .544, shown in the above table 8.

Regression Analysis

Before applying regression, there were certain assumptions that should be fulfilled. Assumptions are listed below

Assumptions of Regression

The sample size is of N= 103; adequate to apply regression analysis procedure.

Normality, Outliers and linearity

Normality of data and its screening by the identification of outliers, the second assumption of analysis of regression; seen (Figure 1) that points are in linear ranged along with line and also, they are normally distributed. Thus, assumption of linearity for regression analysis fulfilled. Responses were recorded (Figure 2) that there are no outliers. All data points are within range of 3. So, assumption of not having any outliers also fulfilled.

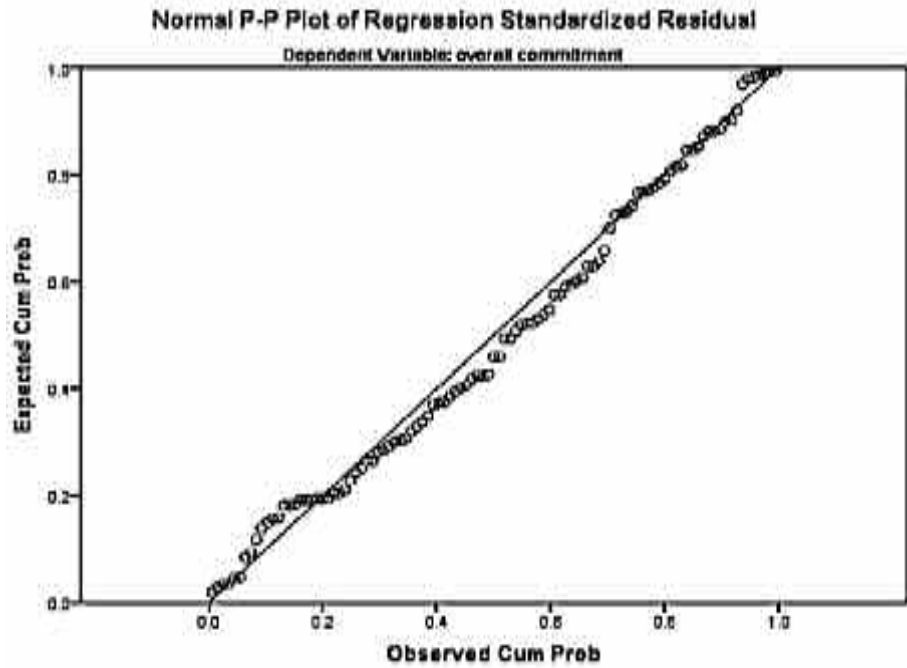


Figure 1. Normality and Linearity

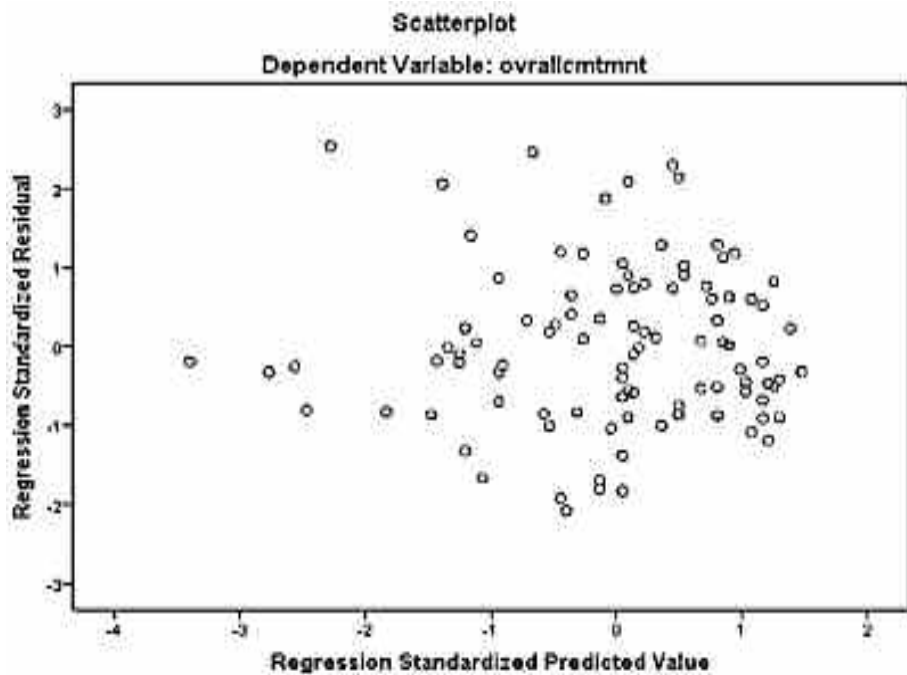


Figure 2. Outliers Graph

CORRELATION ANALYSIS

Table 9: Correlation of Overall Commitment and Internal Branding Correlations

		Overall commitment	Internal branding
Pearson Correlation	Overall commitment	1.000	.622
	Internal branding	.622	1.000
Sig. (1-tailed)	Overall commitment	.0	.000
	Internal branding	.000	.
N	Overall commitment	103	103
	Internal branding	103	103

Correlation is obtained for assessing relationship between internal branding and employee commitment. Statistical results of correlation between internal branding and employee overall commitment shows that value of correlation coefficient is 622 as shown in the table 9 above. If value of correlation coefficient is greater than .5, then it shows positive significant relationship between two variables. Therefore, correlation between internal branding and employee's overall commitment level is high.

Correlation Analysis of All Variables

Values of correlation between independent and dependent variables were shown in the table 10 below.

Table 10: Correlation analysis of all variables

	IB	NC	CC	AC
IB	1			
NC	.615**	1		
CC	.371**	.420**	1	
AC	.498**	.596**	.378**	1

**Correlation is significant at the 0.01 level (1-tailed)

Correlation value among internal branding and normative commitment is .615, while correlation between continuous commitment and internal branding is .371. Correlation value of affective commitment and internal branding is .498 value of correlation of all variable is above .3, so it shows that there is positive relationship among all variables. Result indicates as shown in the table 10, that teaching faculty of universities in Pakistani settings have greater commitment level if focus of universities is more on internal branding.

Regression Analysis of Internal Branding on Employee Commitment

Table 11: Regression Analysis of Internal Branding on Employee Commitment

Model	R	R square	Adjusted R Square
1	1	.622 ^a	.386

Value of R Square is .622, as per results mentioned in the table 11 above. It reveals that variation in employee commitment is 62%, which explained result of variation in internal branding. The results of correlation analysis construct a positive bond between employee commitment and internal branding. It reveals internal branding is very important forecaster of employee's commitment.

Regression Analysis of Dimensions of Employee Commitment

Table 12: Regression Analysis of Dimensions of Employee Commitment

	R	R Square	Adjusted R Square	Sig. F Change
NC	.615	.379	.372	.000
CC	.371	.137	.129	.000
AC	.498	.248	.241	.000

Regression models were utilized to predict value of dependent and independent variables. It is noted that in higher education institutions of Pakistan; internal branding has 62% impact on employee overall commitment because $R^2 = .622$. value of R square is .379 for normative .137 for continuous commitment and .248 is for affective commitment. Result shows that for normative commitment, continuous commitment and affective commitment is respectively 37%, 13% and 24%. Shown in the table 12 above. While comparing all three-commitment levels; internal branding has more impact on normative commitment and low impact on continuous commitment. It validates and proves our all four-research hypothesis that internal branding has significant and positive impact on employee's overall commitment, normative commitment, continuous commitment and affective commitment.

Control Variable

Researchers, control two variables i.e. experience and sector. Analysis of control variables are shown in the blow table 13 below.

Table 13: Control Variable

Model	R	R Square	Adjusted R Square	Std. Error of the estimate	S. Square Change	Sig. F Change
1	.249 ^a	0.062	0.043	0.4501	0.062	0.04
2	.675 ^b	0.456	0.439	0.34465	0.393	0

Analysis of level of commitment after controlling two variables experience in current university and sector (public and private) explains that there is 6 % of variance in experience and sector. When internal branding is entered, total variance explained by model as a whole was 46%. Control variables explained and additional 40% of variance in commitment R Square change= .393. This is statistically significant contribution as indicated by sig F change =.040.

ANOVA^c

Table 14. ANOVA^c

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.342	2	.671	3.312	.040 ^a
ANOVA ^c Residual	20.259	100	.203		
Total	21.601	102			
Regression	9.842	3	3.281	27.619	.000 ^b
ANOVA ^c Residual	11.759	99	.119		
Total	21.601	102			

ANOVA, in the above table 14, indicates that there is effect of experience on employee commitment and less effect of public or private university factor on employee commitment.

CONCLUSION

In the present research, results draw attention to the significant function of internal branding in nurturing employee’s commitment. Correlation and regression analysis of overall internal branding and commitment shows significant and positive relationship by showing R Square=.622. Thus, first hypothesis is accepted. Study also shows, there is found an important role of internal branding on employee normative commitment. The chief purpose of internal branding is to make internal employee that organization take care of them. So internal branding has more effect on normative commitment because it addresses such issues that employee feels comfortable and happy towards their work and faculty members were more loyal towards their universities. They willingly not want to leave their university. They show more sense of belongings and see their university that it is having good values and standards. Second hypothesis is accepted because correlation result reveals that there is significant relationship between internal branding and employee commitment i.e. $r=0.615$. Further regression analysis also proves with Beta value 0.379 that is significant and positive.

Continuous commitment is less affected by internal branding by having alpha value of .371 and R Square .137, then it effects on affective commitment previous research of (Caruana & Calleya, 1998) also shows that internal branding has significant effect on employee affective commitment.

RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

Limitations of the study are including time, is one of the important limitations. Finance is one of the other limitations to conduct a large level research study. Current research study is limited to only higher education institutions. Another limitation is; internal branding taken as only independent variable.

We found that internal branding might be typified as relatively successful in all respects (Jelle, 2020). Recommendations for the current study are; needed future research studies by selecting other independent variables, which can examine and effect employee's commitment. In the future studies, population and sample size needed to be increased. For Future researchers, they should consider other service organizations like banks, hotels telecommunication sectors etc. As the present research consider only higher education institutions, while it cloud be conduct at lower sector of education including employees of higher secondary, secondary, primary education and pre-primary sector. Need to investigate other factors that have relationship with employee commitment, which puts significant effect on employee's performance. There may be other variable that effects employee commitment; should be studied.

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SERVANT LEADERSHIP AND ORGANIZATIONAL COMMITMENT

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ABSTRACT

This study seeks to explain the relationship between dimensions of servant leadership and dimensions of organizational commitment in the healthcare sector of Karachi. Two separate instruments were developed for the purpose of data collection and the data were collected at two different points in time. A total of 350 instruments were distributed among the employees of healthcare sector of Karachi. From these 350 respondents, only 300 filled and returned both the instruments. Since, there were three dependent variables in the study, therefore, three separate multiple regression analyses were used as the statistical technique. Results indicated that emotional healing has significant positive relationship with affective commitment. On the hand, altruistic calling and emotional healing have significant positive association with normative commitment. Whereas, emotional healing, wisdom and persuasive mapping have significant association with continuance commitment in the healthcare sector of Karachi.

Keywords: *Servant Leadership, Organizational Commitment, and Healthcare Sector.*

INTRODUCTION

Overview

Business world has never been as difficult as it is today. This is due to the competition that has made it difficult to have a sustainable competitive edge (Hitt et al., 2001). There are many ideas and strategies that can help in creating and sustaining competitive advantage. Some discussed that adapting modern technologies and creative techniques such as just in time approach or lean production can be useful in achieving competitive edge

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(Groeneveld & Van de Walle, 2010). However, it has been observed that these techniques have been proved ineffective to attain a sustainable competitive edge. The inability of such technologies/ tools lies in the fact that as soon as these techniques start creating a competitive edge, these techniques are soon followed by competing businesses (Groeneveld & Van de Walle, 2010). Hence, businesses are eagerly trying to find new and creative techniques that cannot be copied by other firms. In this regard, it is concluded that only human capital is the resource that cannot be imitated, hence, the immense importance of human capital is realized (Ariani, 2012).

The realization of the importance of human resources lead the organizations to find ways of having committed workforce. In this regard, it is argued that there are three major type of organizational commitment (Allen & Meyer, 1990) which are affective, normative and continuance commitment. However, commitment is something that is not transactional in nature and therefore one cannot enhance the level of commitment amongst the employees using the transactional leadership style. This in turn suggests that only economic exchange relations are not enough for have a committed workforce. Therefore, it is argued that the concept of social exchange can be helpful in enhancing the level of commitment amongst the employees (Van Knippenberg & Sleebos, 2006).

Duchon and Plowman (2005) asserted that the social exchange theory emphasizes on commitment as a give and take procedure seeking a long-term bond with organization. These relations are also affected by behaviors of leaders, when employees consider or perceive leader as possessing desirable outcomes (Hannah & Avolio, 2011). On the other hand, effective leaders also try to gain creative cooperation of employees through social exchange relations. In their quest to gain creative cooperation of employees, leaders across the globe have tried a number of leadership styles. Servant leadership is one of the leadership styles.

The concept of servant leadership suggests that a supervisor also serves as a servant that usually attend the need of his/her followers. Hence, in this type of leadership, instead of showing arrogance, the leader shows humbleness and make the employees feel that he/she care about them. This helps the leader to gain trust of employees. The most common attributes of a servant leader are humbleness, sacrifice and constructive approach to behavior related to organization (Hannah & Avolio, 2011).

