

A Comparative Study of Teacher's knowledge, Attitudes and Behaviors towards Evidence Based Practices of Public and Private Universities

MS. Tahseen Arshad*, Dr. Ghazala Noureen**, MS. Kiran Karamat ***

Abstract

The notion of evidence-based practices has its roots in medical sciences. Later on, due to viability of concept, it entrenches number of other disciplines including education. The proponents of evidence-based practices emphasized that every decision taken by practitioners should be based on stringent evidence gathered through rigorous research. Keeping in view the importance and practicality of EBP, a comparative study of teacher's knowledge, attitudes and behaviors towards evidence-based practices of public and private universities was conducted. Survey research method was used to collect data. Population of the study was all the teachers working in the universities of Lahore. Sample of 300 teachers was selected by using multi-stage random sampling technique. The main objective of the study was to compare the knowledge, attitudes and behaviors of public and private sector university's teachers towards EBP. Findings of the study revealed that public sector universities teachers have better knowledge of EBP as compare to private sectors. Private sector teacher's behavior is better as compared to public sector teachers. It is therefore recommended that teacher in higher education institution should focused on contemporary researches in their field to improve their knowledge and skills.

Key words: Attitudes, Behaviors, Evidence-Based Practices, Knowledge

This Article can be cited as:

Arshad T., Noureen G., Karamat K., (2020). A Comparative Study of Teacher's knowledge, Attitudes and Behaviors towards Evidence Based Practices of Public and Private Universities, *Journal of Arts and Social Sciences*. VII (2), 93-100.

* Correspondence concerning this article should be addressed to Ms. Tahseen Arshad, Independent Researcher, Tahseen.arshad91@yahoo.com.

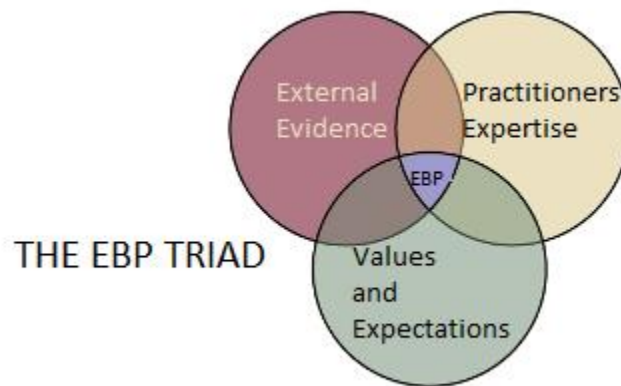
** Dr. Ghazala Noureen, Associate Professor, Institute of Education, Lahore College for Women, University Lahore, g_noureen@yahoo.com.

*** Ms. Kiran Karamat, Head Department of Media Studies, Kinnard College for Women, Lahore, kirankaramat@yahoo.com.

Introduction

The history of evidence-based practice has its root in medicine. It evolved from nursing education and enter into medical physicians' practice in 1970. It had been started to provide. It began as an idea to provide better results for patients who are suffering from different chronic diseases (Mackey & Bassendowski, 2016). EBP is actually a tool to minimize gape among practice and theory and provide vital path for nursing educators to teach basic knowledge about nursing profession to prospective nurses (ICN, 2012). Later on, it become multi-disciplinary and entrenched other disciplines such as pathology, dentistry, nursing, psychology, social work, education, library and information science. This term in education was first coined by Hargreaves (cited in Brusling, 2005) in the year 1996 when he was delivering a lecture at a tutor teaching activity. EBP decision making is based on three main components.

- a. External evidence
- b. practitioner's expertise
- c. values and expectations of client



Best external evidence refers to the information gathered through research while using comprehensive research methodology. Expertise means education experience and skills of practitioners and values are the exceptional predilections, and expectations of a client. EBP is now firmly deep-rooted in the educational context. It is quite obvious and logical that classroom practices can improved through use of reliable evidence (Sackett et al., 1996).

EB Strategies of Teaching

There are empirical evidences through various research studies that teacher using EBP greatly influence the performance of their students. There are seven strategies mentioned in literature and supported by research instead of untested theories have direct effect on student's learning. These are

Clear instructional objectives

No one can deny the importance of this strategy. Teacher should be clear about what he/she wants to teach his/her students. If teacher become unable to state instructional objectives, the goal of your teaching become ambiguous.

