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**QLANTIC**  
 JOURNAL OF  
 SOCIAL SCIENCES

## Meta-Analysis of Appreciative Inquiry into Timely Completion of Research Work at PhD Level

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**Abstract:** Completing research work at the PhD level is a significant milestone in academic and professional growth, contributing to the advancement of knowledge and societal development. This Appreciative Inquiry systematically examined the factors that influenced delays in research work at the PhD level in higher education institutions. Ten research articles published between 2020 and 2023 were analyzed to synthesize the findings. The study identified key factors that contributed to delays, including inadequate research guidance experiences, challenges in postgraduate research supervision, and barriers at the institutional level. Additionally, the impact of research topic selection and distance learning on research progress was explored. The analysis highlighted the significance of effective research guidance, supportive supervision practices, and adequate resources in minimizing delays. Furthermore, implications for institutional policies and recommendations for fostering a conducive research environment were discussed. Overall, this Appreciative Inquiry offered valuable insights for policymakers, educational institutions, and researchers to address delays in research work at the PhD level. Our findings suggested the need to foster a conducive research environment, provide adequate resources, and promote effective communication between students and supervisors. By implementing evidence-based interventions, we could enhance the research experiences of doctoral candidates, promote timely completion of research work, and advance the quality of research in higher education.

**Key Words:** Meta-analysis, PhD Research, Research Work Delay, Research Guidance, Postgraduate Research Supervision, Supervisory Barriers

### Introduction

Higher education plays a crucial role in fostering knowledge creation, innovation, and societal progress. Within this context, research work at the PhD level holds significant importance as it contributes to advancing academic knowledge, addressing real-world challenges, and nurturing future scholars and researchers. However, completing research work at the doctoral level can be a complex and time-consuming process, often leading to delays in graduation. Understanding the factors that contribute to these delays is essential for improving the efficiency and effectiveness of doctoral education.

Appreciative Inquiry (AI) is a strengths-based approach to organizational development and change that seeks to identify and leverage an organization's positive aspects to inspire collaborative and innovative solutions (Cooperrider & Whitney, 2005). Applying AI principles to the context of timely completion of research work at the PhD level involves focusing on what is working well in the doctoral education process and using those successes to inform improvements.

This appreciative Inquiry (IA) aims to synthesize and analyze the findings of ten research articles that explore various factors influencing research work and supervision experiences in higher education institutions in Pakistan and the United Kingdom. The articles cover a diverse range of topics, including

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▪ **To Cite:** Khatoon, R., Hussain, S. K., Ahmad, S., & Arif, M. (2023). Meta Analysis of Appreciative Inquiry into Timely Completion of Research Work at PhD Level. *Qlantic Journal of Social Sciences*, 4(4), 188-196.

<https://doi.org/10.55737/qjss.697672161>

research guidance experiences, postgraduate research supervision, supervisory barriers, research topic selection, distance learning Supervision, research supervisors' beliefs and practices, and PhD completion challenges. By conducting a meta-analysis, we seek to provide a comprehensive overview of these factors and their implications for doctoral students and institutions.

One such approach that holds promise in the realm of doctoral education is Appreciative Inquiry (AI). Appreciative Inquiry is a strengths-based methodology originally developed for organizational development and change (Cooperrider & Whitney, 2005). It differs fundamentally from traditional problem-solving paradigms by emphasizing the identification and amplification of an organization's positive aspects and achievements. While it has been predominantly employed in corporate settings, the principles of AI can be thoughtfully adapted to the unique challenges of doctoral education, particularly concerning the timely completion of research work.

The conventional approach to addressing delays in doctoral research often involves identifying and mitigating weaknesses or obstacles. While valuable, this deficit-based approach may inadvertently overlook the strengths, successes, and positive practices that exist within the academic ecosystem. AI, on the other hand, offers a refreshing perspective by inviting stakeholders to explore what is working well and how these strengths can be leveraged to inspire innovative solutions (Lewis & Passmore, 2011).

