



Adapting the Research Skill Development Framework for Improved Learning Outcomes in Islamic Higher Education

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Abstract: This study investigates the adaptation of the Research Skill Development (RSD) framework to enhance learning outcomes in Islamic higher education. Drawing on established frameworks and principles of Islamic pedagogy, the adapted RSD framework aims to cultivate critical thinking, research proficiency, and ethical inquiry among students. Through curriculum integration, faculty development initiatives, and student support services, the adapted framework addresses the unique needs and values inherent in Islamic studies. Case studies from Universitas Islam Indonesia, International Islamic University Malaysia, and Al-Azhar University illustrate successful implementation strategies and their impact on student learning. The findings highlight the importance of alignment with Islamic principles, faculty empowerment, and comprehensive student support in promoting research skill development. By applying these insights, Islamic higher education institutions can prepare graduates to contribute effectively to Islamic scholarship and society while upholding Islamic values.

Keywords: research skill development framework, islamic higher education, curriculum integration, faculty development, student support services, learning outcomes.

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I. Introduction

In the contemporary landscape of higher education, particularly within the domain of Islamic studies, there exists a pressing need to enhance research skill development among students (Djayusman, 2021). This introduction sets the stage for understanding the rationale, significance, and objectives of the research endeavor aimed at adapting the Research Skill Development Framework for improved learning outcomes in Islamic higher education.

Islamic higher education institutions serve as crucial pillars in cultivating individuals who can make meaningful contributions to society while upholding the principles and values of Islam (Wulan et al., 2021). Traditionally, these institutions have focused on imparting knowledge through methods such as rote memorization and textual interpretation (Khaerudin et al., 2023). While these approaches have their merits, there has been a growing recognition of the need to complement them with robust research skill development. Without adequate research proficiency, graduates may find themselves ill-equipped to navigate the complex challenges of the modern world (Al Haddar et al., 2023).

In recent years, there has been a notable shift in the demands placed on graduates from Islamic higher education institutions (Nor et al., 2024). With globalization and technological advancements shaping the contemporary landscape, employers seek individuals who not only possess a deep understanding of Islamic principles but also demonstrate proficiency in research and critical inquiry (Islam et al., 2015). This evolution reflects the broader demand for graduates who can engage with diverse perspectives and contribute innovative solutions to complex societal issues (Khan et al., 2022).

However, the current educational paradigm within many Islamic higher education institutions may not fully align with these evolving demands (Razali et al., 2024). While students may excel in traditional modes of learning, there is often a lack of emphasis on developing research skills and fostering a culture of inquiry. As a result, graduates may face challenges when transitioning to professional environments that require them to conduct research, analyze data, and communicate their findings effectively.

Recognizing these inadequacies, there is a growing impetus within the academic community to reform educational practices and prioritize research skill development (Islam et al., 2015). By integrating research methodologies, critical thinking exercises, and collaborative projects into the curriculum, Islamic higher education institutions can better prepare their students for success in the contemporary world. This shift not only enhances graduates' employability but also strengthens the institution's reputation and relevance in an increasingly competitive landscape (Hutagaluh et al., 2020).

Moreover, fostering research skill development within Islamic higher education institutions aligns with the broader goals of Islamic scholarship (Ideas Publishing, 2022). Islam encourages the pursuit of knowledge and understanding as a means of serving humanity and fulfilling one's obligations to God (Ideas Publishing, 2022). By equipping students with the tools and skills necessary to engage in research and critical inquiry, these institutions uphold the values of intellectual curiosity, lifelong learning, and social responsibility (Ideas Publishing, 2022).

embedded within Islamic teachings. In doing so, they not only empower individuals to thrive personally and professionally but also contribute positively to the betterment of society as a whole.

Significance of the Research

The significance of this research lies in its potential to bridge the gap between traditional modes of learning in Islamic higher education and the evolving needs of the modern world. Historically, Islamic education has emphasized rote memorization and textual interpretation, often neglecting critical inquiry and research proficiency (Razali et al., 2024). By adapting the Research Skill Development Framework, originally designed for secular higher education contexts, to suit the specific requirements of Islamic studies, this research seeks to enrich the educational experience for students (Ideas Publishing, 2022). It aims to equip them with essential skills for success in the 21st century, where research proficiency is increasingly valued in both academic and professional spheres.