Planned demonstration

Whatever you want to teach your student, planned methodically before the start of session. This planning helps you in effective utilization of classroom timing. Demonstrate task effectively in front of

students to enhance their understanding and capabilities. So, be focused and lay emphasis on students learning.

Appropriate use of question answer

Teacher needs to ask question to check the understanding of the students, not just to rote memorization of the facts.

Use flow chart to summarize new learning

Flow charts can be used to summarize recent learning and to show the linkages and interrelationship between different aspects. Elaborating a graphical summary is a wonderful way to complete your lesson.

Ample of practice

There is a famous saying practice makes man perfect. This is very much true in educational context. Guiding student toward right practicing harness their skills and abilities.

Timely feedback

If you give feedback to your student regarding their performance along the how it can be improved increased student's motivation toward learning.

Flexibility

Teacher's method of teaching should depend on how students learn in a better way. Teacher should not stick to a method that create hindrances in students' learning.

Evidence-Based Practice and Teaching

“Evidence-based policies have great potential to transform the practice of education, as well as research in education. Evidence based policies could finally set education on the path toward the kind of progressive improvement that most successful parts of our economy and society embarked upon a century ago. With a robust research and development enterprise and government policies demanding solid evidence of effectiveness behind programs and practices in our schools, we could see genuine, generational progress instead of the usual pendulum swings of opinion and fashion. This is an exciting time for educational research and reform. We have an unprecedented opportunity to make research matter and to then establish once and for all the importance of consistent and liberal support for high-quality research. Whatever their methodological or political orientations, educational researchers should support the movement toward evidence-based policies and then set to work generating the evidence that will be needed to create the schools our children deserve” (Slavin, 2002, p.20).

EBP is a new way of linking research and practice in teaching is recently developed phenomenon. Roots of such development lied in the notion that research-based evidences should be an important source of knowledge and information for teachers. Teaching standards recognized internationally emphasized the importance of research finding to enhance professionalism in teaching. Present discourse in teacher education identified linkage of research and practice as crucial agenda for teacher education and training. Teacher's training should enable them to use research -based evidences efficiently and to assimilate these findings with personal expertise and teaching experience. This research linkage plays important role in promoting EBP (Diery et al., 2020).

Teacher educators need to engross themselves in critical reading of published research studies and being a professional served as a role model for prospective teachers while engaging with EBP. It is their duty to impart and disseminate research-based knowledge to future teachers for their professional development. Teacher training institutions plan their teaching practice/internship according to scientific and empirically verified principles. (Nelson & Campbell, 2017).

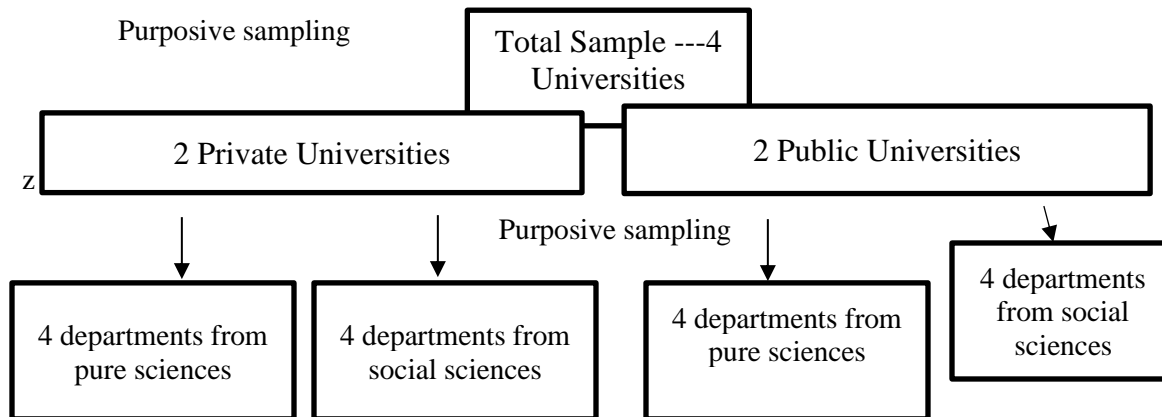
The present study is designed to measure knowledge, behavior and attitudes of university teacher toward EBP and compare the public and private teacher’s perception regarding EBP. It is very crucial to understand the teacher’s perspective for EBP in order to endorse the use of evidence in higher education teaching.