The servant leadership may have foremost influence on employees' assertiveness and job consequences which are crucial for the productivity. According to Barbuto and Wheeler (2006) servant leadership is a multi-facet construct that includes Altruistic calling, emotional healing, wisdom, persuasive mapping and organizational stewardship. Therefore, this study seeks to test the impact of the dimensions of servant leadership on the dimensions of organizational commitment in the healthcare sector of Karachi.

Problem Statement

Leadership has become one of the most extensively studied variable of organizational behavior and a large number of researchers (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014; Fairhurst & Connaughton, 2014; Tourish 2014; Cheong, Yammarino, Dionne, Spain, & Tsai, 2019) have studied leadership. Previously, researchers were more concerned about traditional leadership styles. However, due to rapid changes in environment, managers are desperate to find ways of gaining creative cooperation from the employees. Hence, a number of new leadership styles have emerged over the period of time. Servant leadership is one of these newly emerged leadership styles. Hence, researchers (Eva, Robin, Sendjaya, van Dierendonck, & Liden, 2019; Joo, Byun, Jang, & Lee, 2018; Burton, Peachey, & Wells, 2017; Liden, Wayne, Liao, & Meuser, 2014) have studied servant leadership as well. McCann, Graves and Cox (2014) have studied servant leadership along with job satisfaction in the healthcare sector. Drury (2004) has worked on servant leadership and organizational commitment as well. However, Drury (2004) studied organizational commitment as a one dimensional construct. However, Barbuto and Wheeler (2006) argued that servant leadership is a five dimensional model. The facets of servant leadership revealed by (Barbuto & Wheeler, 2006) are altruistic calling, emotional healing, wisdom, persuasive mapping, and organizational stewardship. Whereas, Allen and Meyer (1990) previously suggested that there are three dimensions of organizational commitment which affective, normative and continuance commitment. However, to the best of researchers' knowledge, no study has been conducted that tests the relationship between the dimensions of servant leadership and dimensions of organizational commitment. Hence, this study aims to test the relationship between the dimensions of these two variables in the healthcare sector of Karachi.

LITERATURE REVIEW

Theoretical Background

This research study is based on the theoretical underpinnings of social exchange theory and leader-member exchange (LMX) theory. The social exchange theory suggests that there are two types of relationships at work, these are the economic exchange relationships and the social exchange relationships. Economic exchange relations are transactional in nature and cannot help in gaining the creative cooperation of employees. Therefore, in order to gain creative cooperation of employees, leaders must also have social exchange relations with the employees. This gives the rise to the concept of leader member exchange relations. In the words of Graen and Uhl-Bien (1995), the leader-member exchange (LMX) theory is a relationship-based approach to leadership that focuses on two-way relationship between leaders and their followers. The theory basically talks about the existence of relationship between the leaders and followers. The theory further argues that the quality of relationship between the leaders and followers influences the work outcomes of the followers (Deluga, 1998). Since, the current research study discusses about servant leadership, therefore, arguably the use of dimensions of servant leadership helps improving the relationship between the leader and followers which in turn motivates the followers to be more committed towards the firm. Hence, this study is based on the conceptual underpinnings of the social exchange theory and the leader-member exchange (LMX) theory.

Organizational Commitment

Organizational commitment is an essential building block in understanding employee work attitude and productivity (Allen & Meyer, 1990; Dhar, 2015). Jamal (2011) revealed that organizational commitment is related to job performance in Malaysia & Pakistan. Employees with stronger confidence in the values and beliefs of an organization, accepts goals and objectives and are ready to get involved and do extra effort for organization. This sort of commitment indicates that those who are strongly associated to an organization will work hard to improve their organizational operations without looking for or intention of personal gain (Ariani, 2012). However, organizational commitment is not a one dimensional construct but it is rather a three dimensional construct, these are affective, normative and continuance

commitment (Allen & Meyer, 1990). These are the affective, normative and continuance commitment.

Affective Commitment can be categorized as the desire component of the organizational commitment and is the positive emotional attachment of an employee has towards the organization (Allen & Meyer, 1990). Therefore, it can be stated that an employee who is high of affective commitment dimension will identify himself/herself strongly with the organizational goals and will have the aspiration to remain part of the firm. Whereas, the continuance commitment is attentiveness of the costs that are connected with leaving the organization (Allen & Meyer, 1990). In other words, the Continuance Commitment can be categorized as the need based component of the organizational commitment and is the commitment (or internal feelings) of an employee towards staying (continuing the current job) or leaving the organization. This is done purely on the basis of costs and benefits associated with staying or quitting the organization. Last but not the least; the normative commitment, in the words of Meyer, Stanley, Herscovitch, and Topolnytsky (2002) symbolizes a perceived responsibility to remain in organization. Hence, it is the commitment on the basis of a strong sense of responsibility towards the organization and hence it is the commitment (or internal feelings) of an employee that he ought to be loyal with the organization because of the feelings of obligation towards the organization. It is more of an ethical responsibility to stay loyal with one's organization and those employees having strong normative commitment stay loyal with the organization since they feel that it is the correct thing to do.

Leadership

Supervisors are important in gaining the creative cooperation of employees. The behavior of leaders is an important aspect in creating a better working environment (Mulki, Jaramillo, & Locander, 2008). However, there are a number of leadership styles for instance, transformational leadership, transactional leadership, ethical leadership, servant leadership, authentic leadership, and paternalistic leadership. Although, there is a debate about different leadership styles and their relative importance (Langley & Tsoukas, 2010; Mailhot, Gagnon, Langley, & Binette, 2016), however, one can safely argue that each leadership style provides a useable solution if applied in accordance with the requirements of organizational structure and demands of

environment. Since, the present research study is built on the theoretical underpinnings of social exchange theory, therefore, this study is primarily concerned about the softer side of leadership and seeks to test the relationship between servant leadership and organizational commitment.

Servant Leadership

Greenleaf (1977) argued that going beyond one's self-interest is the core characteristic leadership. Although, other leadership styles also incorporate this characteristic, however, this characteristic has never been given the central position in any other leadership theory as it is in the concept of servant leadership. Luthans and Avolio (2003) suggested that servant leadership is based on the creation of opportunities within an organization to help followers grow (Luthans & Avolio, 2003). In comparison to other leadership styles, the ultimate aim of servant leadership is the well-being of followers (Greenleaf, 1977).

Servant leadership is usually defined as going above limit from one's self interest. The servant leadership also focuses on moral behavior of taking responsibility for having success in part of employee development. The servant leadership includes values which include acting ethically, intentions which include sacrificing for others and behaviors that include supporting employees eventually generates the respect and loyalty of employees (Kool & Van Dierendonck, 2012). Hence, it is a unique connection among leaders and employees when compared with other leadership styles. It is because of this reason that servant leadership tends to have significant relationship with task and performance in context to workplace where an employee engages more.

As far as the dimensionality of servant leadership is concerned, Barbuto and Wheeler (2006) suggested a five-dimensional model of servant leadership. Altruistic calling, emotional healing, wisdom, persuasive mapping and organizational stewardship are the dimensions of servant leadership (Barbuto & Wheeler, 2006).

Altruistic calling is one of the dimensions of servant leadership. Barbuto and Wheeler (2006) states that altruistic calling is the desire for a positive change in others through services. This is considered central to the ideology of servant leadership. It has been demonstrated as the need of altruism in supervisors to have great influence on organization (Avolio

& Locke, 2002). On the other hand, Emotional healing is the second dimension of servant leadership. It can be defined as need for tolerance, recognition and humbleness as refer to healing. Wisdom is another dimension of servant leadership. Barbuto and Wheeler (2006) discussed that wisdom is superlative to accuracy and practicality, as integrating knowledge and utility. Leaders who are high in wisdom are usually characterized by good observant and are defensive across functions and setting. Another dimension of servant leadership is the persuasive mapping. It can be defined as a capability to inspire others by means of going across prescribed authority (Barbuto & Wheeler, 2006). Supervisors who use persuasive mapping can inspire others without depending on any expert or authentic influence (Barbuto, Fritz, & Matkin, 2001). Whereas, organizational stewardship is defined as trusting organization as a legacy to support and must decisively pay to society (Barbuto & Wheeler, 2006). It is basically an involvement-oriented component of leadership (Barbuto et al., 2001).

Servant Leadership and Organizational Commitment

Researchers have studied the impact of servant leadership on positive work outcomes. In this regard, researchers (McCann, et al., 2014; Al-Asadi, Muhammed, Abidi, & Dzenopoljac, 2019; Li, Mehmood, Zhang, & Crossin, 2019) have studied servant leadership along with job satisfaction. On the other hand, researchers (Drury, 2004; Schneider & George, 2011) studied servant leadership and organizational commitment and found significant positive association between the two variables. However, these researches (Drury, 2004; Schneider & George, 2011) studied both the servant leadership and organizational commitment as one-dimensional constructs. This seems to be inconsistent with the researches of Barbuto and Wheeler (2006) and Allen and Meyer (1990). It is primarily because of the fact that Barbuto and Wheeler (2006) suggested that servant leadership is a five-dimensional construct, where, altruistic calling, emotional healing, wisdom, persuasive mapping and organizational stewardship are the dimensions of servant leadership. On the other hand, Allen and Meyer (1990) had previously argued that organizational commitment is a three-dimensional construct and the affective, normative and continuance commitment are the dimensions of organizational commitment. Therefore, present research study aims to test the causal relationship between the dimensions of servant leadership and dimensions of organizational commitment.

METHODOLOGY

For the purpose of collecting data for this study, two separate instruments were developed. The first instrument consisted of 23 items, these items were adapted from Barbuto and Wheeler (2006) for measuring the dimensions of servant leadership. Whereas, the second instrument consisted of 24 items, these items were adapted from Allen and Meyer (1990) for measuring the dimensions of organizational commitment. Respondents were asked to rate their opinion on a Likert scale ranging from 1 to 5, where, 1 being strongly disagree and 5 being strongly agree.

In order to avoid the common method bias, data were collected at two different points in time and there was a difference of one month between time one and time two. At time one, data were collected using the first instrument that seeks to collect the data regarding the opinion of employees about their respective supervisors. A total of 350 instruments were distributed among the employees of healthcare sector of Karachi. It should be noted that these 350 instruments were distributed only to those employees of healthcare sector who have been working with the same firm for at-least six months. This is done so because of the fact that the instrument seeks to inquire if the employees think that their leaders exhibit the qualities of servant leadership style and it usually take some time for employees to develop the perceptions about leadership style of their manager. Hence, purposive sampling technique was used in the present research study. From the 350 instruments that were distributed at time one, 321 instruments were filled and returned.

On the other hand, the second instrument that seeks to measure the level of dimensions of organizational commitment among the employees of healthcare sector was used to collect the data at time two. The instrument was distributed among those 321 respondents who had previously filled and returned the first instrument. From these 321 respondents, only 300 filled and returned the instrument. Hence, the final data set comprises of 300 pair of instruments.

Furthermore, since the study seeks to test the impact of dimensions of servant leadership on three different dimensions of organizational commitment namely affective commitment, normative commitment and continuance commitment, therefore, three separate multiple regression analyses were used as the statistical technique.

RESULTS

Reliability

Cronbach’s alpha test was used to investigate the internal reliability of instruments. The standard value is 0.70 and above, which usually reflects that data collected from questionnaire is reliable and can be used for further statistical analysis and interpretation of results. Table 1, indicates the Cronbach alpha values of variables used in this research.

Table 1: Internal Reliability of Instrument

Variable Name	No. of items	Cronbach alpha
Altruistic Calling	04	0.875
Emotional Healing	04	0.913
Wisdom	05	0.907
Persuasive Mapping	05	0.806
Organizational Stewardship	05	0.891
Affective Commitment	08	0.701
Normative Commitment	08	0.703
Continuance Commitment	08	0.737

* Cronbach alpha 0.7 or above as the criteria for internal reliability

Since the Cronbach alpha of all the variables used in the study are 0.7 or greater, therefore, it is concluded that instruments used in the study are reliable instruments.

Regression Results

Since, there are three dependent variables in the study, therefore, three separate regression analysis were used in the study.

Table 2: Regression Results Affective Commitment Model

Variable Name	Beta (β)	t-value	p-value	VIF
Constant	2.191	10.153	.000	
Altruistic Calling	.054	1.033	.302	1.990
Emotional Healing	.240	4.634	.000	1.977
Wisdom	.005	.088	.930	1.845
Persuasive Mapping	-.060	-.964	.336	1.776
Organizational Stewardship	.027	.430	.667	1.657

Adjusted R² = 0.138 F-Statistics = 10.610 Sig = 0.00

Table 2 suggests that the value of Adjusted R square is 0.138 for the affective commitment regression model. This can be interpreted as 13.8% of variance in the dependent variable (Affective commitment) can be explained by independent variables. Furthermore, since the significance value of F in ANOVA is 0.000 that is less than 0.05, this depicts that all independent variables used in this study are accurate and authentic for explaining the affective commitment of employees. The F value also represents that right model had been selected to test the relationships. The F value of this model is 10.610 which is higher than 3.5, this suggests that the model is most accurate for testing the affective commitment of employees and is a good fit. Furthermore, the VIF values of all the variables are less than 10, this indicates that there is no issue of multicollinearity in the data. Table 2 also depicts the significance of independent variable on affective organizational commitment. The p-value of emotional healing in the model is less than 0.05, indicating that emotional healing has significant relationship with the affective commitment. Whereas, since the p-values of the rest of the variables are greater than 0.05, this indicates that these variables do not have significant association with the affective commitment.