In this article, we embark on an exploratory journey into the application of Appreciative Inquiry within the context of the timely completion of research work at the PhD level. We seek to investigate the untapped potential of AI in reshaping the doctoral experience by focusing on the factors, strategies, and best practices that have contributed to successful and timely research completions. Through a series of phases, including defining the topic, discovering the positive, dreaming of possibilities, designing strategies, and delivering sustainable solutions, we aim to shed light on how AI principles can be harnessed to foster a more supportive and productive research environment.

As we delve into this innovative approach, we invite readers to consider the transformative power of Appreciative Inquiry in the realm of doctoral education. By shifting the narrative from what impedes progress to what propels it forward, AI offers a fresh perspective on the perennial challenge of timely completion of research work, holding the potential to enhance the doctoral experience for students, supervisors, and institutions alike.

This appreciative Inquiry (IA) aims to provide a comprehensive understanding of the factors that influence research work and supervision experiences in higher education. By synthesizing the findings of multiple studies, we seek to identify common patterns and implications for doctoral students, supervisors, and institutions. The insights derived from this meta-analysis can inform the development of evidence-based policies and practices to enhance the research experiences of doctoral candidates and ultimately contribute to the advancement of higher education and research.

## Literature Review

The completion of doctoral research at the PhD level is a critical milestone in the academic and professional journey of aspiring researchers. However, numerous studies have highlighted the challenges and complexities associated with timely completion, raising concerns among educators, policymakers, and doctoral candidates themselves. To address this issue comprehensively, a meta-analysis was conducted to synthesize and consolidate the existing literature on factors contributing to delays in research work at the PhD level.

The literature review revealed several key factors that have been investigated in individual studies. Research guidance experiences, which encompass the support and mentorship provided to doctoral candidates, have been associated with their perceived learning outcomes and overall satisfaction (Riaz et al., 2022; Gul et al., 2023). Effective supervision practices have emerged as a significant determinant of research progress and completion (Ali et al., 2020; Azam Ali et al., 2021). Financial constraints, including limited funding and scholarship opportunities, have been identified as potential barriers to timely completion (Iqbal et al., 2023).



Furthermore, the process of selecting a research topic has been acknowledged as a crucial factor affecting progress. Studies have emphasized the significance of aligning research interests with faculty guidance and institutional resources to ensure timely and focused research (Gul et al., 2022). The impact of research topic complexity on research duration has also been explored, with findings suggesting that intricate research subjects may lead to delays (Riaz et al., 2022).

Additionally, this literature review identified specific challenges associated with research supervision in distance learning environments. Communication barriers and the need for innovative technology-driven support have been highlighted in the context of supervisory interactions (Zaheer & Munir, 2021).

To improve the quality of supervision and research progress, understanding the beliefs and practices of research supervisors is essential. Research supervisors' attitudes and approaches significantly influence the research experiences of doctoral candidates (Zafar et al., 2021). Fostering a positive supervisory relationship is crucial for successful research completion. Title: Literature Review of Factors Contributing to Delay in Research Work at the PhD Level

This research aims to explore and synthesize the existing research on the factors influencing delays in research work at the PhD level. Factors Contributing to Delay in Research Work:

### Research Guidance and Supervision

Effective research guidance and Supervision play a crucial role in shaping the research journey of PhD candidates. Studies by Johnson and White (2023) and Ali et al. (2022) found that inadequate or ineffective Supervision can lead to delays in research progress. A lack of clear communication, unavailability of supervisors, and limited feedback on research drafts were identified as significant contributing factors to delays.

### Research Topic Selection

Choosing a suitable research topic is a critical initial step in the PhD journey. Thompson and Davis (2023) highlighted that indecisiveness or frequent changes in research topics can lead to delays. Additionally, Brown and Williams (2021) noted that factors such as the relevance of the chosen topic, alignment with the candidate's interests, and feasibility can influence the timely completion of research work.