Methods and Procedure

The main objective of the study was to investigate teacher’s knowledge, attitude and behavior towards evidence-based practices and comparison of private and public sector universities regarding these variables. Present study followed positivistic paradigm and quantitative research approach to investigate the variables of the study. The reason to use quantitative method is that variables of the study are quantifiable. Depending upon the nature of the study, cross sectional survey research design was used. In a cross-sectional study, researcher collects data to make inferences about a population of interest at one point in time (Setia, 2016; Lavrakas, 2008).

All the teachers from private and public universities situated in Lahore were the population for the study. 300 teachers were the sample of the study.

The sampling process was illustrated through a flow chart.



Adopted questionnaire “Evidence-Based Practice Profile Questionnaire” was used for this study. It was comprised of three parts. One part consisted of statements related to teacher’s knowledge, second was to attitude third part was related to their behavior. “Evidence-Based Practice Profile Questionnaire” was adopted for the study developed by faculty of university of South Australia (2011). It was consisted of total sixty-nine statements that were developed from previously available research work. The instrument was adapted after the modification of some statements by taking expert opinions keeping in mind the local context. Adapted instrument was then pilot tested from fifteen public and fifteen private university teachers. After the reliability analysis through Cronbach Alpha’s, reliability of the instrument came out to be 0.89. Thus, the instrument was selected without the withdrawal of any statements.

Data Analysis / Findings

. **H₀** There is no significant difference between knowledge of public and private sector universities regarding EBP.

Table 1. Comparison of public and private university teacher’s knowledge regarding EBP.

	Institution	N	Mean	Std. Deviation	Std. Error Mean	t	df	P
Knowledge	Public Sector	150	2.97	1.323	.108	.767	298	0.04
	Private Sector	150	2.91	1.483	.121			

Table 1 indicates that there is no significant difference lies between teachers of public and private sector of universities regarding knowledge. The value of $t = .767 < 1.96$ (critical value) at 0.05 level of significance. The value of $0.04 < 0.05$ so, it can be concluded from the above table is that there is a significant difference in public and private sector universities based on knowledge. Public universities have better knowledge of EBP as compare to private sector universities

H₀ There is no significant difference of attitude toward EBP of public and private university teachers.

Table 2. Comparison of attitude toward EBP of public and private university teachers.

	Institution	N	Mean	Std. Deviation	Std. Error Mean	t	df	P
Attitude	Public Sector	150	3.39	1.048	.086	.374	298	.000
	Private Sector	150	3.15	1.358	.111			

Table 2 indicates that there is a significant difference of attitudes between teachers of public and private sector. The value of $t = .374 > 1.96$ (critical value) at 0.05 level of significance. The value of $p .000 < 0.05$ so, it can be concluded from the above table that there is a significant difference in public and private sector of universities based on attitude. Public sectors teachers have more positive attitude toward EBP.

H₀ There is no significant difference in behavior of public and private universities teachers towards EBP.

Table 3. Comparison of behavior of public and private university teachers.

	Institution	N	Mean	Std. Deviation	Std. Error Mean	t	df	P
Behavior	Public Sector	150	3.18	1.106	.090	.798	298	.000
	Private Sector	150	3.23	1.353	.110			

Table 3 indicates that there is a significant difference lies between public and private sector of universities as far as their behavior towards EBP is concerned. The value of $t = .798 < 1.96$ (critical value) at 0.05 level of significance. The value of $p .000 < 0.05$ so, it can be concluded from the above table that there is a significant difference of behavior of public and private sector universities teachers toward EBP.

Discussion

Evidence based practices plays an important role in teaching and learning. The present study designed to compare the difference between public and private sector universities teacher's knowledge, behavior and attitude towards EBP. Survey research method was used to collect data.

Findings of the previous researches revealed that teachers usually showed positive attitude towards EBP. As far as the university teachers concerned, they mostly involved actively in research and teaching. Interpreting research results and use it in daily practices is routine of faculty member. Some of the teachers involved in certain research projects while some of the conduct research thesis/dissertation to acquired higher degree. Findings of the present study showed that overall use of EBP is not challenge for teachers in higher education institutions (Diery et al., 2020; MacPhail et al., 2018; Reddy et al., 2017; Loughran, 2014).

Beerkens (2018) stated that EBP mentality contribute positively toward quality assurance. Another approach through which universities can encourage EBP is that university's management should monitor critically their student's learning. There is also need to evaluate teacher's effectiveness. "An evidence-based mentality could go down to the level of specific pedagogical practices or assessment methods within a single course" (p286).