Table 3: Regression Results Normative Commitment Model

Variable Name	Beta (β)	t-value	p-value	VIF
Constant	2.619	12.764	.000	
Altruistic Calling	.160	3.232	.001	1.990
Emotional Healing	.128	2.608	.010	1.977
Wisdom	-.018	-.314	.754	1.845
Persuasive Mapping	-.057	-.976	.330	1.776
Organizational Stewardship	-.002	-.035	.972	1.657
Adjusted R ² = 0.118		F-Statistics = 8.864		Sig = 0.00

Table 3 suggests that the value of Adjusted R square is 0.118 for the normative commitment regression model. This can be interpreted as 11.8% of variance in the dependent variable (Normative Commitment) can be explained by independent variables. Furthermore, since the significance value of F in ANOVA is 0.000 that is less than 0.05, this depicts that all independent variables used in this study are accurate and authentic for explaining the normative commitment of employees. The F value also

represents that right model had been selected to test the relationships. The F value of this model is 8.864 which is higher than 3.5, this suggests that the model is most accurate for testing the normative commitment of employees and is a good fit. Furthermore, the VIF values of all the variables are less than 10, this indicates that there is no issue of multicollinearity in the data. Table 3 also depicts the significance of independent variable on normative organizational commitment. The p-values of altruistic calling and emotional healing in the model are less than 0.05, indicating that altruistic calling and emotional healing have significant relationship with the normative commitment. Whereas, since the p-values of the rest of the variables are greater than 0.05, this indicates that these variables do not have significant association with the normative commitment.

Table 4: Regression Results Continuance Commitment Model

Variable Name	Beta (β)	t-value	p-value	VIF
Constant	2.428	2.764	.050	
Altruistic Calling	.187	1.245	.075	1.990
Emotional Healing	.035	2.604	.040	1.977
Wisdom	.020	2.514	.048	1.845
Persuasive Mapping	.067	2.771	.031	1.776
Organizational Stewardship	-.108	-.031	.961	1.657
Adjusted R ² = 0.106		F-Statistics = 8.057		Sig = 0.00

Table 4 suggests that the value of Adjusted R square is 0.106 for the continuance commitment regression model. This can be interpreted as 10.6% of variance in the dependent variable (Continuance Commitment) can be explained by independent variables. Furthermore, since the significance value of F in ANOVA is 0.000 that is less than 0.05, this depicts that all independent variables used in this study are accurate and authentic for explaining the continuance commitment of employees. The F value also represents that right model had been selected to test the relationships. The F value of this model is 80.57 which is higher than 3.5, this suggests that the model is most accurate for testing the continuance commitment of employees and is a good fit. Furthermore, the VIF values of all the variables are less than 10, this indicates that there is no issue of multicollinearity in the data. Table 4 also depicts the significance of

independent variable on continuance organizational commitment. The p-values of emotional healing, wisdom and persuasive mapping in the model are less than 0.05, indicating that these variables have significant relationship with continuance commitment. Whereas, since the p-values of the rest of the variables are greater than 0.05, this indicates that these variables do not have significant association with the continuance commitment.

DISCUSSIONS, CONCLUSIONS AND FUTURE RESEARCH

Discussion

Although, there have been few researches (Drury, 2004) in past that seeks to explain the relationship between the servant leadership and organizational commitment, however, there is a scarcity of research that seeks to explain the relationship between the dimensions of these two variables. Hence, this research study seeks to explain the relationship between dimensions of servant leadership and dimensions of organizational commitment especially in the healthcare sector of Karachi.

Results indicated that emotional healing has significant positive relationship with affective commitment. On the hand, altruistic calling and emotional healing have significant positive association with normative commitment. Whereas, emotional healing, wisdom and persuasive mapping have significant association with continuance commitment in the healthcare sector of Karachi. These results reinforce the results of previous researchers (Drury, 2004). Furthermore,

CONCLUSIONS

The results of present research study suggest that social exchange relations work better than the economic exchange relations when it comes to the question of enhancing the level of organizational commitment among the employees. It is because of the fact that an employee cannot commit for longer relation until and unless it does not benefit him or herself (Ariani, 2012). This beneficial relationship is important at workplace, commitment for staying for longer period of time only guarantee when individual feel some positive change in their own life. Employees with stronger confidence in the values and beliefs of an organization, accepts goals and objectives and are ready to do extra effort or exhibit higher level of organizational commitment (Gould-Williams & Davies, 2005).

This study depicts that the effective way of leadership is influential in attaining long term success for the firm. Furthermore, the study also depicts that supervisors are always central to nurturing a healthy work environment and delivering support for the long run development of firm's human capital. Hence, selection of proper leadership style is crucial for enhancing the level of organizational commitment among the employees.

RECOMMENDATIONS

With reference to the results presented in this study, it is suggested that managers in the healthcare sector must focus on emotional healing as this is the only dimension of servant leadership which is found to be having significant relationship with all the three dimensions of organizational commitment. Hence, emotional healing is an important aspect of servant leadership that may play a crucial role in enhancing the level of organizational commitment among the employees of healthcare sector of Karachi. Furthermore, in addition to emotional healing; altruistic calling is also found to be positively associated with normative commitment; therefore, managers must focus on this aspect of leadership as well in order to enhance the level of normative commitment. Therefore, it is suggested that managers in the healthcare sector should concentrate on enhancing the communication channels, so that they may get able to reach the employees and listen their grievance and develop strategies for emotional healing etc. On the other hand, in addition to emotional healing; wisdom and persuasive mapping are also found to be positively associated with continuance commitment. Hence, managers must understand that the concept of social exchange relations plays an important role even in the matters of continuance commitment which is otherwise seems to be comparatively more related to the concept of economic exchange relations.

FUTURE RESEARCH

Since, this study is limited to the geographical boundaries of Karachi, therefore, this result obtained during the course of study have limited generalizability outside the geographical boundaries of Karachi. Therefore, it is suggested that similar studies should be conducted in other geographical locations as well. Furthermore, the study is conducted only in the healthcare sector, which again limits the generalizability of research in other sectors, therefore, it is suggested that similar studies

should also be conducted in other sectors as well. On the other hand, since leadership affects the job satisfaction of employees and it is also a well-known fact that job satisfaction also alters the level of organizational commitment, therefore, it is suggested that role of job satisfaction be tested in the relationship between the dimensions of the studied variables. Similarly, role of trust in leader can also be tested in the relationship between the dimensions of these variables.

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PREVENTING AND COUNTERING VIOLENT EXTREMISM: A CASE FOR INTEGRATING PEACE EDUCATION INTO TEACHER EDUCATION CURRICULUM IN PAKISTAN

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ABSTRACT

The study aims to analyze the existing content pertaining to Peace Education in the core courses of B.Ed. (Hons.) Curriculum. Identified courses were thoroughly scrutinized against set criteria i.e. generating evidences about the presence or absence of explicit or implicit themes connected with Peace Education. This analysis informed integration of Peace Education into Pre-service Teacher Development Programs with special reference to B.Ed. (Hons.) Subsequently, Peace Education Training Module for In-service Secondary Schools Teachers has been developed Employing Case Study Research Design, Peace Education Training Model has been proposed based on deliberations with the administration and teaching workforce of the sampled Secondary Schools of Public and Private Sector across Karachi city. Peace Education is proactive approach to prevent extremism at Secondary Schools Level. Integration of Peace Education is expected to reduce growing rate of extremism at Higher Education Institutes (HEIs) as Post-Secondary Education is not standalone phenomenon. Through Peace Education, it is possible to intervene and prevent vulnerable working age population (above 15 year and below 65 year) drifting to extremism and subsequently terrorism It will help achieving sustainable Development Goals as envisaged in HEC vision2025 as peace and socioeconomic development are interdependent

Keywords: *Teacher Education, Secondary School Teachers, In Service Teacher Training, Pre-Service Teacher Education, Curriculum Evaluation, Extremism, Peace Education*

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INTRODUCTION

Higher Education Institutes (HEIs) in Pakistan have witnessed many incidents of on-campus violent extremism. As reported in the Dawn and revealed by the Sindh Chief Minister that three “well-educated” students have been arrested for being involved in planning and executing recent terrorist attacks in Karachi. The Dawn reported third-year student at Bahawalpur’s Government Sadiq Egerton College stabbed a professor to death over vaguely described “anti-Islam” remarks. The Dawn also reported 23-year-old student of Abdul Wali Khan University, Mardan was killed and another seriously injured by an on-campus wild mob for allegedly “publishing blasphemous content”. Cursor of Education and Development in Pakistan (CODE-2019, p.3) research report pertaining to countering violent extremism on campuses denotes that in spite of witnessing on-campus pervasive existence of violent extremism at HEIs in Pakistan, the national framework or policy discourse in line with international practices and commitments is non-existent. Countering violent extremism at HEIs is not standalone phenomenon.

National Education Policy-2017 {Draft} specifies that Secondary Education Secondary Education is one of the most important parts of education system. It is important for multiple reasons: such as it denotes progression from the primary to higher level of education; preparation to the world of work; adoption of profession and most importantly the conceptual clearance of basic life skills. Therefore, secondary education is a crossroad, opening avenues of higher education for graduates on one hand and providing skilled manpower for job market on other hand. But educational indicators in terms of access, quality, gender disparities and educational expenditure pose a dismal picture of secondary education landscape and may contribute unrest in youth and thus breeding ground for violent extremism. Marina (2013) is of the view as to how the curriculum is determined; educational sequences are scheduled, school and classroom life is organized, and how the construction of positive personal relations is overseen has a lot to do with peace education.

This study derives insights from Beyond Bali; a transformative education approach for developing community resilience to violent extremism. It covers a range of topics and activities, including social science studies and ethical dilemma learning, are suitable for Years 8 and 9 students studying the Australian Curriculum Integration of peace education in teacher

education curricula will enable secondary school teacher to address the challenges of highly diversified complex classrooms. It is most likely to reduce growing tendency of extremism at working age level youth. Higher education is not standalone phenomenon as post-secondary education is dependent upon the intake of secondary education. This research aims to restore harmony and peace in the society by breeding peace in the minds of secondary schools students through secondary school teacher training wherein Peace Education is focal area. The training will yield in improved practices in terms of their knowledge, dispositions and skills. The research is progressive in nature. Identifying gaps as a result of content analysis informed designing teacher training module and its implementation.

Effectiveness of Education System is dependent upon teacher education. National Education Policy (2009-2015) specifies the Planning Commission's Vision-2030' focusing on change of mind-set which demonstrate commitment to a new set of societal goals. This policy also advocates the commitments of Government of Pakistan towards Education for All and Millennium Development Goals (MDGs) coupled with Inclusive and Child friendly education that will provide platform for materializing Sustainable Development Goals (SDGs). Peace is pre-requisite for development. For this purpose, teacher quality and leadership at school play an essential role. National Education Policy (2009-2015) also advocates that reform is required in all areas: pre-service training and standardization of qualifications aligned with curriculum reform.

This research aims to provide a way forward for re-thinking teacher education in Pakistan in current scenario of growing extremism and violence. HEC vision 2025 also highlights planning and development as a national challenge and puts it on high priority agenda during 2016-2025. B.Ed. (Hons.) curriculum was designed in 2012. It is ripe time to initiate review and reform process for its sustainability. The focal areas of reformation include curriculum evaluation resulting in quality teacher workforce with pre-requisite knowledge, disposition and skills needed to impart 21st century skills. The research will provide a way forward for integrating peace education into teacher education curriculum after thorough evaluation of 08 Core Subjects i.e. School Community and Teacher, Classroom Management, Comparative Education, Foundations of Education, Curriculum Development, ICTs in Education, Contemporary Trends and Issues in Education and Research Project.

This research proposes integration of Peace Education into B.Ed. (Hons.) Curriculum after thorough scrutiny of the existing curriculum of 4-Year Pre-service Teacher Education Program. Curriculum Evaluation and In-service Secondary School Teachers and School Leader input has helped in identifying focal area of In-service Secondary School Teachers Training in order to develop their pre-requisite knowledge, attitude and skills required for sustainable and mindful peace-building on campus and society.

The main objectives of study include evaluation of selected courses of B.Ed. (Hons.) Curriculum and resultantly proposing integration of peace education into teacher education curriculum.

