Research-Based Professional Development Needs Of Teacher Educators: Qualitative Evidence From University Of Education Lahore, Pakistan

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Abstract

Since the beginning of the century, academics and policymakers have acknowledged the necessity for teacher educators' research-based professional development. Therefore, the present qualitative study sought to identify the teacher educators' research-based professional development needs serving at the University of Education Lahore, Pakistan. A total of 25 regular teacher educators from the University of Education were selected as a sample for the study by using the random sampling technique. Semi-structured interviews were conducted to gain in-depth information from the participants. Interviews were transcribed verbatim and translated into English. Thematic analysis was used to analyse the data after transcription. Six themes emerged as research-based professional development needs of teacher educators: (i) pursuing the doctoral program for research purposes, (ii) article writing and publications, (iii) research projects, (iv) training in quantitative and qualitative software for data analysis, (v) promotion of research culture, and (vi) collaboration. The study showed that teacher educators had extensive research-based professional development needs. The university's administration can fulfill these needs by providing support and offering opportunities for teacher educators, so they might be engaged in research activities and uplift the university's ranking. Moreover, the university administration can foster collaboration to promote research culture at the university.

Keywords: Research-Based Professional Development Needs, Teacher Educators, University of Education, Qualitative Evidence

Introduction

The educational system's success depends on the professional development of teacher educators (Smith, 2017). It is widely acknowledged that teaching is a dynamic process that requires teachers to enhance their professional growth by embracing learning and research opportunities (Kelchtermans et al., 2018). Thus, whenever discussions about raising the standard of higher education were started, they always ended up with the recommendation that professional development opportunities should be provided to teachers and research culture at universities should be promoted to uplift their ranking (European Commission, 2015). Thus, research-based professional development programs were initiated at universities all over the world to enhance teachers' professionalism and to promote

research culture. By focusing on the professional development needs, the administration of universities strived to engage their teachers in professional development as well as in research activities. Moreover, the administration also encouraged their teachers to concentrate on conducting research studies, gaining research funds, and boosting publication outputs (Stern, 2016; Tack & Vanderlinde, 2014). Lunenburg et al. (2014) and MacPhail (2019) highlight this situation by mentioning that many universities foster teachers to conduct research to understand the demands of the 21st century and improve their practices, either individually or collectively. Consequently, it helps teachers become more aware of potential conflicts between their mission and their values, and they experiment with and develop new teaching strategies related to their student's learning.

In the global context, the fundamental change in European education in the form of research-based professional development programs introduced in the United States, United Kingdom, Scandinavia, and Europe can be seen as an emphasis on the professional development of teachers (Bourke & Loveridge, 2017; Lambirth et al., 2021; MacPhail, 2019). This change was based on the idea that teacher professional development programmes should be research-driven to foster a research inclination among teacher educators and train both producers and consumers of research (Tack & Vanderlinde, 2014). Many research studies on the need, importance, and challenges in the field of professional development have been conducted by researchers. Menter et al. (2010) discovered in their study that research-based teacher professional development remained a young subfield of education research worldwide. Melnychuk et al. (2011) conducted a study on research-based professional development in Canada and revealed that 41 percent of teachers viewed research as an essential function fostered by their universities. In addition, they were required to be engaged in research-based professional development at the institutional and national levels (Melnychuk et al., 2011). According to McEvoy et al. (2018) 's study, teachers hesitated and felt pressure to conduct research studies as a part of professional requirements and advancement in the field. They viewed their limitations in research skills as impediments to research efforts. On the other hand, Chinese universities typically place less emphasis on producing peer-reviewed publications by faculty (Gong et al., 2021). Therefore, in cases when instructors have a higher academic degree, such as a doctorate, they are expected to be engaged in research-based professional development (Gong et al., 2021). This is particularly true for individuals who spend much time teaching research skills classes. Thus, the primary motive for teachers to participate in research-based activities is to receive a higher level of academics, higher income, and ultimately satisfy the university's research requirement (Gong et al., 2021). Teacher educators from many countries indicated research-based professional development activities in the field of education as one of their top priorities for professional learning (MacPhail et al., 2019). This way, research-based professional development activities have become the recommended strategies for teachers to safeguard their future. Van Der Klink et al. (2017) discuss that university teachers in many countries engage themselves in research-based professional development activities because research generates new knowledge that leads to breakthroughs and advancements and provides universities with a platform to grow and contribute to the educational system. Thus, it has become an important commodity in a globalised society. According to Naz and Malik (2014), higher education institutions have increased their emphasis on research-based professional development in order to develop evidence-based policies and programmes, solve society's critical

