
IMPLICATIONS OF THE ANDRAGOGY CONCEPT IN VARIOUS COMMUNITY EDUCATION SETTINGS: A LITERATURE REVIEW

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Abstract

The concept of andragogy learning for adult learning has been applied in various educational institutions, both formal and non-formal. Researchers conducted a literature review of the best studies in the field of andragogy to provide the best and most comprehensive insights on the application of andragogy principles in adult educational settings. The researcher analyzed various studies on andragogy over the last seven years with a focus on applying the principles of adult learning (andragogy) in various educational settings. The results of the literature review revealed that the application of andragogy principles in adult education provides a variety of benefits including increasing resilience, learning motivation, facilitating understanding in the learning process and being able to improve better learning outcomes. E-learning or online learning can also be an alternative in andragogy learning during a pandemic and in the digital and fast-paced era. Online learning can also be a way out to meet the needs of adult students to study, and add skills when distance or busy work becomes an obstacle. The ability of the facilitator in managing learning also influences the ability of students to achieve the expected competency standards. Tutors must understand the principles of both pedagogy and andragogy so that the strategies used in the learning process are in accordance with the conditions and characteristics of their students.

Keywords: Andragogy, Adult learning, Implications of Andragogy Concept

Abstrak

Konsep pembelajaran andragogi untuk pembelajaran orang dewasa telah diterapkan dalam berbagai lembaga pendidikan baik formal maupun nonformal. Peneliti melakukan tinjauan literature terhadap penelitian-penelitian terbaik dalam bidang andragogi untuk menyediakan wawasan terbaik dan komprehensif tentang penerapan prinsip andragogi dalam setting pendidikan untuk orang dewasa. Peneliti menganalisa berbagai studi tentang andragogi dalam rentang tujuh tahun terakhir dengan fokus pada penerapan prinsip pembelajaran orang dewasa (andragogi) dalam beragam setting pendidikan. Hasil kajian literatur mengungkapkan bahwa penerapan prinsip andragogi dalam pendidikan orang dewasa memberikan beragam manfaat diantaranya dapat meningkatkan resiliensi, motivasi belajar, memudahkan pemahaman dalam proses pembelajaran dan mampu meningkatkan hasil belajar yang lebih baik. Pembelajaran secara e-learning atau daring juga dapat menjadi salah satu alternatif dalam pembelajaran andragogi pada masa pandemi dan di era digital dan serba cepat. Pembelajaran secara online juga dapat menjadi jalan keluar untuk memenuhi kebutuhan peserta didik dewasa untuk menuntut ilmu, dan menambah skill ketika jarak atau kesibukan bekerja menjadi kendala. Kemampuan fasilitator dalam mengelola pembelajaran juga mempengaruhi kemampuan peserta didik dalam meraih standar kompetensi yang diharapkan. Tutor harus memahami prinsip baik itu pedagogi dan andragogi sehingga strategi yang digunakan dalam proses pembelajaran sesuai dengan kondisi dan karakteristik dari peserta didiknya.

Kata kunci: Andragogi, Pembelajaran Orang Dewasa, Penerapan Konsep Andragogi

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INTRODUCTION

Addressing global challenges that threaten humanity today, such as pandemics and climate change, requires learning and action on a scale that includes and goes beyond personal development (Raymer, 2021). The impact of the pandemic on education has manifested itself in many ways, exposing inequalities in access to quality formal and non-formal education. The pandemic has also exposed a world that is interconnected but still insufficient to solve inequality and social justice (UIL, 2022). Learning is an integral part of everyday life, this is a concept that starts from birth and continues throughout life, in essence, learning can be done by everyone from children to adults (Tezcan, 2022; Yusri, 2017). But many adults don't understand that their brains are still growing and changing, they need challenges to complete, and transformative learning experiences to help stimulate growth (Digital Promise, 2016).