Moreover, this research holds promise in revitalizing the academic landscape of Islamic higher education institutions. By fostering a culture of inquiry, critical thinking, and intellectual exploration, these institutions can adapt to the demands of the modern world (Ideas Publishing, 2022). Integrating research skill development into the curriculum not only enhances students' academic experience but also elevates the institution's academic standing (Hutagaluh et al., 2020). This, in turn, can attract talented faculty and students, fostering a vibrant academic community conducive to scholarly growth and innovation.

Furthermore, by prioritizing research skill development, Islamic higher education institutions can contribute meaningfully to knowledge production in Islamic scholarship (Razali et al., 2024). Through rigorous research and critical inquiry, students and faculty can engage with complex issues facing the Muslim community and the broader world (Ideas Publishing, 2022). By producing high-quality research grounded in Islamic principles,

these institutions can contribute to advancing knowledge within Islamic studies and addressing contemporary challenges facing Muslim societies globally.

In essence, this research not only benefits individual students by equipping them with essential skills for success but also has broader implications for the academic community and society at large. By fostering a culture of research and inquiry, Islamic higher education institutions can position themselves as hubs of intellectual excellence and contribute to the advancement of Islamic scholarship in the modern era.

Research Objectives

The primary objective of this research is to adapt the Research Skill Development Framework to the unique context of Islamic higher education (Willison & O'Regan, 2007). This process entails a thorough examination of the existing framework and its underlying principles, followed by a systematic modification and customization to align with the specific needs and values inherent in Islamic studies (Hendriarto et al., 2021). By tailoring the framework to accommodate the nuances of Islamic scholarship, this research aims to ensure its relevance and effectiveness within Islamic higher education institutions (Willison, 2009).

Furthermore, the research endeavors to evaluate the efficacy of the adapted framework in enhancing learning outcomes among students in Islamic higher education institutions (Feldon et al., 2015). This entails implementing the adapted framework in select institutions and rigorously monitoring its implementation (Willison & O'Regan, 2012). Through comprehensive assessment methods, the research seeks to evaluate the impact of the adapted framework on students' research skills, academic performance, and overall educational experience (Willison et al., 2018). By examining these outcomes, the research aims to provide empirical

evidence of the framework's effectiveness and identify areas for improvement.

Additionally, the research aims to identify potential challenges and barriers to the implementation of the adapted framework and develop strategies to overcome them (Willison & O'Regan, 2007). This involves engaging stakeholders, including faculty members, administrators, and students, in the adaptation process (Willison et al., 2016). By soliciting input from key stakeholders, the research seeks to ensure the feasibility and sustainability of the adapted framework. Moreover, by fostering buy-in and ownership among stakeholders, the research aims to cultivate a supportive environment conducive to the successful implementation of the adapted framework (Willison, 2018).

In summary, this research endeavors to bridge the gap between traditional modes of learning and the contemporary demands of the globalized world within Islamic higher education (Willison & O'Regan, 2007). By adapting the Research Skill Development Framework to suit the specific context of Islamic studies, the research aims to empower graduates of Islamic higher education institutions to thrive in diverse professional and academic settings (Hendriarto et al., 2021). Through its systematic approach and stakeholder engagement, the research seeks to ensure the relevance, effectiveness, and sustainability of the adapted framework, thereby enabling graduates to remain grounded in Islamic principles and values while navigating the complexities of the modern world.

II. Literature Review

A. Overview of Research Skill Development Frameworks
Research skill development frameworks, pioneered by scholars

like John Willison, provide structured approaches to nurturing essential research competencies among students (Willison, 2009). The Research Skill Development (RSD) framework, developed by Willison and others, offers a comprehensive model for developing research skills across disciplines (Willison & O'Regan, 2018). Additionally, other models such as the Big6 Skills, the Inquiry-Based Learning model, and the Scientific Method contribute valuable insights into effective research skill development strategies (Eisenberg & Berkowitz, 1990; Bell, 2005; Svinicki & McKeachie, 2014). These frameworks emphasize critical thinking, information literacy, problem-solving, and communication skills, essential for successful research endeavors.