LITERATURE REVIEW

National Education Policy (2009-2015) takes into account emerging trends and concepts such as School Health, Life Skills Based Education, Environmental Education, Population and Development Education, Human Rights Education, School Safety and Disaster and Risk Management, Peace Education and Inter-faith harmony, detection and prevention of child abuse, etc. Sindh Education Sector Plan (2014-2018) specifies goal to provide education in a manner that it leads to social cohesion and aims to "promote peace education and disaster risk reduction as a 'life skill'". HEC Vision-2025 also highlights Sustainable Development Goals (SDGs) and sustainability of Higher Education itself. Thus combating extremism through peace education is instrumental in the current scenario. Thinking critically, solving problems, collaborating for managing risks and uncertainty are core competencies and employability skills that are critical for employment in a green economy and living together peacefully in a sustainable society. National Education Policy (2009-2015) specifies that there are five- six basic pillars that have the major contribution in education sector. These are curriculum, textbooks, assessments, teachers, the learning environment in an institution and relevance of education to practical life. The most significant action is required in improving the teaching resources and the pedagogical approaches teachers employ. The reform of teaching quality is of the highest priority. Integration UNESCO- Guidelines for Peace & Human Rights Education specify that most of teachers do not go into teaching aligned with the values of peace education. Mishra (2011) highlights certain approaches for promotion of peace education i.e. creating Peace Education Discipline/Specialization, Peace Education embedded in

Philosophy of Education Core Course, development of an Elective Course on Peace Education and integrating Peace Education into Teacher Education Curriculum.

Cremin, Echavarría, & Kester (2018) advocates transactional Peacebuilding to reduce epidemic violence to undo the three major crises hampering Peace education progression; nationalism, continued cultural imposition and dominant reliance on rational forms of learning. The role of teacher education designed through these lenses is instrumental in sustainable peacebuilding.

Secondary School Teachers equipped with knowledge, skills and disposition in terms of managing diversity in classrooms, democratic conflict resolution, gender equity and such allied concepts will transform the learners to materialize the goal of national integration and national cohesion. As a success story, Singapore is witnessed as a commercial hub due to increased investment in human capital. Integrating Peace Education into Teacher Education Curriculum is an investment in Human Resource Development with has compliance with rate of return as well as social demand approach of educational planning. Role of Education is instrumental for socioeconomic development. The Proposed research is directly connected with Goal 16 i.e. “Promote Peaceful and Inclusive Societies for Sustainable Development”.

Abbasi (2014) investigated on finding the ways out from radical tendencies and disengaging the youth from the terrorist outfit and a program for societies for de-radicalization through balance and unique educational system in Pakistan. Abbasi (2014) argued that at present the system of education in Pakistan was far from the satisfaction to achieve the vision of balance education to prepare youth against the violent extremism as human resource. The stratification in educational system was also responsible for the absence of government policy and strategies to engage youth in community developmental process in order to dis-engage them from terrorist outfit. Basit (2015, pp.45-46) evaluated the counter de-radicalized initiatives in the context of Pakistan. This research bring forth a narrative that anything offered in religious guise has immediate appeal and amidst lack of mindfulness people end up supporting even violent agenda in the name of religious affiliation. The problem has been further aggravated by flawed and ambivalent perception of treating home-grown extremism as something external. Weak governance, lack of

inclusivity and the intellectually stagnant madrassa and public education system have further deteriorated the prevailing situation. Qadri (2015) investigated a theoretical underpinning about how current educational system could be used for countering violent extremism.

Federal Public Service Commission Annual Report 2017 reflects a dismal picture of critical thinking; a core competency for peace education and community engagement. According to this report the candidates having studied in private schooling system performed better and claimed 46% share in total allocation as compared. Even the candidates graduating from Garrison schools have been successful in getting 13% share in allocation. It is deplorable the candidates graduating from Government Schools could get only 9% share in allocation. Most of the students having studied at public sector schooling system join public sector universities with their academic attainment backlog. The report further elaborates that ideas presented were random. There was no argument building, logical sequence and coherence. The examiners were of the view to imperatively communicate HEIs in Pakistan for taking appropriate measures in order to develop critical thinking, creative writing and other allied employability skills. It will help undoing pull factors as denoted in recruitment patterns of Violent Extremism Organizations.

Wait (2016) through NUS- GuildHE has put forward six pillars of active citizenship designed for higher education institutions and students' unions keen to carry forward agenda of active citizenship education through integrating it in formal curriculum. Otherwise, the increased marketizations of higher education can side-line the agenda of peace education. Peace education is instrumental being beneficial for students, institutions and society. Taking insights this report, an indigenous model for peace education to develop youth resilience for countering violent extremism needs to be developed and institutionalized accordingly.

The United State Institute for Peace (USIP) has developed 'The Peacebuilding Toolkit for Educators. It is designed to support the work of educators in bringing peacebuilding themes and skills into the classroom. Given the current situation of on-campus violent extremism in Pakistan, such toolkit for In-service Teachers is required. This study attempts to propose integration of Peace education into pre service teacher education curriculum and designing peace education training for in-service teachers.

RESEARCH METHODOLOGY

Population

The population of this study comprises of In-service Secondary School Teachers in Public & Private Sectors based in Karachi city of Sindh province.

Sample

The sample of this study consisted of 200 in- service Secondary School Teachers teaching core curriculum and 40 Principals/ Head teachers serving at 40 Secondary Level Schools. The sample comprises of equal number of Schools from Public and Private Sector from District East & Central, Karachi.

Data Collection Procedure

Data was collected through semi structured interviews from In Service Secondary school Teachers. Additionally documents pertaining to policy and practices of peace education and integrating peace education content into teacher education programs were analyzed.

Data Analysis

The research employed qualitative Research Design. Data was analyzed as per thematic analysis techniques used in Qualitative Research Approach.

Ethical Considerations

This research involves multiple sources of data, it is essential to allow only voluntary participation in this activity. The subjects were granted full liberty to decide whether or not to become part of this study. The interviews and Focus Group Discussion were conducted with prior intimation and appointment. Respondents were advised on using their right to omit any item if they feel it may interfere with their privacy or are offending to them. The participants were assured that no identifiable reference can be part of the questionnaire and in no way their identity appear in any form in the raw data or reported format.

The research team kept in mind the confidentiality of the information gathered by reporting the data anonymously. Furthermore, assured that the informed consent is sought. All the ethical protocols of education research were strictly followed as set by esteemed educational research organizations and HEC as well.

RESULTS

Thematic Areas of Peace Education for Proposed Integration

On the basis of International and National Policy and Practices and rigorous Literature Review the thematic areas identified include Fundamentals of Peace and Peace Education, Spirituality, Social Justice & Structural Violence, Strengthening Human Rights Role of Critical Pedagogy in Peace & Co-existence Education, Sustainable Development for Ecological Footprints & Recourse Exploitation, Approaches to Peace Education, Collaboration & Partnership for Peace Education through Effective use of ICTs , Behavior Management & Conflict Resolution, Sensitivity to challenge Prejudice, Stereotyping and Discrimination, Historical Perspectives on Peace Education/Protagonists of Peace & Peace Education, Curriculum Development , Early Identification, Intervention & Rehabilitation of vulnerable youth recruitment of Violent Extremist Organization.

B.Ed. (Hons.) Program Structure and Identified courses for Content Analysis leading to Peace education Content Integration.

B.Ed. (Hons.) is Post-Secondary 04 Year Degree Program comprising of 19 Credit Hour (CH) Compulsory Courses, 51 CH Professional Courses, 24 CH Foundation Courses , 26CH Content Courses and 15 CH Teaching Practice Courses amounting to 135 Credit Hours.

From among 135 CH Program structure, 33 CH courses have been identified. The identified courses include Method of Teaching, Classroom Management, Information and Communication Technologies (ICTs) in Education, School, Community & Teacher, Curriculum Development, Educational Psychology, Comparative Education, School Management, Contemporary Issues and Trends in Education, Introduction to Guidance and Counseling and Research Project.

Content Analysis of selected courses from B.Ed. Hons Curriculum

The courses were analyzed concerning their alignment with themes such as peace, harmony, citizenship education, conflict resolution, empathy, understanding self, problem-solving, decision making, social justice, harmony, empowerment, liberation, critical consciousness, and democracy. The proposed content area is based on the data of contemporary peace education approaches and also the inputs of In-service Secondary Schools Teachers captured through on-site Focus Group

Discussions in terms of their challenges and prospects of imparting Peace Education at Secondary Schools. Analysis of each identified course includes course composition and potential rationale for the course. The analysis also considered the aspect whether peace Education is explicitly or implicitly embedded and thus analysis informed integration of Peace Education Related themes has been proposed.

Course Title: Methods of Teaching – Semester - I

The course comprises of Seven Units This course introduces prospective teachers with the knowledge, dispositions and skills required to impart 21st century skills and operating as reflective practitioner. As per detailed scrutiny of the course, Peace Education Content is not explicitly embedded. Detailed scrutiny of the course suggested that Peace Education Content seems to be implicitly embedded. Topics like Cooperative Learning, Identifying Diversity and addressing it through effective classroom teaching and planning of physical and psychological setting are the inputs relevant to Peace Education and teaching Respect for All. Unit Seven deals with Self-Regulated Learning. It is connected with critical thinking and can help the phenomenon of epistemic violence through self-regulation, mindfulness. Thematic areas like Role of Critical Pedagogy in Peace & Co-existence Education, Preventing and Countering Violent Extremism and role of teacher in Peacebuilding through developing community resilience are required to be installed in this course.

Course Title: Classroom Management – Semester-II

This course comprises of six units and introduces prospective teachers with the knowledge, dispositions and skills required to manage 21st Century Learners through reflective practice. As per detailed scrutiny of the course, Peace Education Content is not explicitly embedded. However in depth analysis of the course reflected that peace education is implicitly embedded. Units like managing diverse classrooms and Creating Shared Values and Community have linkages with Peace Education & Preventing & Countering Violent Extremism (P/CVE). The course is deficient in having content like managing disruptive and challenging behavior may be instrumental in developing pre-requisite knowledge, skills and disposition to apply preventive and proactive classroom management.

Course Title: Information & Communication Technologies (ICT) in Education – Semester-III

This course introduces prospective teachers with the knowledge,

dispositions and skills required to manage 21st Century classroom in the age of Digital Divide by using ICTs in Education. The scrutiny of the course content informed that Peace Education Content is not explicitly and implicitly embedded. It is proposed that the content pertaining to Peace Promotion Campaigns through mindful use of ICTs/Social Media In order to counter the recruitment drives of Extremisms Violent Organization through social media; the prospective teachers are required to be equipped with skills for fighting Info-medic in the contemporary era and differentiating fake news from authentic Information.

Course Title: School, Community & Teachers – Semester -1V

This course comprises of eight units and introduces prospective teachers with the knowledge, dispositions and skills required to manage linkages among key stakeholders of educational process. As per detailed scrutiny of the course, Peace Education Content is neither explicitly nor implicitly embedded. The content pertaining to Community resilience to countering extremism needs to be embedded. The culmination of this course is community building supervised project. Teacher educators are required to assign projects pertaining to peacebuilding through school- community- family nexus.

Course Title: Curriculum Development – Semester -V

The representative syllabi comprises of five units and introduces prospective teachers with the knowledge, dispositions and skills required to manage curriculum for 21st Century Learners through reflective practices. As per detailed scrutiny of the course, Peace Education Content is neither explicitly nor implicitly embedded. The content pertaining to critical peace pedagogy needs to be integrated for inclusive education. UNESCO Peace Education Framework for Teacher Education and Text Book Analysis on the basis of this framework needs to be explicitly written in order to enhance prospective teachers' role as curriculum developers.

Course Title: Contemporary Issues & trends in Education – Semester -VI

In its 2010 document, Curriculum of Education: B.Ed. (Hons.) 4-Year Degree Program, the HEC added Contemporary Issues and Trends in Education as a professional three-credit course. This initiative supports the belief that broad-based knowledge approach to contemporary issues and trends in education is crucial for teacher preparation. The course orients pressing issues of today's global community to the prospective teachers. This is the only course wherein Peace education and its pedagogy are explicitly written.

Course Title: Comparative Education – Semester -VII

In the HEC 2010 document, Curriculum of Education: B.Ed. (Hons.) 4-year Degree Program Comparative education course was added as a professional course. This course is aimed at preparing prospective teachers for change agents by analyzing national and international landscape of education. At the outset the course discusses some misconception about comparative Education to avoid superficial 'cherry-pick' decisions while reforming education system. It is proposed that International Policy and Practices for Peace building be included in the course.

Course Title: School Management – Semester -VIII

In the HEC 2010 document, Curriculum of Education: B.Ed. (Hons.) 4-year Degree Program, School Management was added as a professional course. This course is aimed at preparing teachers cum school leaders by developing their knowledge, disposition and skills in educational management and school improvement and effectiveness. It is proposed that role of Principal/head teacher in terms of safe campus and conducive teaching learning climate be included for promoting peacebuilding and countering violent extremism.

A WAY FORWARD & CONCLUSION

The study recommends Integration of Peace Education related content into Pre Service Teacher Education Program and focal areas pertaining to peace education, peace- building, Non-violent action, Critical thinking and reflection of In-service secondary School Teachers. On the pattern of the United States Institute of Peace (USIP) Peace Teacher Training Program, the Continuous Professional Development Programs for In Service Secondary School teachers are needed to be design and implemented. One of the standards among National Professional Standards for Teacher Education in Pakistan is required to be explicitly added to highlight the role of teachers as Peace-makers and the knowledge, disposition and skills required in this context. Furthermore, NACTE Academic Evaluators Training is made pertinent to peace and evaluating campus climate as well. While introducing Teacher licensing regime, Peace Education delivery be made one of the core skills. Pre-service & In-service Teacher Education Programs needs to be bridged. In-service teachers having PTC and CT and B.Ed. (1 Year) qualification need opportunities for continuous professional development through offering In-service Associate Degree in Education after enrichment of Teacher Education Curriculum and proposed integration of Peace Education into existing curriculum.