Learning for adults has a broad impact, namely in increasing income and the economy, developing skills and cognitive abilities, increasing social status, roles in the family, work and community, impacting health and even impacting social involvement (Schuller & Desjardins, 2010). For adults learning is also a process of searching and finding things that match what is needed, where these needs are obtained from the adult education process, one of which is related to self-actualization, self-esteem and recognition in the role or status they have and showing involvement. maturity of one's self-concept (Yusuf et al., 2021). Adult participation in education is influenced by several things, for example family settings, time constraints, and well-being (Allmendinger et al., 2011). Busyness, work stress, distance to financial conditions are often obstacles for adults to return to study (Rahim & Widodo, 2021). Learning for adults requires specific approaches and methods based on theoretical concepts based on understanding adults as learners, which is called the concept of adult education (andragogy) (Yusri, 2017). Many educators previously had difficulty carrying out their duties because they used educational principles for children that were not suitable when applied to adults, so that adult education is now starting to be managed systematically (Hiryanto, 2009).

Theoretical framework: The concept of andragogy in adult education

The world of education knows the terms pedagogy and andragogy. Pedagogy is literally the art and science of teaching children, while andragogy is the art and science of helping adults learn (Knowles, 1980). Andragogy is often encountered in the process of adult education both formal and non-formal, where in non-formal education, the principle of andragogy is the foundation of the learning process at various levels of non-formal education, while in formal education, andragogy is applied to upper secondary level education (Hiryanto, 2017). Before describing the concept of andragogy, we must first know about the definition of "adult". Knowles et al (2005) defines an adult in four ways, firstly a person is called an adult when he is biologically at the age to be able to reproduce (early youth), secondly a person is legally called an adult when he has obtained ownership rights, has a driver's license, married unconditionally. and the like, thirdly, socially, a person is called an adult when starting to carry out adult roles such as working full time, having a partner, being a parent, voting in general elections and the like and the last is psychologically a person is called an adult when it comes to self-concept, namely being responsible over his own life, and can direct himself.

The andragogical approach is a learning model in which educators act more as facilitators, students are actively involved, gain knowledge by formulating and solving their own problems,

are encouraged to seek and obtain information from various sources, learning is authentic, relevant, constructivist and social-networking is also built in class (Zubaidah, 2020) . According to Loeng (2018), the history of the andragogic concept approach is divided into three phases, namely classical humanism, dialogical humanism, and romantic humanism. The concept of humanism is multifaceted and unambiguous . Classical humanism was pioneered by Kapp in the 1980s with a fundamental emphasis on reason, character building and self-knowledge. Next is the conception of andragogy that developed during the war with Rosenstock Huessya as the central actor with a different approach, namely experience and dialogical principles as the central elements. The third phase is andragogy pioneered by Malcom Knowles in the 1970s, called romantic humanism with a more individual orientation, aimed at individual needs and individual independence. Romantic humanism emphasizes that humans have the power for personal development. Knowles' concept in romantic humanism andragogy is freedom, dignity, self-awareness, self-realization, and the development of all human potential.

(Knowles et al., 2005) stated that the andragogical model appears based on several assumptions that are different from pedagogy, namely:

1. 1. The need to be curious . Adults need to know why they need to learn something before they can learn it.
2. 2. Learner's self-concept . Adults have a self-concept to be responsible for the decisions they choose for their own lives.
3. The role of the learner's experience . Adults participate in educational activities with a greater volume and different quality of experience than young people which affect the consequences of adult learning
4. Readiness to learn . Adults are ready to learn what they need to know and are able to do it effectively in real-life situations.
5. Learning orientation . Adult learning is life-centered or task-centered or problem-centered. Adults are motivated to learn because they feel that learning will help them deal with the life problems they experience.
6. Motivation . Adults are highly responsive to extrinsic motivation (better jobs, big salary promotions and the like, but the most powerful motivations are internal pressures such as the desire to increase job satisfaction, self-esteem, quality of life and the like).

The difference between pedagogy and andragogy in terms of assumptions and process elements, is presented by (Knowles, 1977) in the following table.

Table1. Assumptions and elements of the learning process of pedagogy and andragogy

| Assumption | | | Process Element | | |
|--------------|--|-------------------------------------|-----------------|---|---|
| About | Pedagogy (teacher-centered learning) | Andragogy (self-learning) | Element | Pedagogy (teacher-centered learning) | Andragogy (self-learning) |
| Self concept | Dependent personality | More independent | Climate | Formal authority, oriented towards competitive judgment | Informal, respectful, consensual, collaborative, supportive |

| Assumption | | | Process Element | | |
|------------------------|------------------------------------|--|---------------------|--|---|
| The role of experience | Built, more than used | Richer learning resources | planner naan | Especially by teachers | Participatory decision making |
| Readiness to learn | Varies according to maturity level | Develop from life's tasks and problems | Needs diagnosis | Especially by teachers | Assessment together |
| Study orientation | Subject centered | Focus on a task or problem | Goal setting | Especially by teachers | Mutual negotiation |
| Motivation | External rewards and punishments | Internal incentive, curiosity | Design & study plan | Content units, course syllabus, logical sequence | Projects and learning content are sorted according to readiness |
| | | | Learning Activities | Transmission technique, assigned readings | Self-study, inquiry, experimental techniques |
| | | | Evaluation | Especially by teachers | By joint assessment of self-collected evidence. |