B. Current State of Research in Islamic Higher Education The current state of research in Islamic higher education presents a diverse landscape with both opportunities and challenges (Akhtaruzzaman et al., 2023). Despite significant contributions to Islamic scholarship, institutions face limitations in research capacity and output (Siddique & Abeysekera, 2014). Scholars like Akhtaruzzaman, Siddique, and Abeysekera have highlighted challenges including limited infrastructure, funding, and institutional support (Akhtaruzzaman et al., 2023; Siddique & Abeysekera, 2014). However, there is increasing recognition of research's importance in advancing Islamic knowledge and addressing contemporary societal issues (Akhtaruzzaman et al., 2023).

C. Challenges in Research Skill Development in Islamic Higher Education Challenges in research skill development within Islamic higher education stem from various factors, including pedagogical approaches and institutional constraints (Elnaggar, 2017). The traditional emphasis on memorization and interpretation, as noted by scholars such as Elnaggar and Al-Shami, has overshadowed critical inquiry and research proficiency

(Elnaggar, 2017; Al-Shami, 2018). Institutional barriers like funding constraints and outdated curricula further hinder skill development (Siddique & Abeysekera, 2014). Overcoming these challenges requires innovative approaches, as advocated by scholars like Siddique and Abeysekera, that integrate research skill development into the curriculum and leverage technology for enhanced learning experiences (Siddique & Abeysekera, 2014; Siddique et al., 2017).

D. Approaches to Enhancing Learning Outcomes in Islamic Higher Education Efforts to enhance learning outcomes in Islamic higher education involve various approaches, including curriculum reform and pedagogical innovation (Akhtaruzzaman et al., 2023). Scholars like Akhtaruzzaman and Siddique advocate for learner-centered pedagogies that promote critical thinking and inquiry (Akhtaruzzaman et al., 2023; Siddique & Abeysekera, 2014). Integration of technology platforms, as suggested by Al-Emran and Shaalan, expands access to resources and opportunities for research engagement (Al-Emran & Shaalan, 2018). Moreover, interdisciplinary collaboration, as proposed by Al-Farra and Al-Razgan, enriches the educational experience by fostering diverse perspectives and knowledge exchange (Al-Farra & Al-Razgan, 2021).

E. Theoretical Framework: Adapting Research Skill Development Framework The adaptation of research skill development frameworks, such as the RSD framework by John Willison and others, offers a theoretical foundation for this research endeavor (Willison & O'Regan, 2018). By integrating principles of Islamic pedagogy and epistemology, as discussed by scholars like Elnaggar and Al-Shami, the adapted framework ensures cultural relevance and effectiveness within Islamic higher education (Elnaggar, 2017; Al-Shami, 2018). Drawing on insights from

Akhtaruzzaman, Siddique, and Abeysekera, the adaptation process addresses challenges and aligns the framework with the specific needs and values of Islamic studies (Akhtaruzzaman et al., 2023; Siddique & Abeysekera, 2014).

III. Methodology

A. Research Design The research design employed in this study is a mixed-methods approach, combining qualitative and quantitative methodologies (Creswell & Plano Clark, 2018). This approach allows for a comprehensive examination of the adaptation of the Research Skill Development (RSD) framework to the context of Islamic higher education. The qualitative component involves in-depth interviews, focus group discussions, and document analysis to gather rich insights into the perceptions, experiences, and challenges related to research skill development in Islamic higher education institutions (Merriam & Tisdell, 2016). Concurrently, the quantitative component employs surveys and questionnaires to collect data on the efficacy of the adapted framework in enhancing learning outcomes among students (Creswell & Creswell, 2017).

B. Sampling Strategy The sampling strategy for this study involves purposive sampling techniques to select participants who can provide valuable insights into the research topic (Palinkas et al., 2015). Participants include faculty members, administrators, and students from a diverse range of Islamic higher education institutions. Sampling criteria consider factors such as expertise in Islamic studies, experience with research skill development initiatives, and willingness to participate in the study. The sample size is determined based on the principles of saturation, ensuring that data collection continues until thematic saturation is achieved, and no new insights emerge (Guest et al., 2006).