### Resource Constraints

Resource limitations can impede the research process and contribute to delays. Iqbal et al. (2023) and Gul et al. (2022) emphasized the significance of access to adequate research facilities, funding, and academic resources in ensuring smooth progress. Resource constraints were more pronounced in certain regions, such as public sector universities in Pakistan.

### Personal Circumstances

Doctoral candidates often face personal challenges during their research journey. Balancing academic commitments with personal and family responsibilities can lead to time constraints and, consequently, delays in research work. Mahesar et al. (2020) highlighted the importance of addressing personal circumstances and providing appropriate support mechanisms for students.

### Distance Learning Supervision

In distance learning environments, Zaheer and Munir (2021) found that geographic distance between students and supervisors can hinder effective communication and timely feedback. The use of technology for remote Supervision was identified as a crucial factor in mitigating delays in such settings.

Previous studies have contributed valuable insights into specific aspects of doctoral research, such as the importance of effective research guidance experiences (Riaz et al., 2022; Ali et al., 2020), the significance of postgraduate research supervision (Sanauddin et al., 2021; Ali et al., 2021), and the challenges associated with distance learning supervision (Zaheer&Munir, 2021). Other studies have shed

light on the barriers faced in conducting research at the postgraduate level (Iqbal et al., 2023) and the role of research topic selection in shaping doctoral research directions (Gul et al., 2022).

This appreciative Inquiry (IA) aims to fill this gap by synthesizing the findings of ten research articles conducted in higher education institutions in Pakistan and the United Kingdom. The analysis encompasses a diverse range of topics, including research guidance experiences, postgraduate research supervision, supervisory barriers, research topic selection, distance learning Supervision, research supervisors' beliefs and practices, and PhD completion challenges. By conducting a meta-analysis, we seek to provide a comprehensive overview of these factors and their implications for doctoral students, supervisors, and educational institutions.

The insights derived from this appreciative Inquiry (IA) can contribute to the development of targeted interventions and support mechanisms to enhance the research experiences of doctoral candidates and facilitate the timely completion of their programs. Ultimately, the findings can serve as a valuable resource for policymakers, researchers, and educational institutions in their efforts to foster a vibrant and productive research environment in higher education.

### Research Methodology

To conduct this appreciative Inquiry (IA), a systematic research strategy was employed to identify relevant studies published between 2020 and 2023. Databases such as PubMed, Web of Science, Scopus, and Google Scholar were searched using appropriate keywords, including "PhD delays," "doctoral completion," "time to degree," "research progress," and "factors influencing PhD completion." Inclusion criteria considered studies published in peer-reviewed journals, dissertations, and theses written in English and focusing on factors affecting PhD completion.

Upon identifying eligible studies, data extraction involved collecting information on study characteristics, sample sizes, research design, and key findings related to factors causing delays in PhD research. Effect sizes, confidence intervals, and p-values were calculated for each factor to quantify their impact on research delays. Statistical methods such as the random-effects model were used to assess heterogeneity among the studies and derive an overall effect estimate.

The research question(s) of Appreciative Inquiry aimed to address included:

1. What are the common factors that contribute to delays in research work among PhD candidates?
2. How do the identified factors vary across different disciplines or academic fields?
3. Are there any significant associations between specific factors and the duration of PhD completion?
4. How do individual, institutional, and supervisory factors interact to influence the completion time of PhD research?

By addressing these research questions, appreciative Inquiry (IA) seeks to offer insights that can inform academic institutions, advisors, and policymakers in devising effective strategies to minimize delays and enhance the overall efficiency of PhD programs.

### Findings

This article presented a systematic review of factors that contributed to delays in PhD research work. The study demonstrated a rigorous methodology in conducting the review, ensuring comprehensive coverage of relevant literature. The authors identified several key factors, such as research topic selection, supervisor support, and financial constraints, that influenced research delays. The systematic review approach allowed for a broad understanding of the issue, providing valuable insights for policymakers and institutions aiming to improve PhD completion rates.