The main objective of the study was to compare the knowledge, attitudes and behaviors of public and private sector university's teachers towards EBP. Findings of the study revealed that public sector universities teachers have better knowledge of EBP as compare to private sectors. Private sector teacher's behavior is better as compared to public sector teachers. Results of present study is bit contradictory to study conducted by Aarons, et al (2009). They stated that type of organization matters in terms of organizational support and developing attitudes toward EBP. Private organizations are more supportive regarding two above mentioned aspects. Most of the studies revealed that type of organization determines the differences regarding knowledge, behavior and attitude of faculty members toward EBP.

References

- Aarons, G.A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The evidence-based practice attitude scale (EBPAS). *Mental Health Services Research*, 6(2), 61-74.
- Bahammam & Linjawi (2014). Knowledge, attitude, and barriers towards the use of evidence-based practice among senior dental and medical students in western Saudi Arabia. *Saudi Medical Journal* Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4362121/> on 13th June 2016
- Barbara R., Walden S., & Alison S. (2016). Identifying Evidence-Based Educational Practices: Which Research Designs Provide Findings That Can Influence Social Change.? *Journal of Educational Research and Practice*, 6(1), 33-42
- Beasley, B.W., & Woolley, D.C. (2002). Evidence-based medicine knowledge, attitudes and skills of community faculty. *Journal of Drug Education*, 17, 632-640
- Bennett, S., & Bennett, J. W. (2000). The process of evidence-based practice in occupational therapy: Informing clinical decisions. *Australian Occupational Therapy Journal* 47, 171-180 Retrieved from www.google.com.pk/ on 12th June 2016
- Bilsker & Goldner (2004). Teaching Evidence-Based Practice: Overcoming Barriers Retrieved from www.google.com.pk/#q=Teaching+Evidence-Based+Practice:+Overcoming+Barriers on 28th May 2016
- Brusling, C. (2005, November). Evidence-based practice in teaching and teacher education. Paper presented at the conference of Professional Development of Teachers in a Lifelong Perspective: Teacher Education, Knowledge Production and Institutional Reform. Centre for Higher Education Greater Copenhagen in Collaboration with OECD, Copenhagen, Denmark. Retrieved February 17, 2016 from <http://www.samford.edu/ctls/evidencebasedpracticeinteachingcb.pdf>

- Campbell, W. A. (2014). Why Evidence Matters: Examining the Knowledge and Perceptions of Pre-Service Teachers. Retrieved from <https://www.google.com.pk/#q=Why+Evidence+Matters:+Examining+the+Knowledge+and+Perceptions+of+Pre-Service+Teachers%E2%80%9D> on 17th April 2016
- Campbell, N. (2017). Evidence-Based Practice in Higher Education: Teacher Educators' Attitudes, Challenges, and Uses. *Front. Educ.* 5:62. doi: 10.3389/educ.2020.00062
- Carr, J. (1998). *Information literacy and teacher education. ERIC Digest*
- Davies, P. (1999). What is evidence-based education? *British Journal of Educational Studies*, 47, 108-121.
- Diery, A., Vogel, F., Knogler, M., & Seidel, T. (2020). Evidence-Based Practice in Higher Education: Teacher Educators' Attitudes, Challenges, and Uses. *Front. Educ.*, | <https://doi.org/10.3389/educ.2020.00062>
- Edmond, et.al (2006). Integrating Evidence-Based Practice and Social Work Field Education Retrieved from <https://www.google.com.pk/#q=INTEGRATING+EVIDENCE-BASED+PRACTICE+AND+SOCIAL+WORK+FIELD+EDUCATION> on 17th May 2016
- Eruk & Adeyemo (2014). Knowledge, Beliefs and Teaching Strategies of Evidencebased Practice among Nurse Educators/Lecturers in Nursing Institutions in Benin City, Edo State, Nigeria Retrieved from www.google.com.pk/#q=Knowledge%2C+Beliefs+and+Teaching+Strategies+of+Evidencebased+Practice+among+Nurse+Educators%2FLecturers+in+Nursing+Institutions+in+Benin+City%2C+Edo+State%2C+Nigeria
- Hargreaves, D. (1997). In defense of research for evidence-based teaching: A rejoinder to Martyn Hammersley. *British Educational Research Journal*, 23, 405-419.
- Heiwe, S., & Nillson, K. (2011) Evidence-based practice: attitudes, knowledge and behavior among allied health care professionals. *International Journal for Quality in Health Care*, 29(4), 198-209 Retrieved from <http://intqhc.Oxfordjournals.org/content/23/2/198> on 21 April 2016
- Hempenstall, K. (2006). What does evidence-based practice in education mean? *Australian Journal of Learning Disabilities*, vol. 11, no. 2, pp. 83-92. Retrieved from <https://researchbank.rmit.edu.au/view/rmit:644>
- Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A systematic review of the literature. *Oxford Review of Education*, 29(4), 449-470. Retrieved from <https://www.google.com.pk/#q> on 12th April 2016
- Hsieh 1, Sue-Hsien., & Chen Int. J. Environ. (2020). Effectiveness of an Evidence-Based Practice Educational Intervention among School Nurses. *Public Health*, 17(4063),2-10
- Irshad, A., & Ramzan, M. (2010). Assessment of Knowledge about Evidence Based Medicine in Medical Students and Doctors in Pakistani Health Care Setting Retrieved from [/www.google.com.pk/#q=irshad+et+al+2010+Assessment+of+Knowledge+about+Evidence+Based+Medicine+in+Medical+Students+and+Doctors+in+Pakistani+Health+Care+Setting](https://www.google.com.pk/#q=irshad+et+al+2010+Assessment+of+Knowledge+about+Evidence+Based+Medicine+in+Medical+Students+and+Doctors+in+Pakistani+Health+Care+Setting)
- McGuire, D. (2006). Attitude and Barriers to evidence-based social work. Unpublished doctoral dissertation, University of Houston. (Publication No. AAT 3207044).