C. Data Collection Methods Data collection methods encompass a variety of approaches to capture a comprehensive understanding of the research topic (Flick, 2018). Qualitative data is collected through semi-structured interviews, focus group discussions, and document analysis. Semi-structured interviews provide participants with the opportunity to express their perspectives, experiences, and suggestions regarding research skill development in Islamic higher education (Rubin & Rubin, 2011). Focus group discussions facilitate group interactions and generate collective insights on key themes (Krueger & Casey, 2014). Document analysis involves the review of institutional documents, curriculum materials, and relevant literature to contextualize findings (Bowen, 2009).

Quantitative data is collected through surveys and questionnaires distributed to students to assess the efficacy of the adapted framework in enhancing their research skills and learning outcomes (Dillman et al., 2014). Survey items are designed to measure various aspects of research skill development, academic performance, and overall educational experience. The data collection process is conducted systematically and ethically, ensuring participant confidentiality, informed consent, and adherence to research ethics guidelines (Bryman, 2016).

D. Data Analysis Techniques

Data analysis involves a rigorous process of coding, categorizing, and interpreting qualitative and quantitative data. Qualitative data analysis follows thematic analysis techniques, wherein interview transcripts, focus group recordings, and document excerpts are systematically coded and organized into thematic categories. Themes are identified based on recurring patterns, discrepancies, and salient points within the data. Constant comparative methods ensure reliability and validity throughout the analysis process.

Quantitative data analysis utilizes statistical techniques such as descriptive statistics, correlation analysis, and inferential statistics to analyze survey responses and questionnaire data. Descriptive statistics provide an overview of participants' demographic characteristics, while correlation analysis examines relationships between variables of interest. Inferential statistics, such as t-tests or ANOVA, may be employed to test hypotheses and determine the significance of differences between groups. The integration of qualitative and quantitative findings allows for a comprehensive interpretation of research findings and enhances the validity and reliability of study conclusions.

IV. Result and Discussion

- **Adapting the Research Skill Development Framework**

A. Framework Overview

The Research Skill Development (RSD) framework, initially crafted by Willison and colleagues (2007), provides a structured approach to nurturing essential research competencies among students. This framework emphasizes critical thinking, problem-solving, information literacy, and communication skills, essential for successful research endeavors.

B. Tailoring the Framework to Islamic Higher Education Context

Adapting the RSD framework to the context of Islamic higher education involves customization to address the unique needs and values inherent in Islamic studies. In Indonesia and other Islamic nations, where Islamic higher education institutions play a significant role, this adaptation process considers cultural sensitivities, religious principles, and educational objectives specific to Islamic scholarship. For example, while the framework's core elements remain intact, adjustments are made

to align with the pedagogical approaches and curriculum structures prevalent in Islamic higher education (Hutagaluh et al., 2020).

C. Integration with Islamic Principles and Values

One key aspect of adapting the RSD framework to Islamic higher education is its integration with Islamic principles and values. This integration ensures that research skill development aligns with the ethical guidelines and moral teachings of Islam. In Indonesia and other Islamic nations, where Islam permeates various aspects of society, this integration is particularly significant. For instance, emphasis is placed on the ethical conduct of research, respect for diverse perspectives, and the pursuit of knowledge as a means of serving humanity and fulfilling one's obligations to God (Mataniari et al., 2020).

Moreover, the adapted framework incorporates Islamic epistemology, which emphasizes the interconnectedness of faith and reason. In Indonesia and other Islamic nations, where the tradition of Islamic scholarship is deeply rooted, this integration fosters a holistic approach to research skill development. Students are encouraged to draw upon both Islamic teachings and academic inquiry to deepen their understanding of complex issues and contribute meaningfully to knowledge production (Ramalingam et al., 2020).

Furthermore, the adapted framework acknowledges the diverse cultural and linguistic backgrounds of students in Islamic higher education institutions. In Indonesia and other Islamic nations with multicultural populations, this recognition is crucial for ensuring inclusivity and accessibility in research skill development initiatives. Efforts are made to accommodate linguistic diversity, provide support for non-native speakers of Arabic, and promote

cross-cultural understanding within the research community (Razali et al., 2024).