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CAREER ASSESSMENT IN PAKISTAN: CURRENT SCENARIO

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ABSTRACT

Assessment in career counseling is an essential part because it helps counselors to identify individuals' unique characteristics which assist in making educational or vocational decisions, having lifetime implications. Using interview technique, this article aimed at examining the existing practices of Pakistani career practitioners about their use of assessment tools with their counselee. Career counseling appears to be a neglected area as scant evidence can be found related to its development, particularly with regard to career practitioners' training and development of assessment tools. Yet, some practitioners are fully aware of its importance and utilize psychometric assessment tools mostly for helping students for making academic or career related decisions. However, dependence on internationally developed theories in practice and research is a matter of concern. It indicates career assessment and career counseling at large needs policy makers' and academicians' attention to address the gaps through policy and indigenous theoretical framework.

Keywords: Career Assessment, Personality Testing, Interest Inventory, Indigenous Career Theory.

INTRODUCTION

This article discusses the current state of career assessment in Pakistan with regard to its development and career practitioners' assessment skills. We begin with the brief introduction of career assessment tools, followed by discussing their increasing need in the context of challenges faced by Pakistani society.

Utilization of a scientifically proven career assessment tool for the purpose of self-exploration provides a baseline to objectively determine

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the direction of the entire guidance process. Knowledge of career theories, and selection and administration of an appropriate psychometric tool is one of the core elements among the minimum competency criteria for the career practitioners (National Career Development Association [NCDA], 2009). The need for career assessment for the purpose of selecting a suitable field is even greater today because of the rapidly changing labor market and introduction of diverse occupations requiring new skills in the technological advanced era (Bruckner, LaFleur & Pitterle, 2017).

In career assessment, interests, abilities and values are considered as the most significant areas to identify. Founder of the career guidance movement, Frank Parsons's talent- matching approach (Parsons, 1909) provided the foundations for the development and advancement of career assessment tools during the times when the western world was combating the challenges posed by industrialization and World War I. The discipline continued to grow as the world faced new challenges with the modernization of technology and another setback struck by World War II (Eliason et al, 2014). As reported by test publishers, each year more than 2,500,000 career assessment tests are administered (Hansen, 1995). However, the use of tools developed in western countries based on theories which represent their culture and work environments is not warranted in Asian societies having different sets of cultural values and labor market dynamics (Leung, 1995).

Context for the Need of Career Assessment in Pakistan

Policy makers have always been cognizant of the importance of career counseling in Pakistan. Our review of 20 policy documents including nine five-year plans, five education policies, five youth policies and Vision 2025 indicated the presence of provision of career guidance and counseling at school and university level. However, less stress has been on the assessment in this process, as only the second and third five-year plan (Ministry of Planning Development and Reform, 1960; 1967) specifically suggested the use of standardized assessment tools for subject and career selection.

The gap between policy and its implementation with regard to career guidance and counseling services at school and college level is wide as some studies suggest the absolute absence at government institutions (Khan, 2010; Nafees et al., 2012; Wasif, 2010), but few private institutions at secondary and higher secondary level have been reported

to provide it in a less formalized way, lacking quality due to insufficient resources. Consequently, students resort to their parents, teachers and; in few cases to their friends, for advice. This advice is not considered satisfactory because it is mostly based on limited information about the available options, the world of work and parents' own desire for their children to pursue conventional careers (medicine, engineering, business and commerce) rather considering children's aptitude, personality and personal inclinations. Until recently, in fewer cases on record, mass media, in the form of television and internet, has become a source of information on career selection, mostly in urban areas. (Bilal & Malik, 2014; Kamran & Khalidi, 2011; Khan, Murtaza & Shafa, 2012; Qurrat-ul-Ain & Khatak, 2012; Saleem et al., 2014; Siddiqua, 2017; Yaqoob et al., 2017).

The situation of career counseling for higher education students was less or more the same as for school and college students until the University Grants Commission was transformed into the Higher Education Commission [HEC] in 2002. For quality assurance and in an attempt to link university graduates with the labor market, HEC made it mandatory for degree awarding institutions to establish placement/ career service centers (HEC, 2007). Zahid, Hooley and Neary (2019) revealed in their review of Pakistani universities' websites that almost half of these institutions have established career guidance services. The focus of these services remains on helping students in their successful transition to the labor market. Some universities are also engaged in providing broad spectrum career services including career assessment but the whole process relies on theories established in western societies.

Each year more than three million students ascend to high school, more than one and a half million to higher secondary and more than two million to tertiary education in Pakistan (National Education Management Information System, 2018). As ordained by our education system, every student is bound to make a subject choice while entering into ninth grade. The selection of subjects at this stage is of grave importance because it may limit the choices at advance level. If students select arts and humanities in matriculation, they are not allowed to study science or engineering at intermediate level and further. Intermediate pre-medical students cannot further study engineering and pre-engineering students cannot study health and medicine related subjects at tertiary level. These conditions for our young students, who are still in the self-exploration

phase of their life, trying to understand the world around them, and presented with numerous fields of study and careers, indicates greater importance of career assessment to help them make an appropriate decision.

Being an emerging economy in the advanced technological and globalized world, Pakistan faces multitude of challenges. Although Pakistan is considered one of the youngest countries in the world as two-third of its population fall under the age of 30 years, and young people between the age bracket of 15-19 years make almost one third of the total population (Najam & Bari, 2017), yet it stands miserably at 134 rank out of 157 on Human Capital Index Pakistan (World Bank, 2018). To accelerate economic growth, country is making an effort to shift into a knowledge-based economy (Kalim & Lodhi, 2002) and create job opportunities requiring intellectual skills. The demand for such a skill set is increasing in Pakistan as well as in advanced countries. At the same time, the current government is introducing fiscal and monetary policies to boost local production and investment. The development of China-Pakistan Economic Corridor is also near being functional and promises to open the door of employment in several sectors (Azhar, 2019). On the other hand, the internet is introducing our students and new graduates to new programs of study and careers beyond borders. It implies when educational and career choices increase and related information becomes easily accessible, it increases the need for self-awareness for improved decision-making. There is no unified career guidance system for our more than seven million students to assist them in developing self-understanding and be able to make cognizant subject/ career choice along with due consideration of certain familial, social and economic factors.

The next session briefly outlines the evolution of career assessment, then we analyze the body of local studies available on career assessment tools and finally move on to identify opportunities available for career practitioner's training on assessment.

LITERATURE REVIEW

Brief History of Career Assessment

During the early stage (1890-1919) of career counseling, when job placement services mostly relied upon Parsons simple model based on observation and data gathering skills, the use of psychometrics in testing

is believed to give respectability to the field and acceptance in the populace (Pope, 1997). An educator by profession and regarded as the first school counselor, Jesse Davis's Student Vocational Self Analysis (Davis, 1914) based on his systemized analysis of self-awareness linked with the occupation process is regarded as a pioneering work in the field of career assessment. Following Davis, was the first psychologist, James Miner, who developed career interest questions by utilizing weighted scores to help students make career decisions. It is his work that is believed to inspire one of the celebrated academicians and researcher Dr. Edward Strong (Harrington & Long, 2013).

The very first and the longest running career development organization in the world, NCDA (then the National Vocational Guidance Association) was established in 1913. The major goals for its creation remain to provide professional development opportunities, counseling standards, publications and advocacy for career practitioners (Feller, 2013). The first standardized career assessment tool Carnegie Interest Inventory (1920) was published by the Carnegie Institute of Technology. At this institute, many authors contributed in the refinement and advancement of standardized career assessment tools through development of survey items, differentiating interests of similar but comparable occupations, identifying gender differences and development of separate interest tools for men and women. Another significant contribution was made by Crowder in 1924 through the classification of several types of items into occupations, hobbies, subjects, activities, types of people etc. These eight classifications were used by Strong in The Vocational Interest Blank (1927), (Harrington & Long, 2013). During the 1930s, the vocational guidance services in union with psychometrics were extended to schools in the United States (Super, 1955). 1940-1959 witnessed these services being formalized for the tertiary level students and having personnel who are specifically trained for this purpose.

It was the same time that witnessed the flourishing of some career development theories that provided foundation to several career assessment tools across the world. Among those, Holland's theory (1997) of work environments is the most celebrated one as it is believed to be easily translated into practice across many cultures and has dominated the field for more than 5 decades (Nauta, 2010). It classifies people and environment into six types and suggests, people find satisfaction in their

work if their personality is congruent with their work environment. It has provided conceptual foundation to the most contemporary interest inventories, some of which include Holland's own work in collaboration with his colleagues, such as Position Classification Inventory (Gottfredson and Holland, 1991) and Self-Directed Search (Holland and Messer, 2013), the latest version of Strong Interest Inventory (Donnay et al, 2005) and Career Key (Jones, 2010).

Implementation of Self-concept in career decision was the central idea introduced by Super and his colleagues (Super et al., 1957). However, most notable concepts of their theory that were translated into assessment tools are career maturity, vocational values, and vocation roles (Šverko, 2001). The Career Maturity Inventory was first developed by Crites. Hundreds of studies have been conducted which produced strong evidence on its reliability and validity across cultures (Crites and Savickas, 1996).

Theory of work adjustment (Dawis, 2002, 2005; Dawis and Lofquist, 1984) is another classic example of those models which have helped practitioners to guide individuals, especially with the need to make entry into a profession and those with adjustment concerns. The central idea of the theory revolves around personal needs of an individual, the needs of organization and the correspondence between them and four adjustment styles. This theory also provides propositions that can be tested and adapted in different cultures (Leung, 2008).

Career Assessment in Pakistan

As we mentioned earlier, the advocacy on career assessment has been very much a part of many policy documents at both national and provincial level. However, very limited evidence can be found in the literature and on ground for its development.

In Pakistan, the 1970s could be regarded as the golden era for career assessment development since it was given due importance through a hefty investment by the Federal Ministry of Education for establishing a test development unit in its curriculum wing. The department initiated several projects for the test construction but no significant milestones were achieved, consequently it could not sustain its existence (Dar, 1982).

Students and faculty are engaged in the research projects a on regular basis, some of the studies related to career assessment have been

conducted so far that we discuss here. Career Key (Jones, 2010) is a widely used psychometric tool based on Holland's theory of work environments for helping individuals make education or career related choices in the western world. In Pakistan, it was adapted and translated in Urdu language by Hussain et al. (2014). The adaptation study sample consisted of 179 students, recruited from Karachi and Lahore. The Career Key Urdu [CKU] layout was kept the same as compared to the original version. Although each subscale of CKU exhibited a significant reliability index ranging from .68 - .85 but it failed to match with the spatial structure of the theory it is based upon. Suggesting, unsuitability of Holland's theoretical model for Pakistani population.

Scale of Occupational Aspiration was developed by Aziz and Kamal (2009) for adolescents in schools. The concept of prestige in theory of circumscription and compromise (Gottfredson, 1981) was utilized for item development. Although the total sample of the validation study was only 60 subjects, the average reliability scores of the scale for both men's and women's traditional occupations was observed to be significant at alpha .75.

The Job Knowledge Test was developed by Khan, Anis-ul-Haque and Anila (1995) which proposes that if students have adequate knowledge about occupations, they are able to make better career decisions. This scale was specifically developed for students in secondary classes. 240 students from Islamabad participated in the study and the test reliability was observed at .84 alpha.

Aap ki Dilchaspian is an adapted and Urdu translated version of Gordon's Occupational Checklist (GOC) (1967) by Khan (1992). The purpose of adaptation was to help eight grade students to identify their career interests. Khan not only simplified the language of the original scale but reduced almost half of its length. The overall reliability of the instrument was measured with an adequate sample of 300 subjects and yielded significant reliability coefficient .80 alpha.

Although not in a significant amount, the literature suggests contemporary efforts have been put in both development and adaptation of career assessment psychometric tools. Almost all tests appear to demonstrate a reasonable reliability index, yet each study has limitations. Firstly, the small sample size limits the generalizability of the instruments. For validation studies, most researchers agree upon a minimum of five

participants per item (Comrey and Lee, 1992; Gorsuch, 1983; Tinsley and Kass, 1979; Irwing and Hughes, 2018; Zhao, 2009). Secondly, each scale has limited geographical coverage, such as except one, all inventories have recruited samples from the capital city only.

Another limitation of these studies, for except one is the absence of reference of a national occupation document in the literature review phase. This step is important since all studies relied on western theories and a local occupation document could provide relevant information on the existing professions in the country. Latest document of Pakistan Standard Classification of Occupations (Pakistan Bureau of Statistics, 2015) contains more than two thousand skilled occupations along with the level of literacy required for each occupation group. Such documents not only help in item development but provide strong foundations for matching a skill with a profession.

Training Opportunities for Career Practitioners in Pakistan

Skillful utilization of career assessment tools is a critical step in the process of career guidance (Harrington and Long, 2013). Among the eleven minimum competency areas decided by NCDA (2009) for career practitioners, individual or group assessment skills come in the three foremost skills. According to the organization, career educators or practitioners must train themselves to be able to decide and use various kinds of assessment tools including personal characteristics such as interests, personality traits, adjustment style, aptitude. Other areas of assessment include but not limited to hobbies, self-concept, work environment, career maturity and learning styles. Practitioners must be cognizant of clients' characteristics while selecting a suitable assessment tool according to various characteristics of the counselee and his/ her situation. The administration of tools, scoring and interpretation of results, writing reports and assisting clients on the basis of his/ her performance on the tool comes with greater responsibility.