Suprijanto (2012) in his book also said that the principles of adult learning (andragogy) are different from children's learning which consists of 5 (five) components, namely:

1. Study law . These are adult learning procedures and conditions for enhancing learning outcomes, such as task understanding, practice, consequences, interest associations, tenacity, success-failure knowledge, and learning itself.
2. Setting goals . There are two goals in andragogy, namely general and specific goals.
3. Material selection . Selection of material in andragogy requires specific criteria, namely the material must be interesting, easy to understand, have useful value, and help achieve educational goals.
4. Attitude development . Andragogy helps learners to develop capacity and emotional control related to solving problems in everyday life.
5. Idealism . The idealism in question is the standard accepted by students. The main principles of idealism in andragogy learning are observation, discussion, and interest development.

Challenges and Opportunities for the Application of Andragogy

Andragogy, the art and science of helping adults learn, has a long and rich history that shapes understanding of adult learning and continues to be a cornerstone of strength in guiding the way adults learn, where in its development, andragogy has received a lot of criticism from various angles coming from scholars. in the field of adult education related to empirical studies

that have not yet been established, the ambiguous concept of andragogy due to the lack of a comprehensive understanding of the concept of andragogy worldwide, that andragogy is not a learning approach for all adult education and doubts about the superiority of andragogy (Henschke, 2011) . However, research for the advancement of andragogy is also continuing, and the opportunities for the future development of andragogy are becoming clearer. The new social reality requires openness to the future, mobility and variability of experience in the life span of generations from educational institutions, and e-learning is very closely related to andragogy as well as andragogy being an important part of the e-learning system that supports the development of freer individuals, the opportunity to follow education, intellectual and activity throughout her life (Zhirkova, 2019) . In addition, an instrument needs to be created to measure whether andragogical assumptions are included in instructional settings, where the instrument aims to provide tools for practitioners to conduct andragogical assessments in the field and provide guidelines for assessing andragogy in adult learning settings, both formal and non-formal (Kroth & Michael, 2009) .

Rachal (2002) identified seven criteria suitable for implementation in future empirical studies of andragogy namely:

1. Voluntary participation. The andragogical researcher must design learning situations in which the learner wants to participate either voluntarily or because of internal motivation.
2. Adult status . Future studies of andragogy should avoid mixed settings between adult learners (with andragogical methods) and traditional students (with pedagogical methods).
3. Collaboratively defined goals . The andragogical researcher must examine or design a learning situation in which the learner plays an important or even a major role in setting learning objectives.
4. Performance-based achievement assessment . When the goal of the andragogical learning experience is primarily competence in a content area such as computer skills, andragogical researchers should check their achievement against a portfolio of evidence demonstrating goal attainment . The evidence, criteria, and method of evaluating the evidence are mutually agreed upon by the learner and the facilitator.
5. Measuring satisfaction . Much adult education is not aimed at mastering some content or mastering a skill, but rather for enjoyment or satisfaction. When in this condition, measurement of satisfaction is very important for andragogical researchers even though achievement is not measured.
6. The right learning environment . Future studies of andragogy must seek and ensure that the physical and psychological environment is as congruent as possible for adult learning, for example a comfortable environment, room settings, and psychological comfort such as friendliness, mutual respect, mutual understanding, gestures and so on.
7. Technical problem . Ideally the random assignment of students should be carried out, but the reality of adult education research is such that this cannot always be done and other technical problems such as issues related to one facilitator carrying out two actions (andrgogy & pedagogy) causing bias or the use of two facilitators, one person any action that may invite differences in rigor, personality or experience so that a match of quality and experience is indispensable.