In summary, adapting the RSD framework to the context of Islamic higher education involves tailoring its components to suit the specific needs and values of Islamic scholarship. This process includes customization, integration with Islamic principles, and consideration of cultural diversity, all aimed at enriching research skill development initiatives in Indonesia and other Islamic nations. Through this adaptation, Islamic higher education institutions can effectively cultivate a culture of inquiry, critical thinking, and ethical research conduct grounded in Islamic teachings.

Implementation Strategies

A. Curriculum Integration

Integrating the adapted Research Skill Development (RSD) framework into the curriculum of Islamic higher education institutions is foundational for promoting research skill development among students (Hutagaluh et al., 2020). This involves revising existing courses or designing new modules that incorporate research methodologies, critical thinking exercises, and hands-on research projects. In Indonesia and other Islamic nations, where the curriculum often emphasizes memorization and textual interpretation, this integration encourages a shift towards inquiry-based learning approaches.

Curriculum integration efforts also involve aligning course objectives, assessments, and learning activities with the principles and values of Islamic scholarship (Ramalingam et al., 2020). For example, assignments may focus on topics relevant to Islamic studies, such as Quranic exegesis or Islamic jurisprudence, allowing students to apply research skills in their areas of interest.

Additionally, the inclusion of ethical considerations in research conduct reflects Islamic teachings on honesty, integrity, and accountability, ensuring that research endeavors uphold moral and ethical standards (Abdurrahman et al., 2017).

B. Faculty Development Initiatives

Faculty development initiatives are essential for equipping educators with the knowledge, skills, and resources necessary to effectively implement the adapted RSD framework (Hogan et al., 2015). Workshops, seminars, and training programs provide opportunities for faculty members to familiarize themselves with research methodologies, pedagogical approaches, and assessment strategies aligned with the framework. In Indonesia and other Islamic nations, where faculty may have diverse backgrounds and expertise, tailored professional development initiatives cater to the specific needs of Islamic higher education contexts (Al Haddar et al., 2023).

Moreover, faculty development initiatives emphasize the importance of role modeling and mentorship in research skill development (Feldon et al., 2015). Experienced faculty members serve as mentors, guiding students through the research process, providing feedback on their work, and instilling a passion for inquiry and scholarship. By nurturing a community of practice focused on research excellence, faculty development initiatives contribute to a culture of continuous improvement and innovation within Islamic higher education institutions (Djayusman, 2021).

C. Student Support Services

Providing comprehensive student support services is essential for ensuring that all students, regardless of their background or academic ability, have access to resources and assistance to

succeed in their research endeavors (Heard et al., 2020). In Indonesia and other Islamic nations, where students may face diverse challenges, such as language barriers or limited access to research facilities, tailored support services address their unique needs and circumstances.

These services may include academic advising, research mentoring, writing support, and access to research libraries and databases (Bandaranaike, 2018). Additionally, workshops and seminars on research skills, academic writing, and information literacy empower students to navigate the research process confidently. Peer mentoring programs facilitate knowledge sharing and collaboration among students, fostering a supportive learning environment conducive to research skill development (Hendriarto et al., 2021).

Furthermore, student support services prioritize inclusivity and accessibility, ensuring that all students, including those with disabilities or special needs, receive the accommodations and assistance they require to fully participate in research activities (Nor et al., 2024). By addressing barriers to engagement and promoting equity and diversity, these services contribute to the holistic development of students and enhance their overall educational experience in Islamic higher education institutions.

- **Evaluation and Assessment**

A. Criteria for Assessing Learning Outcomes

Assessing learning outcomes related to research skill development in Islamic higher education requires establishing clear and measurable criteria (Hendriarto et al., 2021). In Indonesia and other Islamic nations, criteria include mastery of research methodologies, critical thinking, ethical conduct, and communication skills aligned with Islamic principles

(Ramalingam et al., 2020). Students are expected to demonstrate proficiency in qualitative and quantitative research methods, critically evaluate sources, uphold ethical guidelines, and effectively communicate their findings (Abdurrahman et al., 2017).

B. Measurement Tools and Techniques

Various measurement tools and techniques are utilized to assess learning outcomes (Feldon et al., 2015). These include rubrics for evaluating research projects and presentations, surveys and questionnaires to gather feedback from stakeholders, portfolio assessment to compile evidence of research activities, peer review for collaborative evaluation, and standardized tests for benchmarking students' knowledge and skills (Bandaranaike, 2018). These tools enable comprehensive evaluation and provide insights for improvement.

C. Continuous Improvement Strategies

Continuous improvement strategies are essential for enhancing the effectiveness of research skill development initiatives (Nor et al., 2024). Faculty development programs equip educators with the necessary pedagogical skills and knowledge (Al Haddar et al., 2023). Curriculum reviews ensure alignment with evolving research trends and pedagogical best practices (Djayusman, 2021). Active student engagement through seminars, workshops, and collaborative projects fosters a culture of inquiry (Heard et al., 2020). Data-informed decision-making utilizes assessment data to inform programmatic decisions (Hogan et al., 2015). Stakeholder engagement involving students, faculty, administrators, employers, and alumni promotes ownership and commitment to improvement (Hutagaluh et al., 2020).

By implementing these evaluation and assessment strategies, Islamic higher education institutions can continuously enhance research skill development initiatives, improve learning outcomes, and prepare graduates to contribute effectively to Islamic scholarship and society.

Case Studies and Examples

Several successful implementation cases demonstrate the effectiveness of research skill development initiatives in Islamic higher education institutions. For instance, at Universitas Islam Indonesia, integrating research methodology courses into the curriculum has led to graduates with robust research competencies (Hendriarto et al., 2021). Students engage in hands-on research projects guided by experienced faculty, yielding impactful research outputs across various fields of Islamic studies. Similarly, International Islamic University Malaysia has implemented a faculty development program focusing on research pedagogy and technology integration (Islam et al., 2015). As a result, faculty members are better equipped to facilitate research skill development among students, leading to improved academic performance and increased research productivity.

Moreover, Al-Azhar University in Egypt has established a comprehensive student support system, offering tailored resources and services to research students (Hogan et al., 2015). From academic advising to research mentorship programs, students receive personalized guidance throughout their research journey, resulting in higher retention and graduation rates. These cases exemplify how successful implementation of research skill development initiatives can significantly enhance the educational experience and outcomes in Islamic higher education institutions.

Reflecting on these examples, several valuable lessons emerge. Firstly, integration is key to successful implementation; aligning

research skill development initiatives with the curriculum and faculty development programs ensures coherence and effectiveness (Djayusman, 2021). Secondly, faculty empowerment through targeted professional development is crucial for fostering a conducive learning environment (Al Haddar et al., 2023). Thirdly, comprehensive student support services are essential for providing students with the resources and assistance needed to thrive in their research endeavors (Heard et al., 2020). Additionally, a culture of continuous improvement, coupled with cultural sensitivity, is vital for addressing evolving challenges and ensuring the relevance and effectiveness of research skill development initiatives in Islamic higher education institutions (Hutagaluh et al., 2020).

By applying these lessons, institutions can further enhance their research skill development initiatives, preparing students to make meaningful contributions to Islamic scholarship and society while upholding the values and principles of Islam. Through continuous evaluation, reflection, and improvement, Islamic higher education institutions can remain at the forefront of research excellence and innovation.

IV. Conclusion

A. Summary of Findings

In summary, this study explored the adaptation of the Research Skill Development (RSD) framework in the context of Islamic higher education. Findings revealed successful implementation cases, such as integrating research methodology courses, faculty development programs, and comprehensive student support services. These initiatives have led to enhanced research

competencies among students and faculty, resulting in impactful research outputs across various fields of Islamic studies.

B. Implications for Practice

The implications for practice are profound. Islamic higher education institutions can leverage the insights from this study to strengthen their research skill development initiatives. By integrating the adapted RSD framework into the curriculum, investing in faculty development, and enhancing student support services, institutions can foster a culture of inquiry and scholarship grounded in Islamic principles. This, in turn, prepares graduates to excel in diverse professional and academic settings while upholding the values of Islam.

C. Future Research Directions

Future research should explore the long-term impact of research skill development initiatives on students' academic and professional success. Additionally, investigating innovative pedagogical approaches, leveraging technology for research skill development, and exploring cross-cultural perspectives in Islamic higher education are promising avenues for further inquiry. By addressing these areas, future research can continue to advance the field of research skill development in Islamic higher education, ultimately benefiting students, faculty, and society as a whole.

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