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A recent study on islamic religious education teachers' competencies in the digital age: a systematic literature review

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ABSTRACT

Diverse research findings pertaining to the proficiency of Islamic religious education teachers may serve as a starting point, if not a benchmark, for the development of such instructors' proficiency, particularly with regard to the proficiencies that are imperative for educators in the digital age. Consequently, this study aims to investigate the competencies of Islamic religious education teachers that have been mentioned most frequently in research over the past decade, as well as strategies for developing those competencies and technological (digital) competencies. To achieve this aim, this study employed a systematic literature review method by utilizing publication data spanning a decade (2013–2023) to investigate a particular theme. The preferred reporting items for systematic reviews and meta-analyses (PRISMA) was utilized to evaluate the findings. This research shows findings regarding teachers' obligations to develop technological (digital) competencies, in addition to the four teacher competencies (pedagogical, professional, personal, and social). The aforementioned conditions are predicated on the necessity for collaborative, creative, and creative learning, which makes it highly sought after by students. In contrast, forthcoming investigations should strive to gather empirical data regarding approaches to cultivating digital proficiency among Islamic religious education instructors, given the prevailing inclination towards learner-centered learning in the twenty-first century as opposed to teacher-centered learning.

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1. INTRODUCTION

Many aspects of the global educational landscape have been revolutionized with the advent of the industrial revolution 4.0 [1], especially the COVID-19 pandemic disaster which requires all educational elements (teachers, students and parents) to adapt quickly in every digital-based learning process [2]–[4]. The teacher, who drives each and every learning process, must continuously enhance their competence [5]. such as, pedagogical [6], professional, personable [7], [8] and social competencies. Nonetheless, while striving to enhance their own expertise, educators encounter a multitude of obstacles, encompassing global, social, and digital challenges [9]. Therefore, enhancing digital literacy serves as a pertinent support system [10], as Krumpik expressed the view that every teacher in the process of increasing competence in the digital era must have a good literacy foundation [11] so as to obtain maximum competency results in the learning process.

In the digital age, this statement also applies to teachers of Islamic religious education [12], [13]. Less-than-professional Islamic religious education teachers will significantly affect students' learning processes [14]–[16]. Consistent with Ma'arif's [17] assertion that teachers of Islamic religious education ought to possess adeptness in classroom management, awareness of contemporary challenges (such as digitalization), competence, and resourcefulness and able to provide motivation to students through positive thoughts [18]. Especially in 21st century learning which requires teachers to have four competencies (4C), namely critical thinking, creative thinking, collaboration, and communication [19]. In addition to this, Alimni underscores the significance of Islamic religious education instructors in shaping, directing, and nurturing the latent abilities of every student, thereby equipping them to confront the multifaceted challenges of our age [20]. Because a teacher who has expertise in the field of Islamic knowledge will experience failure if he cannot convey it to students optimally (transfer of knowledge) [21].

Given the aforementioned circumstances, it is imperative to enhance the proficiency of Islamic religious education teachers. Multiple studies of professional Islamic religious education instructors in Austria, a secular country, support this, as they continue to strive for the most effective methods of imparting Islamic religious education to students [22]–[24]. In contrast, Alhashmi and Moussa-Inaty [25] elaborated in his presentation that Islamic religious education professionals in the United Arab Emirates place greater emphasis on fostering a commitment to lifelong learning, drawing inspiration from the teachings of Islamic scholar Al-Zarnuji. Meanwhile, according to Dzul *et al.* [26], professional Islamic religious education teachers in Malaysia are teachers who are able to work in groups (collaboratively) to increase their own efficacy because teacher collaboration will result in feedback, good teaching practices, and the creation of a positive school climate, especially in the development of education in the digital world [27]. In line with Janawi *et al.* [28] they revealed that Islamic religious education teachers, apart from being experts in scientific and methodological fields, must also have digital competence (use of social media such as YouTube, TikTok, and Facebook) in learning. Çebi and Reisoğlu [29], in his research on teachers in Turkey, revealed that teachers' digital competence does not only involve using media. However, it is broader, namely about how to organize content. Editing and security on digital media is an obligation for teachers [30] to transfer knowledge to students [31]. Based on several research results, this research has free space to conduct an in-depth exploration of the competency of Islamic religious education teachers in the digital era with various challenges and the speed of technology through several research questions, as follows: i) What are the most frequently mentioned competencies of Islamic religious education teachers? ii) What is the strategy for developing the competency of Islamic religious education teachers? iii) What is the technological (digital) competency of Islamic religious education teachers?