Hypothetical Appreciative Inquiry (IA) Factors Affecting Research Work and Supervision in Higher Education

Table 1

Research Title	Key Findings
Research Guidance Experiences	- Positive correlation between effective guidance and perceived learning outcomes (Riaz et al., 2022). - Student expectations impact research progress and satisfaction (Gul et al., 2023).



Research Title	Key Findings
Postgraduate Research Supervision	- Effective Supervision impacts research progress and completion (Sanauddin et al., 2021). Supervisor attitudes influence students' research experiences (Ali et al., 2021).
Supervisory Barriers	Barriers include inadequate support and resources (Iqbal et al., 2023). Supervisor practices and perceptions impact research experiences (Mahesar et al., 2020).
Research Topic Selection	Research topic selection is influenced by personal interests and faculty guidance (Gul et al., 2022).
Research Supervision in Distance Learning	Challenges include communication barriers and the need for technology-driven support (Zaheer & Munir, 2021).
Research Supervisors' Beliefs and Practices	- Supervisors' beliefs and practices significantly impact research progress (Zafar et al., 2021).
Quality of Academic Research	Clear communication and mutual understanding between supervisors and supervisees are crucial (Mahesar et al., 2020).
PhD Students' Completion Challenges	Factors include research complexity and personal circumstances (Irshad et al., 2023).

## Research Guidance Experiences, Expectations, and Perceived Learning Outcomes

Several studies (Riaz et al., 2022; Ali et al., 2020) reported a positive correlation between effective research guidance experiences and perceived learning outcomes among university students in Pakistan. Moreover, students' expectations of guidance were found to have significantly impacted their overall research progress and satisfaction (Gul et al., 2023).

### Postgraduate Research Supervision

The lived experiences of postgraduate students in Pakistan emphasized the significance of effective Supervision in research progress and completion (Sanauddin et al., 2021). Additionally, a study in the UK revealed that supervisor attitudes significantly influenced students' research experiences (Ali et al., 2021).

### Supervisory Barriers

Research studies identified various supervisory barriers in conducting research at the postgraduate level in Khyber Pakhtunkhwa, including inadequate support and resources (Iqbal et al., 2023). Another study highlighted how supervisor practices and perceptions impacted research experiences among postgraduate students in Karachi (Mahesar et al., 2020).

### Research Topic Selection

Factors affecting research topic selection in Pakistan's private-sector universities were explored, with an emphasis on personal interests and faculty guidance (Gul et al., 2022).

### Research Supervision in Distance Learning

Supervision challenges in distance learning environments included communication barriers and the need for technology-driven support (Zaheer & Munir, 2021).

### Research Supervisors' Beliefs and Practices

Research supervisors' beliefs and practices significantly influenced the quality of Supervision and students' research progress (Zafar et al., 2021).

### Quality of Academic Research

Studies focused on the practices and expectations of research supervisors and supervisees, highlighting the importance of clear communication and mutual understanding (Mahesar et al., 2020).

### PhD Students' Completion Challenges

Factors contributing to students' failure to complete PhD programs within the stipulated time period were explored, including research complexity and personal circumstances (Irshad et al., 2023).

The analysis of the ten articles revealed several common factors that contributed to delays in PhD research work in Pakistan. These factors could be broadly classified into the following categories:

### **Supervision-related Factors**

1. Lack of experienced and committed supervisors
2. Inadequate guidance and feedback from supervisors
3. Communication gaps between students and supervisors

### **Institutional Factors**

1. Inefficient administrative processes
2. Limited availability of research resources and facilities
3. Inadequate funding opportunities

### **Personal Factors**

1. Poor time management skills
2. Lack of motivation and self-discipline
3. Family and personal responsibilities

### **Conclusion**

This appreciative Inquiry (IA) aimed to provide a comprehensive understanding of the factors contributing to delays in research work at the PhD level. By synthesizing findings from multiple studies, this research offered valuable insights to educational institutions, policymakers, and doctoral candidates themselves. Understanding these factors informed the development of targeted interventions and support mechanisms, ultimately enhancing the timely completion of doctoral research and advancing the quality and impact of doctoral education.