and growing problems, and raise the standard of information sharing and technological innovation. Formal learning programmes, exemplary practices, and enriched learning activities were identified as preferred methods of addressing research-based professional development needs. Gong et al. (2021) suggest that policymakers and administrators of institutes must consider teachers' preferences when designing professional development opportunities to meet the demands of teacher educators. While keeping the importance of the professional development of teachers in the Pakistani context, the present study was designed to identify the research-based professional development needs of teacher educators serving at the University of Education, Lahore, Pakistan, so the gap may be filled by taking appropriate measures.

Review of Related Literature

MacPhail and O'Sullivan (2019) and Ping et al. (2018) considered research as a weapon to perform better at work. They mentioned that new educational policies and legislation all over the world act as external motivation for the professional development of teachers. Due to the latest developments in educational policies, teachers are encouraged to improve their skills, knowledge, and capabilities in conducting research. Higher education institutions are urged to compare their research productivity to other institutions. Universities encourage faculty members to publish frequently to get attention, show appreciation, and raise awareness of their research. MacPhail and O'Sullivan (2019) and Solbrekke and Sugrue (2014) mention that most of the teachers teaching at the university level are required to have a good research profile to be promoted in their careers. Their universities promote key research users as excellent teachers. According to Gong et al. (2021) and Roberts and Weston (2014), universities in many countries continue to help teachers to be engaged in

research-based professional development activities. In the United Kingdom, university teacher educators are required to participate in research-based activities such as workshops on starting research projects and publishing papers. Gong et al. (2021) discovered that teacher educators were interested in pursuing doctoral programmes for research purposes. Their participation in research-related activities benefited teacher educators. It reflects that having research papers and projects enhances the educational process that teachers go through. Similarly, getting assistance from other academicians with more experience was found to be critical for one's professional advancement as a researcher (Meeus et al., 2018). Czerniawski et al. (2017) discovered in their research study that teachers perceived writing research articles as a worthwhile endeavour with a fair opportunity to be informative. In their study, Maaranen et al. (2020) discovered that teacher educators preferred to be involved in research-related activities such as writing research articles, book chapters, or even full books. In addition, due to their involvement in research groups, teachers also looked to get financial funding for their research projects.

The collaboration in research-based professional development also received much attention from researchers (Paltridge & Starfield, 2016). According to Loughran (2014) and McEvoy et al. (2019), collaborating with postgraduates, other research team members, and local and international networking can bridge teachers' skill gaps, divide research responsibility, and alleviate time constraints. Griffiths et al. (2014) and Tanner and Davies (2009) contend that knowledge sharing among colleagues and collaborative research projects develops teacher educators' research confidence and, consequently, their research output. The significance of collaboration in the research field is also recognised in developed countries such as China, where it is recommended in research

studies that increased collaboration with local colleagues and developing international networks can improve the global ranking of universities. Gong et al. (2021) analysed the literature covering Chinese teachers' research from 2002 to 2018 and found that a single author wrote slightly over 50 per cent of the publications, over 30 per cent were co-authored, and three authors wrote 15 per cent. Moreover, in China, publishing is a critical evaluation factor for the academic promotion of Chinese teachers (Zhu, 2010). In China, many people hold professional titles, such as "Professor," to signify more recognition from peers and prestigious universities. In order to have their names mentioned as Professors when applying for research funding, several Chinese teachers state that they would like to obtain a Ph.D degree (Gong et al., 2021). The analysis of research culture in a global context reveals that universities in developed countries have a strong research culture. Academic research substantially impacts the growth of knowledge-based organizations in developed countries. However, Subhani et al. (2017) mentioned that universities in underdeveloped nations have good teaching traditions but a weaker research culture.