Research related to andragogy empirically shows that andragogy techniques lead to better results/ outcomes in several areas, namely affective (learners' satisfaction and motivation), the learning process and the use of learning outcomes after learning activities (Knowles et al., 2005) . In the future, discussion of andragogy should go beyond Knowles' version and include the worldwide perspectives of those who have written and published about andragogy (Henschke, 2011) . Judging from the concept of andragogy in adult learning and the challenges and opportunities it has, the researcher intends to examine the implementation of andragogy

principles in various learning settings in society. The results of the study can be used as an additional literature review on the implementation and benefits of adult learning by applying the principles of andragogy which can be used as material for evaluation and joint learning about andragogy practices in the community so that it can be used as a reference for educators/facilitators to be able to determine the appropriate methods and strategies for learning citizens in guiding adult learning to be able to produce results as expected.

METHOD

The method used by the authors in this study is a literature review with a systematic search using electronic databases, including Google Scholar, Researchgate, DOAJ, ERIC to identify relevant articles published in the last 7 (seven) years between 2017 and 2023. Keywords such as “andragogy”, “application of andragogy”, “implications of andragogy”, “inquiry learning” and “adult education” are used in filtering articles that will be used. After selecting titles and abstracts, articles that met the criteria were selected for further analysis in full text. The selected articles were then carefully reviewed for key information related to the research question. The research question in this literature study is how the implications of the concept of andragogy in various educational settings in society. Of the 19 articles obtained, 4 articles were excluded because they did not meet the criteria, so that 15 articles were analyzed. Of the 15 articles, 8 came from international journals, and 7 came from Indonesian journals.

RESULTS AND DISCUSSION

Results

The approach and application of andragogy in non-formal learning will foster students' learning motivation because it is planned together, and facilitates understanding in the learning process because it is based on the experiences of students (Dewi & Primayana, 2021) . A study on the application of andragogy in education was carried out by (Danial et al., 2019) , Danial and friends conducted research using a descriptive qualitative approach regarding the application of andragogy principles in life skills education programs to increase the resilience of entrepreneurs conducted at a course and training institution sewing department. The first thing the institution manager does is identify the needs of students to find out their learning goals and targets for attending the tailoring course. Identification of needs is also needed to plan and solve problems that occur when students experience difficulties. The institution also prepares a comfortable room, in addition to facilitating students with adequate facilities, allowing them to freely express their sewing experience and review problems and solutions in every meeting. Student experience is a source of learning. The format of learning in this institution is 70% practice and 30% theory. Evaluation is carried out by institutions with competency tests after students have completed each level. Evaluation is carried out to determine the knowledge and skills of students. The results of applying the principles of andragogy in course and training institutions can make the learning process comfortable, students are free to express themselves and experience and can increase the resilience of students to become skilled and reliable entrepreneurs.

Subsequent research was conducted by Raharjo & Suminar (2016) regarding the implications of pedagogical and andragogical references conducted at package A, B and C equivalency institutions in the city of Semarang, using a mixed method, a combination of qualitative and quantitative. The results showed that 50% of the tutors had applied the pedagogical and andragogical references very well, 30.4 % were in the good category, and 19.7% of the tutors were still in the very poor category. Students who have an age range of 15-45 years cannot be equated with learning methods, namely with pedagogy or andragogy. The results of the study

also show that the tutor's ability to manage learning affects the competence of students to achieve the expected competency standards. The results of the research become a recommendation for tutors, institutions and the government to improve the learning process in package A, B and C equality institutions. Similar research was also conducted by Syahrudin et al. (2019) regarding the application of andragogy in package C programs, where the results of the research stated that the application The principle of andragogy in the Package C program encourages students' learning motivation because the learning process is varied and interesting.

Ndraha et al., (2022) conducted research on the analysis of andragogical approaches and problems at a non-formal educational institution Center for Community Learning Activities (PKBM) in Binjai. The results of the study show that the implications of andragogy for PKBM institutions have fulfilled several indicators, where the learning atmosphere is created conducive and comfortable, carrying out learning activities with various methods, using appropriate learning techniques and tools, tutors treating students as adults, respecting different experiences and concepts. self. However, there are still several obstacles in the implementation of andragogy in institutions, namely learning activities are less effective, motivation and learning readiness are still lacking, adult understanding of learning material is still lacking and there are several tutors who still apply pedagogical models to adult students.