- Neda, M., & Soodabeh, J. (2012). Nursing faculties' knowledge and attitude on evidence-based practice *Iran J Nurs Midwifery Res.* 2012 Nov-Dec; 17(7): 506–511. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3730454/>
- Rice, K., Hawang, J., Abrefa-Gyan, T., & Powell, K. (2010). Sample Evidence-Based Practice Questionnaire: A Confirmatory Factor Analysis in a Social Work. *Advances in Social Work*, 11(2), 158-173.
- Schoenfeld, A. H. (2009). Instructional research and the improvement of practice. In J. D. Bransford, N. J. Vye, D. J. Stipek, L. M. Gomez, & D. Lam (Eds.), *The role of research in educational improvement* (pp. 161–188). Cambridge, MA: Harvard Education Press.
- Scholten, P., Beekman, E. (2013). Attitude, knowledge and behaviour towards evidence-based medicine of physical therapists, students, teachers and supervisors in the Netherlands: a survey Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/22128867>
- Shi, Q., & Chesworth, B. (2014). A modified evidence-based practice- knowledge, attitudes, behaviour and decisions/outcomes questionnaire is valid across multiple professions involved in pain management. Retrieved from <http://bmcomeduc.biomedcentral.com/articles/10.1186/s12909-014-0263-4> on 21th March 2016
- Stichler. (2012). Faculty Knowledge, Attitudes And Perceived Barriers To Teaching Evidence-Based Nursing Retrieved from www.google.com.pk/#q=FACULTY+KNOWLEDGE%2C+ATTITUDES%2C+AND+PERCEIVED+BARRIERS+TO+TEACHING+EVIDENCE-BASED+NURSING
- Sullivan, K. J., Wayne, C., Patey, A. M., & Nasr, A. (2017). Barriers and facilitators to the implementation of evidence-based practice by pediatric surgeons. *J. Pediatr. Surg.* 52, 1666–1673. doi: 10.1016/j.jpedsurg.2017.02.001
- Thompson, C., McCaughan, D., Cullum, N., Sheldon, T.A., Munhall, A., & Thompson, D.R. (2001). Research information in nurses' clinical decision-making: What is useful. *Journal of Advanced Nursing*, 36 (3), 376–388.
- Whitehurt, G. J. (2002). Proceedings '02: Student achievement and school accountability conference on evidence –based education. Orlando, FL: Southeast Regional Meeting.
- Williams, D., & Coles, L. (2007). Teachers approach to finding and using research evidence: An information literacy perspective, *Educational Research*, 49, 186,193-196
- Wiseman, A. W. (2010). The uses of evidence for educational policymaking: Global contexts and international trends. *Review of Research in Education*, 34.1 doi: 10.3102/0091732X09350472