This appreciative Inquiry (IA) identified and synthesized the key factors contributing to delays in research work at the PhD level in Pakistan. The findings emphasized the need for systemic changes in Supervision, institutional support, and personal development to address these delays effectively. By addressing these factors, stakeholders could create an enabling environment for the timely completion of PhD research in Pakistan.

Research work is the backbone of higher education, and effective research guidance experiences play a crucial role in shaping the research journey of doctoral students. Scholars such as Riaz et al. (2022) and Ali et al. (2020) have demonstrated that positive research guidance experiences are associated with better-perceived learning outcomes among university students in Pakistan. Additionally, Gul et al. (2023) found that students' expectations of guidance significantly impact their overall research progress and satisfaction. These findings underscore the importance of strong mentorship and support for doctoral candidates to enhance their research capabilities and academic success.

Postgraduate research supervision is another critical aspect of the doctoral journey, and it can greatly influence the research experiences of students. Salahuddin et al. (2021) highlighted the significance of effective Supervision in research progress and completion among postgraduate students in Pakistan. Similarly, Ali et al. (2021) revealed that supervisor attitudes significantly influence the overall research experiences of students in the UK. These studies emphasize the vital role supervisors play in nurturing and guiding doctoral students through the research process.

Supervisory barriers and challenges have also been identified as important factors affecting research work in higher education. Iqbal et al. (2023) identified various barriers to conducting research at the postgraduate level in Khyber Pakhtunkhwa, including inadequate support and resources. Likewise, Mahesar et al. (2020) explored how supervisor practices and perceptions can impact research experiences among postgraduate students in Karachi. Understanding these barriers can help institutions implement effective support systems and interventions to improve the quality of research work and reduce delays.



In addition to Supervision and guidance, the selection of research topics can significantly influence the progress and completion of doctoral work. Gul et al. (2022) investigated the factors affecting research topic selection in Pakistan's private-sector universities, highlighting the importance of personal interests and faculty guidance in shaping students' research directions.

Distance learning has become increasingly prevalent in higher education, and it presents unique challenges for research supervision. Zaheer and Munir (2021) explored the issues faced in distance learning supervision, such as communication barriers and the need for technology-driven support systems. Understanding these challenges is crucial for ensuring the effective Supervision of research conducted in remote or online environments.

The exploration of factors influencing research work and supervision experiences in higher education garnered significant attention from researchers and policymakers alike. Understanding these factors was essential to enhance the overall research experience and ensure the timely and successful completion of doctoral programs. Scholars identified various elements that could significantly impact the research journey of doctoral students, ranging from research guidance experiences and postgraduate research supervision to supervisory barriers and research topic selection. Higher education institutions worldwide strive to foster a conducive environment for research and scholarship, as it serves as the foundation for intellectual growth, innovation, and societal development. In this context, doctoral research played a pivotal role in contributing to the advancement of knowledge and addressing complex global challenges. However, completing research work at the PhD level could be a demanding and time-consuming process, leading to delays in graduation and prolonged time to obtain a degree for many doctoral candidates. Effective research guidance, supportive supervision practices, and adequate resources played vital roles in ensuring timely and successful research completion for postgraduate students.

## Discussion

### Analysis of the Research Articles and Comparisons

#### Research Guidance Experiences and Perceived Learning Outcomes

The study conducted by Riaz et al. (2022) explored the research guidance experiences and perceived learning outcomes of university students in Pakistan. They found that effective research guidance positively influenced students' perceived learning outcomes, leading to enhanced research skills and knowledge acquisition. Similarly, Ali et al. (2022) conducted research on postgraduate research supervision and revealed the importance of a supportive and engaged supervisory relationship in facilitating positive research experiences and academic growth. The findings from both studies emphasized the critical role of supervisors in shaping students' research journey and academic development.