Only a specialized program can prepare career practitioners for the skills discussed above. In Pakistan, we could identify only one specialized career counseling graduate program (National University of Science and Technology, 2013). Lately, a 70 hours short course in career counseling is offered by the federal government (Skill Development Council Karachi, 2020). Both programs claim to train students in the assessment area but they borrow western career theories and assessment tools for this purpose.

PROBLEM STATEMENT

Since, HEC has declared career services a mandatory provision at University level, of which career assessment is an integral part. It goes without saying that the career service provider must be skilled at the use of various types of career assessment tools. But as it is evident in the above discussion that we face acute shortage of indigenous career assessment tools and training programs, it is crucial to know how our career educators are able to perform their job with lack of resources.

RESEARCH OBJECTIVES

Our research was guided by the two broad objectives:

1. To understand the role and contributions of career practitioners when resources for helping clients and professional growth are scarce.
2. To understand the scope of their career services particularly related to assessment.

RESEARCH METHODOLOGY

Participants: We recruited career practitioners working at university and in private setup. The reason for employing both types of practitioners was to get their different perspectives. We used expert sampling technique, a type of purposive sampling method because we are in the exploratory phase and there is not adequate empirical evidence available on career assessment in Pakistan (Etikan, Musa, and Alkassim, 2016). Expert sampling informants allow interviewee to gain in-depth information from various aspects through their knowledge and experience which is difficult to get otherwise (Frey, 2018). To identify the potential participants from universities (UP), out of 204, 194 HEC recognized universities' functional websites were reviewed and identification of private practitioners (PP) was done through their appearance in google search. The selection process was mainly based on the provision of career assessment in the process of guidance and accessibility to the sample.

11 institutions were identified but nine were contacted, as we excluded two because they outsourced assessment services. Four private practitioners were identified and all were contacted. We received positive responses from three institutions and two private practitioners who were willing to participate in the study. All of our participants came from educational backgrounds other than career

guidance with a range of experience in the field from 4 years to 20 years. Both private practitioners were male and among the university participants, one was male and two were female.

Instrument: An interview guide based on ten broad open-ended questions, mostly followed by probing questions, was developed to conduct semi-structured interviews (See Appendix). The guide covered career practitioners' qualification and professional background in the demographic section and the scope of services and information regarding assessment was explored through the main body of the interview guide. Semi-structured interviews are considered useful for small scale research where they can help an interviewer to gain maximum information with flexibility (Drever, 1995). Another advantage of this method is that it allows thematic analysis of the gathered data (Alvarez and Urla, 2002).

Data Collection: All interviews were conducted by the first author, a PhD student, having experience of career counseling at college level. Three interviews were conducted on phone and two were conducted online as the participants were geographically dispersed across three major cities in Pakistan. Interviews were recorded with consent on smart phone and transferred to computer to transcribe clean for the analysis. The average length of the interviews was 48 minutes, ranging between 30 to 60 minutes.

Analysis: Following the method suggested by Braun and Clarke (2006), we used thematic content analysis technique. First author completed the transcription on MS Word and the coding was done on MS Excel. To get acquainted with the data, we read the transcriptions multiple times and proceeded with the systematic coding. It helped us to identify the possible themes indicating broader patterns of meaning within the data. Initially identified themes were then reviewed for further refinement. We reconsidered those themes where the data was clearly diverse or insufficient. Once we were sure that our themes satisfactorily fit the data, we began to define and name them. Final analysis is presented in the results section.

RESULTS

We identified three distinguishing themes: career practitioners' education and training, types of career assessment techniques used by practitioners and current scope of career assessment services. First theme

answers our first objective of the study and the other two subsequent themes cater the second objective. First two themes are divided into sub-themes, whereas third theme presents the practices of both types of practitioners separately due to differences in their work. Selected quotations from the interviews have been cited appropriately in each theme.

Career Practitioners' Qualifications

Practitioners' education: None of our five participants received education relevant to their work in career counseling. More specifically, two UP came from psychology background, one having PhD in cognitive and developmental psychology and the other with specialization in clinical psychology. By virtue of their educational field, one UP had earned a license to administer a foreign personality test commonly used for career assessment across many countries.

"I am a certified Myers-Briggs Type Indicator practitioner." (UP2)

The other UP was qualified to conduct IQ tests, achievement tests and projective techniques utilized in clinical settings. Third UP had earned a masters' degree in English literature. On the other hand, one PP had received a dual undergraduate degree in Business administration and Communication and the other PP earned a double master's degree, one in Arabic language and the other in Business administration. However, he did some self-study to enhance his career Counseling knowledge and skills.

"At that moment I took a break from my work and stopped Counseling for a while. During this course I focused on self-learning, understanding and acquiring (Counseling) skills that I must possess." (PP2)

Practitioners' training and experience in career counseling: None of our participants received prior training to get into the role of career practitioner. It is important to note that all UPs were assigned for providing career services besides their teaching or administrative position in the university, where their primary role remains of an educationist.

"My major role is teaching and research supervision, Counseling is a kind of part time job." (UP1)

They did not receive any training pertaining to career counseling before getting into the additional role of career service provider. However, both

PPs began their career in the relevant field and received some form of training and experience outside Pakistan.

“I am professionally trained in career counseling and career guidance from the Internationally Renowned Career Services Department at The University of Arizona, USA.” (PP1)

“After completing my education, I joined a foreign mission as an Education advisor and that was for my benefit. I got the advantage to travel to different countries and get international exposure (in the field).” (PP2)

Type of Career Assessment Techniques Used by Practitioners

Quantitative Assessment: Except one PP, all four participants utilize quantitative assessment tools in the counseling process. Each practitioner emphasized on the major areas like personality, interests, values and abilities for making career related decisions.

All three UPs administer internationally developed scales, however, the two PPs have their own assessment. PP1’s technique resembles more with a qualitative method as he uses a semi-structured interview schedule.

“We use international online tools...” (UP3)

“Our Institute has developed its own localized self-assessment which assist in determining the students’ potential towards careers and vocation that they can do well in... I give them (students/clients) a form to fill out” (PP1)

PP2 has developed four questionnaires based on his own understanding and knowledge of personality, abilities, values and interests.

“We have an open online assessment, then we have another online assessment of advanced level but that is only accessible through permission. Then there is another assessment in hard form, for those who cannot afford the charges of our thorough assessment. The difference in this assessment and thorough assessment is that, through this assessment we suggest students a general field suitable for them, for example engineering, however in thorough assessment three distinctive fields are suggested.

Reliability of assessment tools used by practitioners: Besides one PP who thinks otherwise, two PPs believe though internationally developed tools may not be completely culturally appropriate but they help to provide a basic idea of the personality.

“Definitely, non-indigenous instruments do not fully fit to test our population but we use them to acquire basic understanding of students’ personality that can be beneficial to guide them.” (UP2)

Both PPs find their assessment tools to provide valid and reliable results. However, their method of determining reliability is different as PP1 utilized immediate feedback after each session and PP2 has conducted a survey with a gap of minimum five years to get clients feedback.

“We have done countless self-assessment and consistently earned excellent feedback from our stakeholders...” (PP1)

“The success rate of this (advance) assessment is 96.6%...We surveyed more than two thousand people who had availed our services almost five or six years ago... Those who had adopted our recommended field based on our assessment, they reported successful results and those who did not, shared they regretted taking fields other than our suggested ones.” (PP2)

The Scope and Extent of Career Assessment Services

Private Practitioners’ Account: Both PPs career services scope is geographically wide as they conduct career Counseling sessions and workshops both for individuals and groups across different provinces in Pakistan. More specifically PP1 is based in Karachi and is more active in Sindh. On the other hand, PP2 is based in the capital region, and more frequently visits its surroundings, Khyber Pakhtunkhwa, southern Punjab and certain areas of Baluchistan. Most of the time they both have to approach private and government educational institutes and sometimes they’re invited too. Besides institutional visits and organized workshops, they privately conduct paid individual Counseling sessions which includes assessment. It is also of significance that most of their visits in government and non-profit organizations are either pro-bono or sponsored by the private sector. Thousands of students have benefited from their services across Pakistan. However, in their opinion career Counseling needs support to become an established field and be available to masses.

“I believe, now this work should expand. Our organization has done this work on a solid basis, now things should be transferred to other hands without having fear of being copied, that my business recipe will be out...It should be done with a spirit of making many thousand trainers who can counsel students in our country...” (PP2)

“...sustainability is an area we can improve by investing more in career education and not compromising on hiring quality human resources to sustain career reforms programs efficiently... now is the time to present a legislative bill in the provincial assemblies to have a career education act in Pakistan...” (PP1)

Besides conducting workshops for students both PPs have launched inclusive career Counseling training programs for teachers which also includes career assessment.

“We train teachers to-be career advisors, career coaches and career educators that determine aptitude, interests, values and their personality through a holistic coaching and career counseling process.” (PP1)

University Practitioners’ Account: The scope of career assessment at two of the participating universities goes beyond campus. However, one institute which has its own test resource center along with a Counseling center rarely gets requests for career assessment from inside the campus.

“We conduct assessments related to intelligence, personality and very rarely career assessment. Like I can recall, in the last 5-7 year hardly a couple of people came for a career assessment.” (UP1)

Sometimes they are approached by organizations for training or by schools at the time of admissions when assessments at test resource center are utilized.

“There are some schools where our team conducts students’ assessments related to IQ and sort of career type... Besides that, some government and private institutes training has some part of assessment that we conduct... We have a soft skills training series which includes components like stress, motivation, effective work performance and work-related issues. More commonly (career) assessments (present in test resource center) are administered in

training workshops and research purposes.” (UP1)

The other two universities have a full-fledged career counseling department, mainly run by clinical psychologists. Out of these two institutions, one of them provides assessment services to all of their current students, however the other one also caters the needs of its alumni, staff, their families and often collaborate with the other local universities to conduct career counseling sessions in which career assessment is an integral part. The university also offers the only graduate program in career counseling available in Pakistan.

“At the career advisory center, along with other standardized psychological assessments we have tests available related to achievement, ability, aptitude, interests, values, personality and work-related issues...” (UP2)

DISCUSSION

In this study of career assessment for students, we explored the topic through existing literature, and career practitioners' accounts in private settings and at public sector universities. Private practitioners appeared to be more prepared and active in their role in comparison with those at university. These findings are not unexpected since university practitioners are assigned with this task without proper training and education as a part time work to fulfill HEC criteria to acquire the mandate of a chartered institution. Despite their lack of preparation for the role of career service provider, they possess basic counseling and assessment skills by virtue of being in the field of psychology. It is encouraging to find that two universities' career counseling centers have the capacity to provide services beyond campus as one of them have their own test resource center and the other offers the only graduate program in career counseling. However, career assessment tools available at test resource center are of little practical value because they are mostly developed by students to be further used in research rather for assisting pupils in real life. These findings are congruent with our previously mentioned literature review of existing local career assessment tools which concluded having insufficient sample, non-indigenous theoretical foundation and inconsideration of local realities in test development process restrict their use. The participants of this study appeared to be cognizant of the implications of using international career assessment. It is high time that stakeholders steer the direction of current research to promote development of indigenous

theories that can effectively cater individuals' needs considering local dynamics rather than modifying and adjusting methodologies and tools developed for an individualistic society.

Our study identified information that carries importance for psychology students, teachers and career service providers at different universities who are guiding students without proper education and training. On the basis of survey results, both private practitioners in our study claimed their career assessment and training yield satisfactory results, nevertheless scientific evidence is always required for the authentication of these claims. Besides master's level graduate program, the other prominent feature of short career counseling trainings is their length and level. Ranging from 1 day to 4 months, they aim to equip individuals with necessary skills to become a career counsellor. These qualifications offered by various bodies promote a fragmented structure of career counseling training, which is incapable to respond to the needs of service providers in different settings. Career practitioners in various settings require to have special knowledge of career theories, social and cultural context, labor market trends, education system and employment opportunities, which argues for specialized training and qualification. Basic or inadequate knowledge of guidance theory and training can result in inappropriate diagnosis and treatment. A regulatory body which controls both quality and quantity of career services is a requirement for shaping this profession and plays an effective role to develop a policy framework (Organisation for Economic Co-Operation and Development, 2004).

Our study highlighted the prevalent use of quantitative career assessment. It is suggested by test developers to combine information from other sources regarding various aspects of the counselee rather than solely depending on a general or specific test score (Holland and Messer, 2013). Different types of qualitative assessment resources can help to create a clear self-understanding. Decisions made on the basis of insufficient information or poorly developed tools may have life-long implications.

The understanding of our education system suggests, students must have accessibility to career services at an early age, at least when they are in secondary classes. Few career counselors with limited to no training are not sufficient to address the need of our more than 5 million students in schools and colleges. Several national policies have included career services provision for the youth but miserably failed to achieve the

purpose, especially for those at school and the unemployed population. As suggested by one of our participants, legislation must be carried out for the advancement of the career counseling field and it must be declared mandatory for secondary school students.