In the Pakistani context, public and private universities are required by Higher Education Commission to establish a solid commitment to developing knowledge through research culture (Subhani et al., 2017). Therefore, universities are currently seen as having key responsibilities for research in Pakistan. HEC is assisting higher education institutions in Pakistan with their research endeavours. HEC has taken numerous measures to improve its professional development programs for teachers. The government has delegated complete authority to HEC to help universities enhance their higher education standards and build a research environment capable of meeting the nation's global needs. Several policies on research and innovation have been presented with the primary objective of increasing university faculty participation in research-related professional development activities. The HEC grants financial aid to university researchers and faculty through financial incentives. In addition, it determines the performance criteria for the faculty and the entire university. Therefore, research has become a source for individual faculty members and institutions of higher education to receive monetary support from national and international organisations (Lodhi, 2012; Naseem et al., 2019; Subhani et al., 2017). As a result, the collective efforts of all stakeholders can be viewed as a massive step toward aligning Pakistan's educational system with those of other countries and making it more competitive.

Furthermore, in order to accomplish the target of quality research, HEC has implemented a series of programs to strengthen academics' research capabilities and new hiring and promotion standards for academic faculty. Likewise, standards are evaluated on the base of the amount and quality of research papers published in prestigious peer-reviewed publications. HEC helps public institutions by providing research funds, high-speed internet, and access to the latest academic publications. HEC's funding for public universities significantly increases the number of research articles published in journals with a high impact factor. Thus, public universities are producing a growing number of PhDs by adopting a research culture in Pakistan. Though teachers' interest in research-based professional development has increased significantly in recent decades, however, teacher educators' research-based professional development needs were not the subject of extensive research (Subhani et al., 2017). MacPhail and O'Sullivan (2019) analysed that less number of research studies have been conducted on teachers' research-based professional development needs. Therefore, researchers intended to fill up the study gaps left by prior studies because more research on this topic is needed, as suggested by MacPhail and

O'Sullivan in 2019. There is a compelling need to investigate the research-based professional development needs of teacher educators at the University of Education, Lahore, Pakistan as it is determined to improve the ranking of the university after its establishment in September 2002. This study is significant because it has the potential to make a significant contribution to the field by identifying the research-based professional development needs of teacher educators. The findings of this study may have an impact on the current professional development structure and initiatives at the University of Education Lahore. Based on the study's findings, university administration may be able to provide professional development opportunities to teacher educators based on a needs analysis.

Objectives of the Study

The objective of the study was as follows:
1. To explore the research-based professional development needs of teacher educators serving at the University of Education Lahore, Pakistan.

Research Question

The research question of the study was as follows:

    1.   What are the research-based professional development needs of teacher educators serving at the University of Education Lahore, Pakistan?

Method and Material

The present study aimed to investigate the research-based professional development needs of teacher educators serving at the University of Education Lahore, Pakistan. The study was qualitative in nature and was based on the interpretivist research paradigm, which holds that reality can be understood and explained by looking at it through the participants' direct experiences and perspectives (Cohen et al., 2007; Creswell, 2003). According to Lydall et al. (2005), "a fundamental tenet of interpretivism is

that people seek to create meaning of their experience from the response cited within human consciousness" (p. 1). A total of 25 teacher educators from the University of Education Lahore were randomly selected as participants in the study. The interview method was used to collect the data from participants. Researchers developed a semi-structured interview guide for teacher educators after reviewing relevant literature. The researchers provided study participants with the right to anonymity, voluntary participation, and the right to withdraw from the study at any stage since the ethical concerns were considered most important throughout the research process. Semi-structured interviews were conducted until saturation. Data were analysed by using NVivo 11 plus software. The interviews were transcribed verbatim and translated into English. The data were analysed by using thematic analysis. For thematic analysis of data, the interview schedules were transcribed and then transliterated. Braun et al. (2019) and Regmi et al. (2010) defined transliteration as a rephrasing process that repurposes words from one language into another by changing or harmonizing their meanings, whereas the transcription process involves converting audio recordings of interviews into written statements (Cassol et al., 2018). Codes were assigned to the themes, and sub-themes emerged as a result of the data analysis provided by interviewees. Pursuing doctoral programs for research purposes, article writing and publications, research projects, training in quantitative and qualitative research software for data analysis, promotion of research culture, and collaboration were the six major themes that emerged from the study.

Findings of the Study

1. Pursuance of Doctoral Programs for Research Purposes

Non-PhD participants mentioned that they realise the worth of Ph.D. degree for their

professional as well as career advancement. They further explained that teachers who joined the teaching profession with a doctorate engage themselves more in research activities as compared to those with non-PhD teachers. Moreover, because of their Ph.D., they had a greater opportunity to take advantage of funding or research incentives for their research work. Most of the non-PhD faculty members mentioned that they were waiting for opportunities in the form of study leave or relaxation in workload to pursue the Ph.D.

One participant mentioned:

> I am considering pursuing a doctorate in order to contribute to academic research. Now, there is no survival without Ph.D. degree at the university level, either in terms of professional development or selection for higher scales. Therefore, if I get study leave, I shall definitely go for Ph.D. (P7)

Another teacher educator who supported the same idea stated:

> I'm interested in being engaged in the doctoral program for research purposes; we want to strengthen our teaching through research. (P11)

One of the teacher educators expressed his desire to pursue a Ph.D. in the following way:

> I am aware that my professional advancement is linked to my Ph.D. Thus, if the university administration gives me relaxation in my current workload and non-teaching assignment during thesis work as given during course work, I would like to get a Ph.D. degree. (P 25)

2. Article Writing and Publication

Most teacher educators considered writing articles, publishing papers, and attending conferences as the most critical research endeavour. They expressed that they face pressure from the university to focus on article publication to improve the ranking of the university. They explained that they focus more on article writing in the HEC recognised peer-reviewed research journals because their advancement in career was linked to this criterion. Furthermore, article publication reflects faculty members' aptitude for research culture and professional development. As a result, they continued to try to stay connected with research to apply new ideas in the classroom and contribute to the educational field by addressing various educational problems and issues and suggesting appropriate solutions. Some faculty members described that the competition is very high. Articles published in international and impact factor research journals are now given more importance. Thus, they must be trained to write for impact-factor research journals. One of the teacher educators stated:

> Teachers must gain professional development training to meet the needs of a rapidly evolving educational field by publishing their work in the HEC recognised peer-reviewed journals. (P4)

Another teacher educator expressed his view in the following manner:

> Teachers are supposed to receive research skills training, including how to write exceptional research articles and then publish them in impact factor journals because the number of research papers published in national and international journals heavily influences teachers' academic advancement. (P13)

One of the teacher educators mentioned the need related to article writing and publication in the following way:

> The requirements for career advancement are changing over time. Teachers whose research articles are published in impact factor research journals are attractive to university administration because they reflect the university's performance at the international level. (P 20)

3. Research Projects

Most of the teacher educators expressed that there was a link between teachers' desire for professional development to obtain higher professional titles [professor] and receiving funding for a project to demonstrate their capability and excellence in the research field. So, they had a strong desire to win and write research projects to improve their profile. Faculty members who did not have exposure to the process of writing a research project and getting funding for research projects exhibited the need to get training in research project writing to get funding, either nationally or internationally.

One of the teacher educators expressed her thoughts in the following way:

> Publishing for a research journal and executing research projects can strengthen teachers' professional expertise and confidence to address changing educational demands. Therefore, professional development needs should include how to write and exhibit research projects. (P2)

One teacher educator expressed her ideas:

> Research projects have a considerable impact on the academic advancement of

teachers; therefore, we need research-based professional development, such as the writing of substantial research projects. (P15)

Another teacher educator expressed his view in the following manner:

> Writing for a research project and executing research projects can provide a forum [an opportunity] for teachers to feel a sense of accomplishment by increasing their professional expertise and confidence to meet the demands and challenges of a changing educational environment. Therefore, PD needs relating to research, such as exploring, winning, writing, and presenting research projects, should be addressed. (P24)

4. Training in Quantitative and Qualitative Research Software for Data Analysis

Some faculty members mentioned the need for data analysis training. They explained that they needed to stay updated on various data analysis software such as SPSS, NVivo, AMOS, etc. As a result, data analysis training would benefit them and their students in their research work. One of the teacher educators mentioned the training in the use of quantitative and qualitative data analysis software in the following way:

> Without the help of research software, teachers seem unable to conduct any research. Data analysis software plays an increasingly important role in the world of research. Teachers must be current with emerging technologies and research software to compete in today's competitive environment. Therefore, we want additional training in this particular area. (P12)

Another teacher educator stated this need as:

I am familiar with and knowledgeable about using SPSS software for quantitative data analysis; however, I am interested in learning about new data analysis techniques such as NVivo and AMOS. This training will enable me to confidently use various research instruments and present data analysis more comprehensively and appealingly. (P 22)

Another teacher educator who supported the same idea stated:

The need for training in using the different latest software for data analysis such as NVivo and AMOS has become indispensable. Thus, we must know how to use this software for conducting research. (P17)

5. Promotion of Research Culture

Most of the faculty members considered the promotion of research culture within universities as an important element for the professional development of teachers and familiarity with updated knowledge and skills in the educational field. They stated that academic challenges could only be overcome by adopting a research culture and providing professional development opportunities to teacher educators involved in research endeavours. Some teacher educators stated that research culture could be promoted at the university by reducing workload and reducing non-teaching tasks for teachers. One of the teacher educators stated this need as follows:

Promoting research culture within universities is essential because academic challenges can only be addressed by developing research culture and offering professional development

opportunities to teacher educators involved in research activities (P1).

Another teacher educator negatively expressed her view:

Universities must cultivate a research culture, but this is not the case in our institution. The university management does not follow the teaching and non-teaching workload as other universities do. Other universities do not engage teacher educators in non-teaching tasks and relax them for their research activities. (P15)

Another teacher educator stated:

Universities need to promote research culture, but this target can only be achieved by reducing teachers' workload and non-teaching assignments. (P11)

6. Collaboration

Most teacher educators emphasized the need for collaboration and networks between researchers and academicians in the relevant research-related areas at regional, institutional, national, and international levels. They further explained that teachers needed to understand and be aware of the initiatives in other pioneering and famous institutions and departments. Different universities' technology and development activities can mutually benefit one another. As a result, university teacher educators are expected to participate in a significant amount of collaboratively conducted professional development activities. Moreover, most faculty members considered collaborating with a research team within one's department easier because it allows teachers to learn from each other's knowledge, skills, and experiences. Hence, the collaboration for research activities, whether national or international, was perceived

as an important element for the professional development of teacher educators.

One teacher educator stated the viewpoint:

> I can learn just as much from my colleagues as they can from me. It is the best way to write articles. We are all different, so I am curious about what others perform and how it works. So I am interested in participating in collaboration activities related to research. (P4).

Another teacher educator stated:

> Potentially, we can simultaneously learn from one another's skills and knowledge if we discuss research methods and findings in academic publications. Teachers need to work together to remain effective. (P10).

Another teacher educator expressed the same idea in the following manner:

> Collaboration is an important component of the teacher's practice, and sharing ideas and explaining the methodologies in research articles and their use in the classroom may allow us all to benefit from one another's experiences and knowledge. (P19)

Another teacher educator stated:

> Collaboration among university campuses and institutions situated outside the university greatly benefits the teachers and the university overall. In a nutshell, we need plenty of research-based
> professional development training through collaboration. (P7)

Discussion

Teacher educators identified research-based professional development needs at the University of Education Lahore. This study sought to identify the research-based professional development needs of teachers serving at the University of Education, Lahore, Pakistan. According to the study's results, teacher educators were interested in pursuing doctoral programs for research purposes as they wanted to strengthen their teaching through research. This study finding was in line with Gong et al. (2021) research findings in which teachers considered pursuance of a doctoral program as an important element at the university level. According to the present study's findings, teacher educators' key research needs were article writing and publications and writing research projects because they considered that conducting research, presenting research papers, and winning research projects enables teachers to consider the current situation in their local contexts and address educational problems and issues. Moreover, when teachers know how to write academically, they are more confident and independent in their work. Faculty members viewed research publications and research projects as significant in determining career advancement for teacher educators at the university. Teachers expressed a desire to progress in their professions to a higher scale (i.e., professor). Therefore, they kept trying to publish more articles in various national and international journals. They aimed to explore, write, win, and present research projects to enhance their professional development. A professional title, such as "Professor," is prevalent at universities because it is connected with higher levels of recognition. According to MacPhail and O'Sullivan (2019), a robust research profile is required for most teachers to succeed in their careers. Thus, this study's finding was consistent with MacPhail and O'Sullivan's (2019), Meeus et al. (2018), Ulla's (2018), and Grima-Farell's

(2017) study results. Moreover, university teacher educators exhibited the need for professional training in quantitative and qualitative research software for data analysis that may fulfill the requirement of the latest trends in the research field. Data analysis software plays an increasingly important role in the world of research. This study finding might be considered a new one that does not match with other research studies because this new theme emerged in the context of Pakistan at the university level, where efforts are being made to introduce and familiarise teachers with the latest data analysis techniques for making the research work more comprehensive and attractive even for a lay person. University teacher educators expressed their desire to promote research-oriented culture as every country can only survive by getting benefits from others' research and conducting research to solve their educational problems. This research finding complemented the findings of Noreen and Adeeb's (2014) study, which revealed that teachers perceived the promotion of research culture as a substantial contribution to the body of knowledge. Teacher educators have emphasized the need for collaboration. Collaboration in research-related professional development has received much attention in recent studies (Lunenburg et al., 2014; Paltridge & Starfield, 2016). University teacher educators were expected to participate in a significant amount of collaboratively conducted research-based professional development. This research finding is consistent with McEvoy et al. (2019) and MacPhail et al. (2019), which showed that professional development based on research had been adopted worldwide to increase teaching quality. Researchers conclude that providing research activities based on need analysis improves and expands teachers' research skills and enhances their professional experiences.

Conclusion

The identification of research-based professional development needs can provide a base to design and structure a mechanism that can help the university administration to improve its quality and ranking in the world. The faculty members are considered the heart of any university who can contribute their immense efforts to achieve the target of the university. Therefore, it is fundamental to provide the required resources and support to teachers so they can play their role in the development of the university. The findings of this study shed light on the research-based professional development needs of teacher educators serving at the University of Education, Lahore. They highlighted pursuing a doctoral program for research purposes, article writing and publication, research projects, quantitative and qualitative research software for data analysis, promotion of research culture, and collaboration as their fundamental research-based professional development needs because they can facilitate them to improve their teaching. Therefore, this needs analysis can facilitate the administration to design a mechanism for teacher educators' professional development.

Recommendations

- Based on the findings of this study, it might be recommended that the Higher Education Commission (HEC) can facilitate universities by providing sufficient funding to universities so sufficient need-based research opportunities can be provided to teacher educators for their professional development.
- The university might regularly organize research-based professional development workshops and training sessions to improve teachers' academic research skills to survive in the competitive world of research.

- The university management may involve policymakers, and professional development providers to provide practical professional assistance to teacher educators toward research-based professional development.

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