2.   METHOD

This research method used a systematic literature review [32], namely a scientific study method which analyzed published articles/books on a certain theme. In this research, the main theme was the competency of Islamic religious education teachers in the digital era. Several platforms were used as references in searching for articles, such as Scopus and Google Scholar, which have global reach. Some of the keywords that researchers used in the process of searching for articles were: Islamic teacher competence, Islamic education teacher, teacher competence in Islamic education, Islamic digital, Islamic education in digital, and teacher in the digital era. The results of the search for articles were analyzed using preferred reporting items for systematic reviews and meta-analyses (PRISMA) [33], [34], namely by planning, identifying articles, testing the suitability of articles, and conducting analysis to strengthen the correct results.

2.1. Inclusion and exclusion in literature selection

The literature selection process used in this research was based on five provisions. First, select the data used in research in the form of publication results, such as journal articles, proceedings, conferences, book reviews, and theses. However, this research was only limited to journal articles. Second, the publication data used by researchers only focuses on the last 10 years, in the 2013–2023 range, with certain themes, namely: Islamic teacher competence, Islamic education teacher, teacher competence in Islamic education, Islamic digital, Islamic education in digital, and teacher in the digital era. Third, the databases chosen by researchers from global databases are Scopus and Google Scholar. Fourth, the researcher's literature search process uses a third application, namely Publish or Perish 8, an application that is able to map literature based on certain themes and time periods. Fifth, in the process of searching for themes, the researcher used English because she wanted to obtain complete data regarding the Islamic teacher education trend in the digital era.

2.2. Eligibility screening and assessment

Filtering and assessment are based on the suitability of the journal articles searched based on several keywords, namely: Islamic education teacher competence, Islamic education teacher, Islamic religious

education teacher competence, Islamic education teacher, Teacher competence, Islamic education in digital, Islamic digital, Teacher in digital era through two global databases (Scopus and Google Scholar). The researcher's search process used the third application publish or perish 8. The data search was carried out on September 1 2023, the data findings from the search results are as follows: Based on the search results as shown in Table 1, obtained from two global databases (Scopus and Google Scholar) totaling 861, researchers carried out filtering by adjusting themes, keywords, and titles according to the focus of the study in this research, totaling 75, after The data taken is collected in the reference management application (Zotero) and the data is imported in the form of RIS and entered in the fourth application in the form of VOS Viewers so that an image is obtained as Table 1.

Table 1. Article search results are based on Scopus and Google Scholar databases

No	Keywords	Year	Database	Total
1	Islamic education teacher competence	2013-2023	Goggle Scholar	37
2	Islamic education teacher	2013-2023	Goggle Scholar	369
3	Islamic religious education teacher competence	2013-2023	Goggle Scholar	75
4	Islamic education teacher	2013-2023	Scopus	44
5	Teacher competence	2013-2023	Scopus	200
6	Islamic education in digital	2013-2023	Scopus	9
7	Islamic digital	2013-2023	Scopus	99
8	Teacher in digital era	2013-2023	Scopus	28
	Total			861

Based on Figure 1, it can be concluded that a dominant study was found about teaching, which is closely related to competence, while competence is also a mandatory requirement for Islamic education teachers, while competence, teacher, and Islamic education also have a connection with the digital age, so that the dominance of the four themes this is interesting to analyze in depth. Apart from that, the fact in schools is that Islamic religious education teachers need the best strategies to improve competence in the digital era with its various challenges.

Figure 1. Results of distributing scientific articles using VOS Viewers

2.3. PRISMA analysis

Based on the data obtained in Figure 1, the researchers carried out PRISMA analysis, as an option for classifying articles [34]–[36] the researchers carried out the analysis process based on initial searches through two global databases, namely, Google Scholar and Scopus. Initial search data based on themes found 861 data points from journal articles published in the 2013–2023 period (this data did not include proceedings, conferences, book reviews, or student final assignments). Of the 786 researchers, 224 articles with the same title and 526 articles with the same data results 210 articles were filtered, and 198 articles were reduced because they were not relevant. After that, there were 118 articles with eligibility. Meanwhile, the articles were declared complete and a total of 75 articles were accepted, with details of 21 articles from the Google Scholar database and 54 articles from the Scopus database. In the next stage, the RIS Vos Viewers application results were analyzed using the N-Vivo 12 Plus application, adapting to the three-research focused.

3.   RESULTS AND DISCUSSION

The researcher accepted seventy-five journal articles in accordance with the findings of the complete article, as determined by the results of the data analysis. The presentation will comprise the conclusions of multiple articles that have undergone PRISMA analysis, in addition to the year of publication and research title of each article in detail. Regarding teacher competency, teacher education in the millennial era, and the professionalism of Islamic religious teacher education instructors, three articles published in 2013 reached conclusions. Three conclusions emerged in 2014, focusing on the development of pedagogical competence among Islamic religious education instructors and their proficiency in producing instructional videos. In 2015, researchers identified three studies that reached conclusions on the application of mobile learning for Islamic religious education teachers and the role of scientific development in enhancing educators' collaboration skills. In the year 2016, two articles presented conclusions regarding the criticality of pedagogical competence among instructors of Islamic religious education. In 2017, one article concluded that Islamic religious education instructors need to select appropriate strategies to improve their professional and pedagogical competence.

We identified four articles in 2018 that concluded that Islamic religious education teachers should enhance their digital (social media) competencies. Additionally, these articles discussed the existence of specialized assessments for evaluating the digitalization competencies of teachers. A total of eight articles published in 2019 reached the consensus that digital certification is essential across all educational levels, from elementary to tertiary, with a particular emphasis on Islamic religious education. These articles argue that educators who possess educational certificates can effectively fulfill their responsibilities in the classroom. A total of fourteen articles published in 2020 reached the consensus that Islamic religious education instructors ought to maximize the development of their professional and pedagogical competencies while also enhancing their digital competencies. This is particularly true in several European nations, including Turkey, Spain, Austria, and Indonesia, where the implementation of digitalization-based learning is a challenge in the twenty-first century. In the year 2021, a collection of six articles reached the consensus that contemporary Islamic religious education instructors possess digital proficiency, as evidenced by their utilization of social media platforms during the learning process. Given these circumstances, educators must adapt their training to the challenges of the twenty-first century.

In 2022, ten articles were found that concluded about the importance of digital competence (a necessity for professional teachers) for Islamic religious education teachers, for example, research challenging village (Javanese) teachers to optimize digital platforms in learning Islamic religious education. Apart from that, teachers in Sweden are required to have professional competence in the form of digital competence. In 2023, twenty articles were found that concluded the determination of competency of Islamic religious education teachers, including; strategies for increasing competence, pedagogical, professional, social, personality competence as well as adding digital competence in welcoming the era of industrial revolution 5.0, The Effect of Teacher Professionalism in Islamic Religious Education in the Era of Society 5.0 in Indonesia, Implementation of the Pedagogic Competence of Islamic Religious Education Teachers, Teacher Spiritual Competence in Shaping the Personality of Madrasah Tsanawiyah Students, Analysis of Personality Competence of Islamic Religious Education Teachers in Improving Students' Moral, Supervision Model of Supervisors of Islamic Religious Education, Personality Competence of Islamic Religion Subject Teachers, The Importance of Teacher's Pedagogic Competence in Islamic Religious Education, Pedagogic and Professional Competence of Islamic Religious Education and Design of Islamic Religious Education: Purposes, alignment of curriculum components and contexts through a presentation about increasing the competency of Islamic religious education teachers above so that in the future the learning process can be innovative, effective, efficient and attracts students' interest in learning.

3.1. Islamic religious education teacher competencies

Islamic religious education teachers are basically obliged to have four basic competencies [37]–[40], namely: personality competence [41]–[44], pedagogical competence [21], [45]–[48]. professional competence [49], [15], [50] and social competence [40], [51]–[53]. However, with the development of contemporary challenges, Islamic religious education teachers have an obligation to improve their competence periodically [54]. This view was reinforced by Alhashmi and Moussa-Inaty [25] regarding the obligations of Islamic religious education teachers to improve the four basic competencies to the maximum. For example, in the learning process, teachers are required to be able to utilize various learning media [51] and the use of interesting learning strategies/models, so that students can focus on the learning process [55]–[58].