LIMITATIONS OF THE STUDY

Like any other research, our study has some limitations, including the relatively small sample size, over which we had little control due to the small target population. Also, we only interviewed career counselors serving in two types of settings. As the previous researches suggest, a handful of private schools have recruited full time counselors who help students in making career choices. To identify those counselors was a tricky task as currently there is no database available. However, our findings are consistent with the available facts and previous researches in the field.

CONCLUSION

Despite lack of proper training and education for career counselors in Pakistan, the importance of career assessment is realized by the service providers. Though poorly theorized, a small body of career assessment tools is available. The unique social, political and economic factors of our country demand a career guidance system that is in accordance with our societal values. Until we develop such a system, the development of indigenous career theories, assessments, and career practitioners' training can be promoted through its parent field Psychology; provided sufficient financial and intellectual resources are made available at universities.

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ABSORPTIVE CAPACITY AND FOREIGN DIRECT INVESTMENT: EVIDENCE FROM SOUTH ASIAN COUNTRIES

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ABSTRACT

The absorptive capacity (AC) is very important determinant of foreign direct investment (FDI) more effective for economic growth and development. There are numerous indicators of absorptive capacity such as human capital, technology, infrastructure, institutional quality, GDP per capita, and trade openness. This study determines the effect of absorptive capacity on FDI in South Asian countries over the period 1984-2017 using System Generalized Method of Moment (GMM). The study reveals that absorptive indicators such as trade openness, infrastructure, institutional quality, human capital, gross domestic product per capita, and technology have increasing impacts on foreign direct investment in South Asian countries. However human capital is the more effective determinant of FDI compared to other determinants. It is necessary to increase human capital, free trade, infrastructure, technological innovations, and institutional quality to effectively absorb the benefit and spillover effects of FDI which boosts economic growth and development.

Keyword: FDI, Human capital, infrastructure, institutions, trade openness, technology.

INTRODUCTION

Economic development primarily contingent on an enormous amount of profitable investment. South Asian countries experience a saving deficit that could not meet the desirable amount of targeted investment. Therefore, it is thought that FDI is essential and considered catalyst for economic growth and development. Moreover, South Asian countries (SAC) identify that FDI leads to a substantial increase in physical capital, knowledge, and technology (Sabir et al., 2019). This in turn may support

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hunting international markets for the sale of goods and services (Nasir & Hassan, 2011). SAC employed market-led growth policies to attract FDI inflows in the 1980s, but these countries tend to differ in receiving FDI inflows. For example, India experienced the highest amount of FDI on average during 1984-2017, Sri Lanka and Pakistan also received a huge amount of inward FDI and hence increase gross fixed capital formation (Adhikary, 2017). Moreover, India is the highest recipient of FDI among SAC followed by Bangladesh, Nepal, Pakistan, and Sri Lanka. South Asian countries have similar structural and macroeconomic parameters that provide a favorable environment for foreign investors. To facilitate FDI inflows, many developing countries instigated liberalization and deregulation of the financial sector. The genesis of transformation occurred in the late 1970s, when Sri Lanka started the process of financial liberalization and other South Asian countries also began to liberalize the financial sector. Pakistan also tried to privatize and deregulate the financial sector in the 1980s to attract an enormous amount of FDI. Later on, this process is enhanced in the 1990s with the start of the liberalization process in India (Nasir and Hassan 2011). In addition to that, emerging South Asian countries significantly liberalized their trade policies to boost domestic and foreign investment to enhance economic growth and development (Adhikary 2017).

Aleksynska, Gaisford and Kerr (2003) found interest rates, wage changes, as an assessment tool of openness of the economy. Empirical studies have shown that FDI has ubiquitous effects on the economic growth through the capital accumulation of the host country and transfer of technology from source to the host nation

Dunning (1988) proposes the eclectic paradigm (EP) theory which is also known as OLI theory of FDI. EP theory is also known as OLI theory of FDI reveals that FDI in the host country is determined by ownership or proprietorship explicit advantage (O), locational specific advantage (L), and International specific advantage (I). The EP theory states that the verdict of the foreign investor depends on the capacity of industries or firms, organization and supervision system, prices of labor, transportation expenditures, and government strategies. Moreover, FDI also flows to the countries which offer benign, risk-averse, and commercial investment opportunities and consequently win the global race for these floating resources.

Benefits accrued by the host country may depend on its sufficient

capabilities referred to as absorption capacity¹. South Asian countries attempt to enhance massive FDI inflows but cannot identify whether they have AC to harness the benefits from FDI or not. For example, countries have achieved a minimum level of development before achieving the technological and managerial spillovers of FDI. However, if AC is not sufficient, SAC cannot get too many benefits from inward FDI (Nunnenkamp, 2004). The most important indicator of AC is human capital which absorbs and grasps knowledge and technology gains from the inward FDI and has spillover impacts of economic growth. A high level of human capital significantly impacts FDI inflow (Dunning 1973; Dunning 1988; Dunning 2009; Li & Liu, 2005; Alfaro, 2003). More skilled human capital attracts FDI in SAC (Cleeve, Debrah, & Yiheyis 2015). However, literature shows the mixed results concerning the significant effects of human capital development on inward FDI. For example, non-intensive skilled industries invest in those countries where cheap labor with fewer skills is available whereas knowledge and technology-intensive industries invest in countries where skillful labor in the form of higher education is available (Cleeve et al., 2015).

Furthermore, differences in institutions lead to the variation in the level of technology and sustainable growth that also depends on the technological innovations and quality of political institutions. In particular, political institutions are important for international business companies to invest in those countries where property rights are secured, rules, regulations, and policies are well documented and implemented, and stability governments are stable with fewer shreds of evidence of corruption and bureaucratic hurdles. Strong institutions are a prerequisite to attract FDI inflows to boost the proliferation of jobs and productivity. For instance, political stability is a measure of political institutions and it leads to plenty of FDI inflows, and thus economic growth rises. Otherwise, foreign and domestic investors are reluctant to invest. Gastanaga (1998) added that weak institutions are the main factors that cause less FDI in developing countries. In particular, multinational enterprises are ambitious to invest in politically stable countries (Harms & Ursprung, 2002). Therefore, bottom line is that institutions play a momentous role in the determination of FDI inflows in developing countries like emerging SAC.

Infrastructure is considered another indicator of AC to increase FDI

¹*Absorption capacity pertains to an economy's capacity to absorb the benefits provided by FDI in the form of knowledge and technology spillovers effects*

inflows in developing countries. Many studies claimed that good infrastructure surges the productivity of capital and it also attracts FDI inflows. Poor physical infrastructure does not benefit the development process of any recipient country and discourages investment. A few researchers have synthesized the enhancing effects of infrastructure on FDI inflows (Wheeler & Mody, 1992; Asiedu, 2002).

Trade liberalization and openness is also used as a measure of AC. Trade openness is a vital factor that stimulates FDI in developed and developing countries. Multinational corporations prefer unrestricted trade relative to restricted one because restricted trade increases the distortion of the market and increases the transaction cost that drops off FDI (Asiedu 2002). Therefore, countries with more free trade can attract FDI inflows.

Technology is considered as another important measure of absorptive capacity to impact foreign direct investment of the country. The research and development sector are least developed in developing countries especially South Asian countries. Therefore, technology diffusion occurs from developed to developing countries. FDI is considered a major source of the relocation of innovative technologies to technology deficient developing countries. It has been asserted that absorptive capacity can be truly captured with technology innovations, technology transfer and human capital development. This augments the fact that investment in research and development in terms of technology and educated labor equipped with skills can contribute to raise absorptive capacity and thereby enhance inward FDI (Borensztein, Gregorio, De, & Lee 1998).

The prime objective of this study is to observe the impact of various measures of absorptive capacity such as human capital, trade openness, technology, infrastructure, and political institutions on the FDI in SAC using panel data over the period 1984 to 2017. There exist problems of endogeneity, autocorrelation, and omitted variable bias in the regression equation which leads to inconsistency in OLS estimators. Therefore, this study uses the System Generalized Method of Moment of Arellano and Bond (1991) and Arellano and Bover (1995) to tackle the aforementioned econometric problems.

This study makes a significant contribution to the previous literature in twofold ways. First, this is the pioneer study that examines the influence of absorptive capacity on inward FDI in South Asian countries. Second; this study considers the multiple indicators of absorptive capacity to explore their effects on FDI inflows in SAC.

The rest of the paper is organized into five sections. Section 2 provides the literature on the determinants of FDI. Section 3 contains a methodology comprising of the econometric technique and data sources. The explanation of the observed results is provided in section 4. Section 5 concludes the results.

Review of Literature

Narula and Marin (2003) analyzed the factors that affect the absorptive capacity of foreign direct investment. This study is based on the data from the innovation survey in Argentina (1992-1996). They concluded that infrastructure and human capital play an important role in attracting foreign direct investment. Alfaro (2004) examined the effect of FDI on growth through absorptive capacity by taking financial market development as a proxy of absorptive capacity for 72 countries. They found that countries with well-developed financial markets gain significantly from FDI. Furthermore, he concluded that FDI can play an important role in economic growth.

Kinoshita and Lu (2006) demonstrated two channels through which infrastructure could affect growth. First is that infrastructure is one of the important determinants of economic growth in various studies and he concluded as infrastructure exerts positive externalities on economies. Second, foreign investors are attracted to a country that has sound infrastructure which reduced the cost of doing business as many empirical studies show.

Busse and Hefeker (2007) explored the linkage between political risk, institutions, and foreign direct investment inflows. They found that political risk and institutions are closely associated with FDI. Demirhan and Masca (2008) examined the determinants of foreign direct investment inflows in developing countries. For this purpose, the study used cross-sectional data of 38 developing countries over the period 2000 to 2004. The study used both economic and institutional factors. Growth rate, inflation, trade openness, and tax rate are used as main economic variables controlled with the political institution. They found that trade openness and growth rate play a positive role in FDI inflows whereas inflation rate, risk factor, and tax rate play a negative role in FDI inflows. All variables are significant to expect risk factors. This revealed that risk is not an important factor in attracting FDI in the declared period. When the marginal return of capital is high, then the foreign investor may ignore

political risk. The study concluded that economic factors are more important in the attraction of FDI. Sawkut *et al.* (2009) examined the cause of low FDI inflows in African countries. For this purpose, they used panel data of selected African economies over the period 1990-2005. They used some macro-economic variables (trade openness, stock of capital, labor cost) and institutional variables (political instability, domestic market condition, law, and order). Results showed that there is a positive relationship between trade openness, capital stock, and sound domestic market condition whereas inversely relationship is observed between political instability and FDI. Nguyen *et al.* (2009) found that developing countries only achieve benefits from FDI once they have sufficient absorptive capacity related to the human capital resource, physical infrastructure, technological, and institutional development. They found that poor countries often look for short term goals to quickly cover their shortage. They paid less consideration to absorptive capacity because this process requires time and a lot of effort before achieving performance. Thus, FDI seems to be the best solution to fill a lack of capital, create jobs, and collect the tax. However, FDI holds more benefits in the form of advanced technology and know-how.

Walsh and Yu (2010) examined the determinants of FDI. The study was based on an institutional and sectoral approach. For this purpose, they used panel data of 27 advanced and emerging economies over the period 1985-2008. They examined various developmental, institutional, and macroeconomic determinants of FDI. At first, they examined the impact of the relationship between FDI and macroeconomic variables such as inflation, trade openness, exchange rate, and for institutions they used political stability and judicial independence. Results showed that there is a positive relationship between FDI and these macroeconomic and institutional variables.

Asiedu and Lien (2011) examined the impact of democracy on foreign direct investment. They used panel data for 112 developing countries for the period 1982 to 2007. System GMM is used to estimate the results. They found that good democracy has a positive impact on inward FDI. Good institutions provide an investment-friendly environment for foreign investors and create favorable conditions for investment. They further examined the effect of democracy on FDI depended on the importance of natural resources in the host country. Bission (2011) examined the impact of institutional quality on foreign direct investment.

For this purpose, he used cross-sectional data of 45 selected countries. To capture the quality of institutions he used some variables like a low level of corruption, political instability, law and order situation, political freedom, freedom of media. The result showed that there is a positive relationship between institutional quality and FDI inflows. He concluded that institutions may serve as a catalyst to attract foreign direct investment.

Ishida (2012) examined the positive and negative effects of FDI in East Asian countries. He conducted his study by analyzing different case studies on East Asian countries. He concluded that to attract FDI East Asian countries make the best possible use of its human capital by giving them education and health incentives. The technology may also be improved to digest the more benefit provided by foreign direct investment. Júlio et al. (2013) examined the impact of an institutional factor in attracting FDI. They took the data of 86 countries as a sample during the period 2005-2007. They proved that the institutional framework and the financial market are a means to attract FDI. The more efficient the markets are, they absorb the benefits of FDI. Lugemwa (2014) highlights the importance of improved absorptive capacity in developing countries. He used descriptive analysis to carry out his study for developing countries and used the concept of absorptive capacity with foreign direct investment to prove his study. He said that FDI can play an important role in growth. Developing countries need to attract FDI. One way of doing this is to support firms in developing absorptive capacity. In another way, this could be done through workforce development programs, human resource practices, and institutional quality. Developing countries, therefore, need to research ways of promoting workforce development programs to enhance absorptive capacity for local firms, and to support good human resource practices and organizational routines. The most recent study of Sabir et al. (2019) has found the positive relationship between institutional quality and inward FDI in developing countries using System GMM.