Andragogy-based training applied to Early Childhood Education (ECE) teachers such as research conducted by Novitasari & Sugito (2018) turned out to be effective in improving the training learning process which consists of elements of cooperation, confidence in giving opinions, participating, committing and learning independently Furthermore, this also improves the ability of ECE teachers to make lesson plans. This research using the classroom action method showed significant results related to the ability to make lesson plans between before and after training. The andragogy-based parenting pattern implemented at the State Police School in West Java, Indonesia according to research conducted by Sopyandi (2020) went well so as to produce police officers who can protect and protect the community. This success can be seen from the role of the assistant who becomes a facilitator for students who carry out their duties in accordance with the principles of adult education assumptions and also as caregivers for students.

The application of andragogy principles to educators is also strengthened by research conducted by Anderson & Boutelier (2021) entitled to unite andragogy with the professionalism of adult performance in the teacher's initial preparation program. This research identified that the best way to support professional learning through andragogy is by applying skills, identifying growth, building relationships and flexibility. Teachers as learners in training, require the application of self-contained content with a collaborative process for immediate and sustainable effectiveness. The suggestion in this research for the success of the teacher preparation program in the future is to provide program instructors who are professional in andragogy and applied consistently in all program institutions so that they can support students to improve professionalism. Inquiry learning to build and support peer relationships is also emphasized in this study.

Following the demands of the digitalization era and the Covid-19 pandemic, the implications of andragogy for adults can also be carried out remotely, such as research conducted by Deineha et al., (2020) as a recommendation for organizing adult education in quarantine conditions (the Covid-19 pandemic). 19). The research identified lifelong learning as one of the priorities of societies in all countries, focusing on the potential of andragogy such as promoting social adaptation of adults and tackling labor migration issues. During a pandemic, an effective form of work is interactive communication via e-mail, or the use of electronic

platforms such as zoom. The results obtained in this remote andragogy practice are useful for quality administrative control of the learning process in extreme conditions or remote mode.

Sayuti (2022) also conducted studies related to andragogy practices through e-learning or online with a literature review. The results of the study state that optimizing andragogy learning in formal and non-formal education can be done online, especially during the Covid-19 pandemic, and research proves that the application of andragogy online can also improve students' critical thinking skills. Another research was conducted by Rahim & Widodo (2021) regarding the application of andragogy in online courses or training as a support for adult education, which apart from dealing with crises during a pandemic, is also a means of meeting the needs of digitizing adult learning and education. In the online learning process, the facilitator also continues to involve students in every aspect starting from the process of identification, planning, implementation to evaluation.

The application of andragogy online can also be applied in the field of counseling services. Fadkhurosi & Kusmaryani (2022) conducted research on andragogy-based counseling services using the WhatsApp application, which can reduce student anxiety during the Covid-19 pandemic and provide benefits for students and facilitate the provision of services from Guidance and Counseling teachers. Andragogy-based online counseling services can be a solution when service limitations occur during a pandemic, but the implementation process must refer to a specific counseling approach according to the type of anxiety experienced by students. Research on educational innovation in adult learning considering digital transformation for social inclusion was conducted by Ramirez & Inga (2022). This study seeks to identify teaching and learning mechanisms for adults that enable innovation and evolution for rural communities who have limited technology and internet access. The technology used is virtual didactic, the result is that 66.67% of teachers agree to implement this technology as a better strategy for learning for adults and youth.

Researchers such as Scott et al., (2022) conducted a study of university students in literacy courses, and proposed that an andragogical approach to teaching and learning could potentially serve as a model for better literacy practices in education. Inquiry learning, which is one of the techniques in andragogy, can also be applied to junior high school students. Research conducted by Sinulingga et al (2021) shows that the inquiry learning model is applied to physical health lessons, showing better learning outcomes than direct learning. Determining the learning model in teaching and learning activities will help the success of students.

Discussion

Based on the results of the researcher's analysis of various research results conducted in the last 7 (seven) years related to the implementation of andragogy principles in adult education in various educational settings in society, the researchers found that there was significant consistency in the studies conducted. A number of studies have shown that the use of appropriate andragogical methods in the learning process for adults can improve learning outcomes, optimize the potential of students, and lead to the achievement of the expected learning goals. In fact, a study mentions that inquiry techniques, which are thick with andragogical learning, can also be applied to junior high school students and show better learning outcomes than direct/traditional learning.