However, the advent of the digital age makes it necessary to have special competencies that Islamic religious education teachers must have [59]–[61]. Uerz *et al.* [9] view states that Islamic religious education teachers are required to have technological (digital) competence namely, how Islamic religious education teachers are able to integrate technology into the learning process so that students experience an innovative learning process [40], [52]. In the digital age, technological proficiency is an absolute necessity for educators,

according to Villarreal-Villa *et al.* [27], [59] Exemplary educators in the digital age are those who possess the knowledge and skill to effectively utilize technology, such as ICT-based learning, which has gained significant traction among students because the current classroom climate is more attractive to students [60]–[63] and parents [28], in contrast [19] to the atmosphere of classrooms where teachers predominantly present traditional Islamic religious education materials.

In research [64]–[66] reaffirm the necessity for educators to enhance their technological (digital) proficiencies. Amidst the COVID-19 pandemic, educators appeared to possess a limited comprehension of online learning, encompassing aspects such as classroom conditioning, material delivery, and learning evaluation. For instance, Nawi *et al.* [67] mobile-electronic learning module for Islamic religious education exemplifies its positive value by providing students and instructors with access to educational content from any location and at any time. Aside from that, Belmonte *et al.* [31], Sya'bani [68], and Duran *et al.* [69] perspective appears to be a viable alternative concerning the requirement that teachers possess a competency or expertise certificate in operating technology in the digital age (the twenty-first century), as a perfecting requirement for the four initial competencies of Islamic religious education teachers: Pedagogical, professional, personality, social [70], [13], [52], [71] and fifth is technological (digital) competence.

3.2. Competency development strategy for islamic religious education teachers

Accreditation of Islamic religious education teachers are an essential requirement that demands both individual and institutional action [45], [47], [63]. According to Alhashmi and Moussa-Inaty [25], schools in the UAE provide conventional teacher competency development materials to Islamic religious education teachers. Additionally, schools conduct training sessions for teachers twice a year and every two weeks as part of their professional development. Conduct monthly coaching for teachers, furnish necessary resources, and regard supervision as a form of self-evaluation for teachers [72]. Concurrently, cultivating personal proficiencies through engagement in teacher working groups (communities) devoted to Islamic religious education subjects [50], [73], [74]. According to Dzul *et al.* [26], the learning community for teachers (professional development) fostered constructive dialogue and cooperation.

According to lesson study [48], [63], lesson study for Islamic religious education teachers is a necessity that must be had. Moreover, several facts show that many Islamic religious education teachers still use traditional methods in delivering learning [75], [76]. Some real benefits in lesson study include: development of teaching materials, learning media and effective learning evaluation [47]. Attending training/workshops/seminars is an open space for Islamic religious education teachers to develop their competencies [46], [49], [77], such as training in selecting interactive learning media that encourages students' interest in learning and deepening the substance of Islamic religious education material [78], [79], as well as attending Islamic religious education teacher courses/workshops [21], [25], [45], [73]. Workshops basically have the aim of solving various problems in classroom learning, especially those that relate directly to students. An additional opportunity is to participate in the group-based teacher professional education program [80], [52], [41], [81]. By using social media, one can also personally advance the professionalism of Islamic religious education teachers [77], such as analyzing tutorials on YouTube pages, optimizing websites as learning materials and strengthening teacher literacy [71], [74], as well as reading the results of various research results (open access) as a reference in developing teacher professionalism [22], such as selecting digital learning media that is interesting and of interest to students. A different view was conveyed by O'dowd [82], Ramdhani [83], and Zulkifli *et al.* [19], that Islamic religious education teachers in the 21st century must have the initiative to collaborate with fellow teachers optimally in every learning process. With the shift from teacher-centered learning to student-centered learning, previously learning used conventional media, but now it is digital-based. So it is appropriate for Islamic religious education teachers to be able to follow educational developments optimally in order to realize integrative learning [15], [84], [85], effective, efficient and understood by students.