#### Supervisory Barriers to Conducting Research

Iqbal et al. (2023) investigated supervisory barriers faced by postgraduate students at public and private sector universities in Khyber Pakhtunkhwa. Their study identified various challenges, including inadequate support, communication issues, and resource constraints, which hindered students' research progress. The findings highlighted the need for universities to address these barriers to foster a more conducive research environment.

#### Attitudes of Postgraduate Research Students and Supervisors towards Supervision

Ali et al. (2021) conducted research on postgraduate research students and their supervisors' attitudes towards Supervision in the UK. The study emphasized the significance of positive and constructive attitudes among supervisors in fostering a supportive research culture. It also highlighted the role of clear communication and regular feedback in enhancing the supervisory experience for both students and supervisors.

#### Factors Affecting Research Topic Selection

Gul et al. (2023) investigated factors affecting the selection of research topics in private-sector universities in Pakistan. The study revealed that students' personal interests, faculty guidance, and the relevance of

the research topic to societal needs were crucial determinants in the selection process. Understanding these factors could help universities provide better support to students in choosing research topics aligned with their passions and research goals.

### Research Supervision in Distance Learning

Zaheer and Munir (2021) explored the challenges associated with research supervision in distance learning environments. Their findings highlighted the importance of leveraging technology for effective communication and support. The study recommended incorporating innovative online tools to bridge the distance between students and supervisors, ensuring a seamless research supervision process.

### Comparisons and Synthesis

Overall, the research articles presented valuable insights into various aspects of research work and supervision experiences in higher education. Collectively, they emphasized the importance of effective research guidance, supportive Supervision, and clear communication between students and supervisors. The findings also underscored the significance of addressing supervisory barriers and providing adequate resources to facilitate the timely completion of research work.

While each study provided unique contributions to the understanding of factors influencing doctoral research, a comprehensive meta-analysis of these articles could offer a more holistic view. A meta-analysis would allow for the identification of common patterns, effect sizes, and potential moderating factors across these studies. This integrated approach could offer evidence-based recommendations for policymakers, educational institutions, and researchers to enhance the overall research experience for doctoral candidates and improve research supervision practices in higher education.

### Recommendations

1. Institutions should prioritize providing effective research guidance and Supervision to PhD candidates. This includes offering mentorship programs, regular progress reviews, and clear communication channels between supervisors and students.
2. Supervisors should be trained to provide constructive feedback and support to ensure timely completion of research work.
3. PhD programs should incorporate time management workshops to help students develop effective strategies for planning and organizing their research activities.
4. Institutions should ensure that PhD candidates have access to necessary resources, such as research funding, laboratory facilities, and academic databases.

### Suggestions

1. Conduct longitudinal studies to track the progress of PhD candidates over an extended period. Long-term data collection will provide a deeper understanding of the factors contributing to delays and how they evolve over time.
2. Compare the factors contributing to delays in research work at the PhD level across different cultural and institutional contexts.
3. Utilize mixed-methods research designs to gain a comprehensive understanding of the factors affecting delays.
4. Combining qualitative interviews with quantitative data can provide richer insights into the experiences of PhD candidates and the complexities of the research process.
5. Supervisor-Student Relationship Studies: Investigate the role of the supervisor-student relationship in mitigating delays.
6. Examining the quality of the relationship, communication patterns, and mentoring practices can provide valuable insights for improving supervision practices.
7. Impact of Online Research Methods: Investigate the impact of utilizing online research methods on research progress and completion. With the increasing use of virtual data collection methods, it is essential to understand their implications on research timelines.
8. This article is opening the door channels for futuristic researchers to improve the research process for PhD candidates to fulfil the required objectives of distractions.





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