Other studies have also shown that the implications of andragogy in adult education are not rigid. Digital devices are increasingly being adopted for educational learning today (Zawacki-richter & Latchem, 2018) . Distance, virtual or online learning systems can be an alternative learning that is quite effective in dealing with crises such as the Covid-19 pandemic and

demands for digitalization. Researchers have explored the benefits of virtual applications for learning. Virtual applications have a lot of potential and their application in education has been extensively researched recently (Fern & Vergara, 2023) . There is even research in the context of guidance and counseling, where guidance and counseling teachers apply andragogy with e-counseling services via WhatsApp to reduce student anxiety.

Even though there is consistency from the results of the studies studied, there are still a number of things that must be considered in the application of andragogy in educational settings in the community, including the identification of needs, the constancy of the methods used by the facilitator, the suitability of the strategies used with the needs of students, and evaluation together in each stage of learning. In addition, contextual factors also need to be considered in the application of andragogic principles such as educational background, age , experience, and skills. In online adult learning, the features on the platform must be adapted to the needs of students (Rahmat, 2020) .The key to hope in andragogy is to practice compassion and caring ethics, value learning across the spectrum of formal, non-formal and informal contexts, support and activate society as a learning ecosystem, recognize lifelong learning as a human right regardless of age and status, starting from the assumption and respect for the social and collective nature of learning and regard networks as a means of action and learning (Raymer, 2021) .

Integration and support from all parties, including tutors/facilitators, students, managers of educational institutions and even the government, is indispensable in the implementation of andragogy for adult education. Overall, the research results reviewed support the positive influence of the implementation of andragogical principles in various settings of adult education in society. However, further research is needed to further strengthen the concept of andragogy, andragogy development and innovation, as well as broaden our insights about the application of andragogy in a broader scheme. Future research in the field of andragogy will provide stronger evidence and can serve as a guide for andragogy practitioners in various educational settings, both formal and non-formal.

CONCLUSION

Literature research results to understand the implications of applying the principles of andragogy in various educational settings in society show positive findings. The results of the researcher's analysis of the research results show that the application of andragogy principles in adult education can increase resilience, learning motivation, facilitate understanding in the learning process and be able to improve better learning outcomes. E-learning or online learning can also be an alternative in andragogy learning during a pandemic and in the digital and fast-paced era. Online learning can also be a way out to meet the needs of adult students to study, and add skills when distance or busy work becomes an obstacle.

It should be noted that the tutor's ability to manage learning also affects the competence of students to achieve the expected competency standards. Tutors must understand the principles of both pedagogy and andragogy so that the strategies used in the learning process are in accordance with the conditions and characteristics of their students. This understanding is very necessary to produce competent student outcomes in accordance with predetermined learning objectives. The role of the government is also needed regarding policies in the development of adult learning. This literature review provides a basis for the development of further research related to the application of andragogy in adult learning.

The various methods used in the studies studied, the variability of the subjects and the responses of the research subjects have a role in the research results. Suggestions for future researchers, is that a good instrument needs to be developed to be able to measure the implications of andragogy appropriately so that the results of the study can empirically become a solid guide for practitioners. In addition, much needed research development and innovation in andragogy. Because the learning needs of adults are getting bigger along with the times and the complexity of life's problems.

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REFERENCES

- Allmendinger, J., Kleinert, C., Antoni, M., Christoph, B., Drasch, K., Janik, F., Leuze, K., Matthes, B., Pollak, R., & Ruland, M. (2011). 18 Adult education and lifelong learning. *Zeitschrift Für Erziehungswissenschaft*, 14(S2), 283–299. <https://doi.org/10.1007/s11618-011-0197-0>
- Anderson, M., & Boutelier, S. (2021). Converging Andragogy With Working Adult Professionalism in Initial Teacher Preparation. *Journal of Educational Research and Practice*, 11(1), 202–216. <https://doi.org/10.5590/jerap.2021.11.1.14>
- Danial, A., Syaefuddin, Madjid, A., & Hamdan, A. (2019). Application of the Andragogy Principle in the Life Skills Education Program in Increasing the Self-Relience of Entrepreneurs. *Jurnal Empowerment*, 8(September), 115–125.
- Deineha, I., Hromozdova, L., & