

Models For Andragogy: A Systematic Review and Meta-Analysis

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Abstract

This article aims to look at adult learning models (andragogy), which are innovative learning models that can be applied to adult learning. The meta-analysis in this study used PRISMA. There were 56 articles analyzed from 2020 to 2022 published in international conferences and journals. The articles were collected using Publish and Perish application. The findings show that the learning model using the androgogical model is most widely used. Then the research model that is widely used is the development research model.

Keywords: Model, Androgogy, Meta Analysis, PRISMA Method.

Education has a significant impact on improving the welfare of society [1]. Education begins with parents, who are typically adults. The ability of adults to educate must be continually enhanced, as educating is essentially a form of learning. Parents play a crucial role. In fulfilling their role, parents must educate their children to the best of their abilities. In this context, it is important for parents, as adults, to understand various models of adult learning. One of the objectives is to assist their children with school assignments and to support their understanding of the learning process at home.

Adult learning is referred to as Andragogy [2]. There are various learning models in adult education (Andragogy), such as Online Learning, which became widely adopted during the COVID-19 pandemic. Another model is Academagogy [3], an approach that allows educators to select appropriate elements from Pedagogy (educator-centered), Andragogy

(learner-centered), and Heutagogy (learner-driven) to achieve better learning outcomes. Academagogy is typically applied in face-to-face meetings; however, it has also been adapted for online learning [3].

Focusing on human factors can contribute to increased motivation and the introduction of self-training approaches based on the principles of adult learning (Andragogy). For example, this relates to the depiction of adult education [4]. Adult learning also posits that adult learners have enhanced educational experiences when self-directed learning is included [5].

In contemporary times, technology and information play a crucial role in 21st-century learning, particularly in teaching and the challenges of Industry 4.0, which necessitate the integration of technology into the learning and teaching process. Previous studies on the role of technology in the learning process are known as TPACK; Technology-Pedagogy-Content-

Knowledge [6]. E-learning, or technology-based learning, is one such application, and there is also blended learning, which combines online and offline classes. The integration of technology usage has become a global trend in education [7].

Adult learning is one aspect of non-formal education that requires greater attention [8]. A lack of theory and knowledge can hinder adults' ability to comprehend knowledge or concepts, necessitating models or concepts tailored to adult learning (Andragogy). The foundation of this research is to explore the various models of adult learning and determine which model is most appropriate for adult education (Andragogy), as well as which models are most widely used. High-quality learning in adult education (Andragogy) can serve as a reference for educators in adopting innovative learning models.

METHOD

Using the PRISMA method, the article was developed into a systematic literature review. Articles were gathered using the "Publish or Perish" application with the keyword "Andragogy," resulting in a collection of 200 articles/journals. To synthesize the various studies, a systematic review is necessary to present comprehensive and balanced facts. The articles collected span from 2020 to 2022 and focus on andragogy. The search was then refined with the keyword "model for andragogy," yielding 56 articles.

Subsequently, the articles were further filtered using inclusion and exclusion criteria, as outlined in Table 1. The articles that met the inclusion criteria were then analyzed using the PRISMA method.

Table 1. Decision prerequisites

No.	Inclusion	Exceptions
1	English	Not English
2	Scopus article	Not scopus article
3	Conferences and Journals (International)	Book, Dissertation, Thesis

4	Year 2020-2022	Before 2020
5	Andragogy	In addition, the inclusion criteria
6	Model for andragogy	In addition, the inclusion criteria

As shown in Figure 1, there were 56 articles analyzed using the PRISMA method.

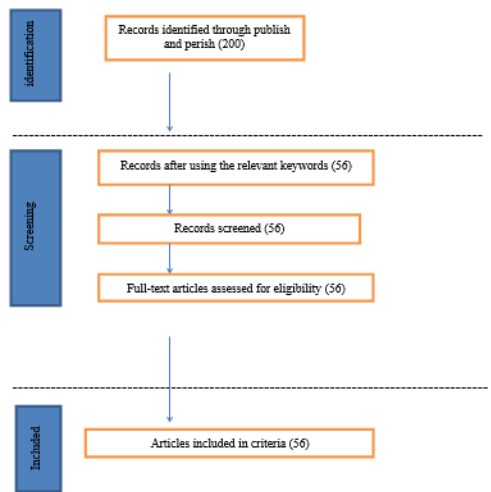


Figure 1. PRISMA method

RESULTS AND DISCUSSION

There are 20 articles published in 2020, 23 articles in 2021, and 13 articles published in 2022 on models for andragogy as shown in Figure.2. There are 46 articles published in international journals and 10 articles published in international conferences as shown in Figure 3.

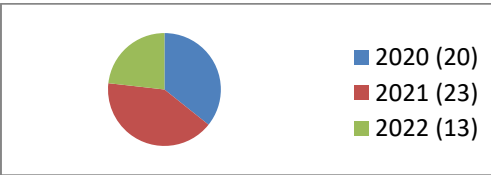


Figure 2: Number of Publications

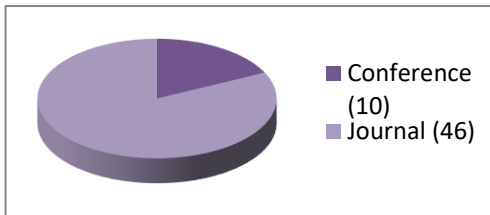


Figure 3. Place of Publication

The division of articles is based on the learning model used: Andragogy and Heutagogy [14], Value & Development Square (VDS) [12], Project based learning [1] [19], TAWOCK [7], Work based learning [8], Simprovisation [10], TPACK [6] [18], V-AK [2], Academagogy [3], Andragogical model [4] [5] [9] [13] [22] [28]

[31] [35] [39] [40] [44] [45] [46] [48] [50] [51] [55], Astin's I-E-O'S Model [11], Knowles Andragogy [15], Culture oriented pedagogical strategies [16], Mix approach [17], Case based learning [20], Evidence-based practice [21] [23], Webinar based teaching [24], Addressing reality [25], Heutagogy [26] [35], Problem-based learning [27], Online learning model [30] [34], Role play [32], Pedagogy consideration [33], Self-directed lerning [36], I-Poetry [37], Blended learning [38], Constructivism in ELT [41], Competency based experiential expertise [42], M-learning strategies [43] [47], 3D games [49], Lecture-panel-discussion model (LPDM) [52], Mobile learning [53], Snap Learning [56] as shown in figure 4.

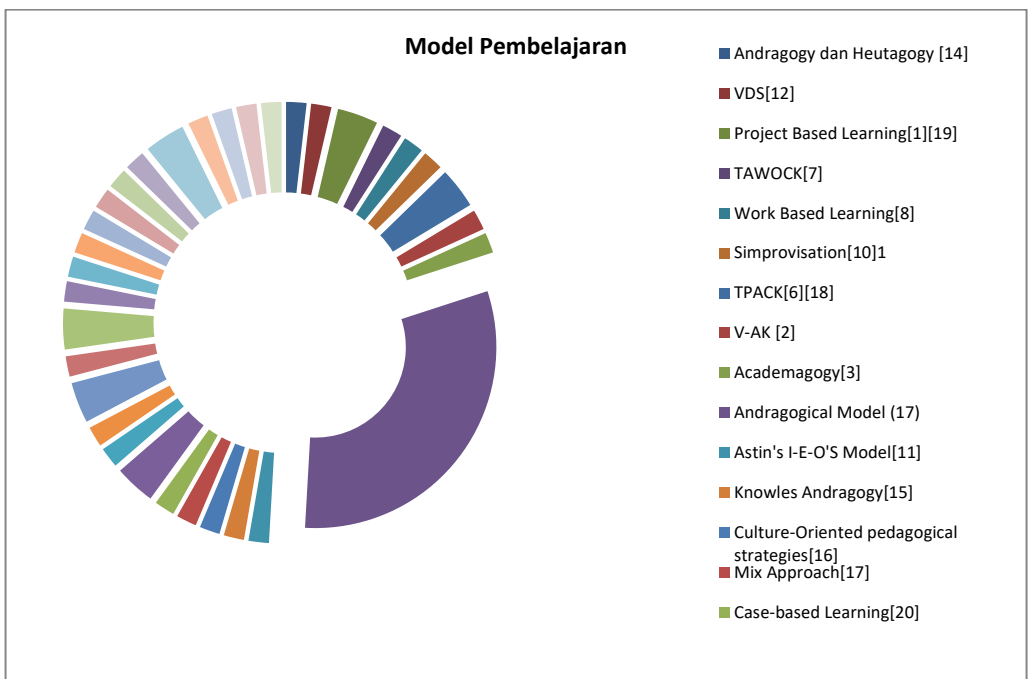


Figure 4. Learning Model

The findings of the article based on the research method, obtained: Quantitative [29] [30] [42], Evaluation [7] [55], Correlation [36] [47], Mixed method [3] [8] [13] [14] [32],

Experiment [18] [20] [21] [24] [29] [31] [39], Survey [17] [22] [34] [40] [44] [49] [52] [54], Comparative [26] [51], Questionnaire [15] [35] [53], Literature Review [2] [11] [12] [16] [19]

[38] [41], Qualitative [6] [1] [4] [5] [10] [48], Development [9] [23] [25] [27] [28] [33] [37] [43] [45] [46] [50] [54] [56], as in the following figure 5.

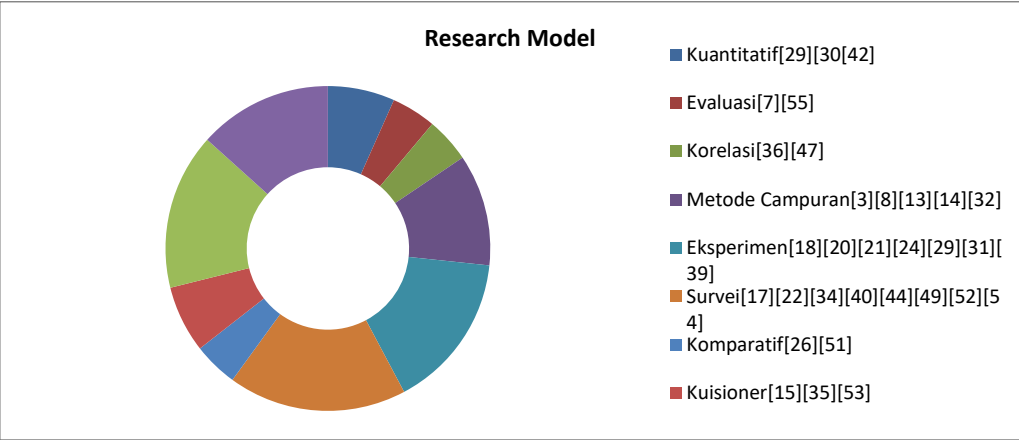


Figure 5: Research methods used

The most widely used adult learning model (andragogy), as shown in Figure 4, is the Andragogical Model, with 17 articles supporting its use. The most frequently employed method, as illustrated in Figure 5, is the development method. The effectiveness of adult learning through the Andragogical Model can be enhanced with innovative and engaging implementation. The Andragogical Model is specifically designed for adult learning.

Andragogy, or the theory of adult learning, was first introduced by Malcolm Shepard Knowles in 1968 [15]. Numerous studies have contributed to the concept of pedagogy—teaching children. Knowles argued that there are distinct approaches in adult learning compared to learning for children. Contemporary researchers have focused on the learning styles of adults and methods to motivate adult learners. They have

utilized andragogy to explore how learning models can effectively capture the interest of adult learners, encouraging them to continue learning to enhance their skills.

CONCLUSION

The findings reveal that there are numerous learning models that can be applied to adult education. The application of these models depends on the discretion of researchers to determine the most appropriate learning model for adults. Consideration of suitability involves assessing and taking into account the characteristics of adult learners themselves. Additionally, the development of new learning models that can be implemented for adult education remains a possibility, allowing for the creation of innovative learning models.

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