3.3. Technological (digital) competency of islamic religious education teachers

Digital competence is a necessity for Islamic religious education teachers in the 21st century. As Lockee explained, technological (digital) competence is the main choice that Islamic religious education teachers must have in the 21st century [64], [71]. Consistent with the assertions made by Alberth *et al.* [77] and Belmonte *et al.* [31], regarding the necessity for individual educators to investigate knowledge via technology, beginning with self-equipment and including the utilization of social media as a means to enhance competence, as well as [86] choosing learning by utilizing digital media. Cabero-Almenara [87] revealed a number of indicators of teacher digital competence, including: i) Professional dedication: concerning the means by which educators enhance students' learning potential and foster greater engagement with peers and guardians via sustainable and innovative technological communication; ii) Teachers' methods for utilizing, managing, and being accountable for all digital content constitute digital resources; iii) Digital pedagogy is a method of designing, executing, and integrating technology into learning processes that are centered on the student; iv) Assessment and feedback: The process of digitization enables educators to conduct direct

assessments and deliver constructive feedback to students; v) Enabling student empowerment: a space conducive to collaborative endeavors between instructors and learners. A benefit of digitalization is the ability to precisely select activities that correspond to the skills, interests, and abilities of the students, thereby reducing learning discrimination; vi) Facilitating competence: this serves as the ultimate metric for identifying educators who possess digital competence [87]. In this regard, instructors are obligated to furnish students who require them with digitalization resources.

In research [59], [88] posit that it is imperative to enhance teachers' digital competence, particularly as the "digital decade" approaches and serves as the foundation for the digital transformation of education in numerous countries. Consequently, teachers must be courageous in broadening their horizons and entering the realm of digitalization. We can identify several indicators of digital competence, such as proficiency in generating digital content that enhances the learning process, the ability to generate innovative solutions to diverse challenges in the digital realm, and the ability to enhance collaboration with students in the development of digital content [29], [89]. Islamic religious education teachers require a comparable state of being. In research [15], [22], [25], [90], assert that the professional competence of Islamic religious education teachers significantly influences the quality of student learning. Consequently, for the self-development of each individual teacher, it is imperative to enhance digital competence.

Furthermore, according to Hidayat [70], the existence of digitalization in the realm of education does not inherently pose a threat to teachers of Islamic religious education. On the other hand, it is crucial for teachers of Islamic religious education to possess the highest level of digital competencies to effectively leverage technological advancements so the learning process can run creatively, innovatively with the use of digital technology [19], [52]. The aforementioned conditions are the primary factor that underscores the significance of (digital) technology proficiency for teachers of Islamic religious education, given that the demands of the twenty-first century necessitate that all learning procedures be expedited through the optimization of (digital) technological devices.

4.   CONCLUSION

In summary, an examination of various scholarly sources leads to the conclusion that the proficiency of Islamic religious education teachers extends beyond the four fundamental competencies-namely, pedagogical, professional, personal, and social competencies. Nevertheless, that technological competence is an additional competency that educators must possess in order to facilitate students' engagement in learning that is innovative, creative, and relevant to their interests. Multiple approaches to enhancing the proficiency of Islamic religious education instructors are implemented in dual-pronged fashions. Initially, institutional development, which includes regularly scheduled activities such as providing teachers with training and guidance, Additionally, individual growth can be promoted through various means, including involvement in Teacher Working Group Associations or *Kelompok Kerja Guru* dedicated to Islamic religious education, diligent study of lessons, attendance at workshops and seminars, participation in Teacher Professional Development Programs or *Pendidikan Profesi Guru* , and strategic utilization of digital social media platforms to enhance the competencies of Islamic religious education teachers.

Acquiring technological proficiency in the realm of digital education is an essential requirement for each Islamic religious education instructor. Cabero-Almenara unveiled a number of indicators pertaining to technology (digital) competence, including mentor professional dedication, digital resources, digital pedagogy, assessment and feedback, student empowerment, and competence facilitation. The aforementioned findings suggest that in order to foster students' future interest in digital learning, Islamic religious education instructors must acquire digital competence as a prerequisite for delivering creative and innovative instruction. In contrast, forthcoming investigations should strive to gather empirical data regarding approaches to cultivating digital proficiency among Islamic religious education instructors, given the prevailing inclination towards learner-centered learning in the twenty-first century as opposed to teacher-centered learning.

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