In light of the above literature, we can say that absorptive capacity and FDI are being rarely studied for East Asia Pacific and South Asian countries. This study contributes to the literature by taking the diversified measures of absorptive capacity to examine its impact on FDI in both regions. Then we compare the impact of absorptive capacity on FDI in both regions.

METHODOLOGY AND DATA

We estimate the following econometric model

$$\ln FDI_{it} = \alpha_0 + \alpha_1 HD_{it} + \alpha_2 INSQ_{it} + \alpha_3 INFR_{it} + \alpha_4 TO_{it} + \alpha_5 \ln GDP_{it} + \alpha_6 TEC_{it} + U_{it} \quad (1)$$

Where i indicates the number of countries that is, t is selected period of this study that is , FDI is our dependent variable taken as net inflow of FDI in current U.S. dollars. It is the summation of equity capital, reinvestment of revenues, and other assets. HD is human capital development expressed as the average years of tertiary education and life expectancy. Human capital development is one of the furthestmost significant determinants that absorb the benefit provided by FDI. Many studies use this variable as the main determinant of FDI. Life expectancy and tertiary education are used to measure human capital. The trade openness (TO) construct is the ratio between the sum of exports and imports to GDP. TO is a key factor to catch inward FDI to boost job creation and economic development. Following Kravis and Lipsey (1982), Culem (1988), and Eswards (1990) we use trade openness as a determinant of FDI and it has positive effects on FDI. Infrastructure (INFR) is measured with fixed telephone line subscriptions per 100 persons. Hypothetically there is exists a positive association between infrastructure and inward FDI. Modern infrastructure attracts FDI inflows due to a reduction in operational cost (Khadaroo & Seelanah, 2007). SQ is democratic institutions. Political stability is used as a measure of institutional quality. If institutions are weak, foreign investors dither to bring money for investment purposes. Moreover, political instability and poor institutions indicate the poor governance within-country viz a viz the reversal of policies that are detrimental for FDI (Gastanaga, 1998; Harms, 2002). We use polity 2 as an indicator for political institutions which lies between +10 (strong democracy) and -10 (weak democracy).

Economic development is indicated by GDP per capita in the study to investigate its impact on FDI inflows. As economic development rises, optimism rises in the economy along with more purchasing power; encourages foreign investors to invest.

TEC is technology measured as the import of machinery and equipment at SITC 1² and total trademark registered. Technology shows improvement in the method of production and innovations. The import of machinery is used as a measure of technology. Technology is also an indicator of absorptive capacity to induce FDI in a country. FDI usually comes with new technologies and

² Standard International Trade Classification 1 (Section).

innovations. Technology has a positive impact on inward FDI. Alternatively, this study also uses a total registered trademark as a proxy of technological innovations. All variables are expressed in natural logarithm (*ln*).

To examine the effect of human capital, institutional quality, infrastructure, trade, GDP, and technology on the FDI, model (1) is estimated by using the ordinary least square method. Perhaps estimators can be biased due to cross-sectional heterogeneity, autocorrelation, and endogeneity in democratic institutions, import of machinery, life expectancy, fixed telephone line subscriptions, and tertiary education. To tackle these problems, this study uses system GMM (Arellano & Bover, 1995; Blundell & Bond, 1998). The validity of instruments is tested using the standard Sargan test. The prerequisite for system GMM is, autocorrelation at first order (AR1) must be statistically significant while autocorrelation at second order (AR2) must be statistically insignificant.

To evaluate the effect of absorptive capacity on FDI inflows, this study uses panel data of five SAC such as Bangladesh, India, Nepal, Pakistan, and Sri Lanka over the period 1984 to 2017. These countries are selected based on the accessibility of data. Data on trade openness, fixed telephone line subscription per 100 people, life expectancy, GDP per capita, and FDI are gleaned from the World Development Indicators (WDI). Data on import of machinery in Standard International Trade Classification, Revision 1 (STIC I) have collected from UN COM Trade, the data of average years of tertiary education are obtained from Barro and Lee database³, and data of polity II⁴ are retrieved from Polity IV data set⁵. We present the descriptive statistics of the selected variables in table 1.

Table 1: Descriptive Statistics

Variables	Obs.	Mean	Std. Dev.	Min	Max
Log(FDI)	170	19.042	2.844	12.421	24.518
Trade Openness	170	41.436	17.303	12.352	88.636
Tertiary Education	170	8.873	0.113	0.020	0.460
Political Stability	170	4.246	4.661	-7.000	9.000
Life Expectancy	170	64.678	5.869	49.410	75.284
Infrastructure	170	2.517	3.678	0.114	17.762
Log(Technology)	170	21.321	1.615	18.238	25.317
Log(Trade Marks)	170	8.873	1.472	6.110	12.599
Log(GDP per capita)	170	24.017	4.343	1.755	28.462

Source: Authors' calculations.

³Educational attainment data for 146 countries in 5-year intervals from 1950-2010

⁴Political Structures and Regime Change

⁵Data series in political Science Research

RESULTS AND DISCUSSIONS

This paper empirically investigates the influence of absorptive capacity on FDI inflows in SAC. First of all, we estimate equation (1) using SGMM, and results are displayed in table 2.

Table 2: Estimated Results of FDI inflows

Variables	GMM	GMM	GMM
Log(FDI(t-1))	0.490*** (0.000)	0.667*** (0.000)	0.516*** (0.000)
Trade Openness	0.008* (0.090)	0.011* (0.107)	0.012** (0.092)
Democratic institutions	0.042* (0.055)	0.072** (0.043)	0.010* (0.070)
Log(Import of Machinery)	0.642*** (0.000)	0.237** (0.027)	0.361** (0.032)
Log(Life Expectancy)	0.093*** (0.000)		0.083*** (0.000)
Human Capital		2.778** (0.029)	5.352** (0.037)
Log(Infrastructure)	0.042* (0.085)	0.038** (0.035)	0.014* (0.086)
Log(GDP per capita)	0.033* (0.106)	0.305** (0.037)	0.346* (0.105)
Constant	-10.319*** (0.000)	-6.522*** (0.000)	-12.575*** (0.000)
Sargan test	0.127	0.176	0.459
AR1	0.000	0.000	0.000
AR2	0.717	0.588	0.672

Note: *, ** and *** show significance at 10%, 5% and 1% level. P-values are given in parenthesis.

The estimated results show that trade openness, democratic institutions, import of machinery, life expectancy, fixed telephone line subscriptions, and tertiary education are positively connected to FDI inflows. The

estimated results show that life expectancy, trade openness, political stability, import of machinery, infrastructure, and average years of tertiary education are positively linked with FDI and statistically significant respectively.

Trade openness (TO) has a positive and significant effect on FDI in selected SAC, which shows that the countries with free trade can attract more FDI because foreign investors favor free trade relative to the restricted trade. Since restricted trade increases the transaction cost which discourages FDI. It is evident that trade openness and foreign direct investment are a complement for each other and affect positively. Aizenman and Noy (2005) also analyzed the association between trade and FDI and found an increasing influence of trade openness on FDI and significant at the 10% level for the countries sample.

Table 2 displays that political stability has a positive and statistically significant enhancing effect on FDI inflows. With the prevalence of political instability, foreign investors are reluctant to invest due to the threat of a reversal of policies and uncertain economic fluctuations that may cause a loss in profit. Our finding is akin to the studies of Asiedu and Lien (2011), Wheeler and Mody (1992), Kumar (1994), Alfaro (2004), and Nunnemkamp (2004). Table 2 shows the import of machinery; the proxy of technology has a positive impact on FDI. The main objective of foreign firms is to maximize profit. Firms invest in the country where the expected rate of return on the investment is high and higher returns are gained and associated with the improved technology. Improvement in production technology increases economic growth (Dornbusch, Fischer, & Startz, 2008). The GDP is found to have a significant and positive impact on FDI (Alharthi, 2018).

Life expectancy and tertiary education are used to measure human capital. Table 2 shows that life expectancy and tertiary education are positively related to foreign direct. As life expectancy and education increase, the productivity of the labor force increases thus raises FDI. Moreover, GDP per capita has positive and statistically significant impacts on inward FDI in South Asian countries. If countries have achieved a certain level of development, then an increased FDI inflow spurs economic growth. We have replaced the import of machinery with a total registered trademark to measure the effects of technology on inward FDI in SAC and results are described in table 3.

Table 3: Absorptive capacity and FDI inflows in South Asian Countries

Variables	GMM	GMM	GMM
Log(FDI(t-1))	0.547*** (0.000)	0.561*** (0.000)	0.520*** (0.000)
Trade openness	0.012* (0.105)	0.017** (0.042)	0.018** (0.024)
Political Stability	0.022* (0.105)	0.010* (0.052)	0.015* (0.086)
Log(Trademark)	0.638** (0.030)	0.572** (0.043)	0.516** (0.045)
Log(Life Expectancy)	0.315** (0.047)		0.065*** (0.003)
Human capital		4.260** (0.049)	4.790** (0.044)
Log(Infrastructure)	0.024** (0.039)	0.060** (0.038)	0.032** (0.029)
Log(GDP Per Capita)	0.139** (0.028)	0.236** (0.031)	0.571* (0.060)
Constant	-0.574** (0.039)	-2.762** (0.023)	-11.250** (0.036)
Sargan test	0.307	0.502	0.521
AR1	0.000	0.000	0.000
AR2	0.612	0.667	0.663

Note: *, ** and *** show significance at 10%, 5% and 1% level. P-values are given in parenthesis.

This shows trade openness, political stability, total registered trademark, life expectancy, tertiary education, infrastructure, and GDP per capita have a positive and statistically significant influence on inward FDI in SAC. The coefficient of registered trademarks is positive in all three models; implies that an increase in registered trademark shows that technology is getting developed in these countries which plays a significant role in attracting FDI inflows. The result shows that a 1 percent rise in trade openness causes a 0.018 percent upturn in FDI south Asian

region. Edwards (1990) claims that economies with a higher degree of trade openness can grow faster by absorbing new technologies at a higher rate than a country with a lower degree of openness. Political stability is positively related to FDI in South Asian countries. With the increase in political stability, FDI increases monotonically, and therefore economic growth increases.

Total registered trademarks are positively related to foreign direct investment, which shows that if the trademark increases, then it indicates that technological innovations are improving. Therefore, it indicates that the absorptive capacity of a country is rising. The results show that a 1 percent increase in technology causes a 0.516 percent rise in FDI in South Asian countries.

Infrastructure has a rising effect on FDI inflows in South Asian countries. Result reveals that a 1 percent improvement in infrastructure causes a 0.032 percent increase in the FDI inflows in SAC. Tertiary education as a proxy of education has a positive relation with inward FDI. The table illustrates that a 1 percent acceleration in tertiary education causes a 4.790 percent increase in the FDI in SAC. Aleksynska et al. (2003) analyzed that an increase in human capital development is expected to augment the potentials of FDI in absorbing benefits in pacific regions. Moreover, GDP per capita has a positive effect on FDI inflows in SAC. Overall, this analysis indicates that human capital development is a more effective measure of absorptive capacity which significantly determinant FDI inflows in South Asian countries followed by registered trademark and GDP per capita. Moreover, GMM satisfies the valid instrument condition, autocorrelation at the first-order autoregressive process, and zero autocorrelation at second-order auto-regressive process respectively.

CONCLUSION

This study has investigated the influence of absorptive capacity on FDI for selected SAC using the General Method of Moment (GMM) for the time 1984-2017. Factors such as human capital, infrastructure, institutional quality, technology, trade openness, and GDP appeared to be positive and statistically significant essentials of the FDI inflows in SAC respectively.

We found that developing SAC can induce more FDI inflows if there is no restriction on trade. Democratic institutions are positively related to

FDI in the South Asian region which implies that if there are political stability then foreign investors prefer to bring investment in these countries due to risk aversion and huge returns. Technology is positively related to a foreign direct investment; implies improvement in technology raises the absorptive capacity of a country. Infrastructure has a positive impact on FDI in SAC and tertiary education as a proxy of education is positively related to foreign direct investment.

The governments of the South Asian countries should improve the absorptive capacity measures such as human capital, infrastructure, and institutions of the country to give better incentives to the foreigners for investing in the country. The government should focus on tertiary education to absorb foreign direct investment inflows that can positively impact economic growth. Trade barriers such as tariffs should be reduced to enhance export-oriented growth which attracts the FDI.

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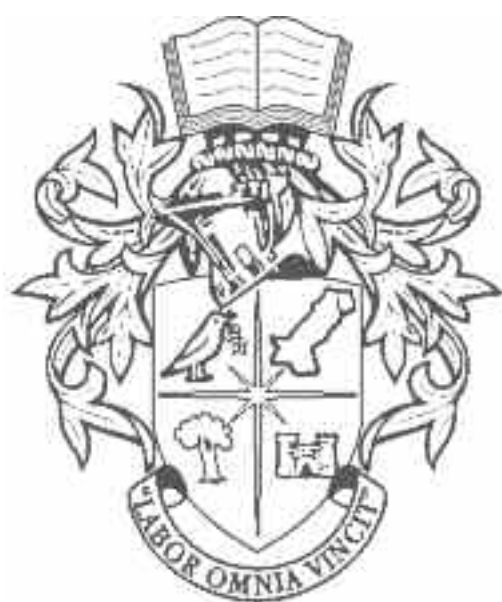


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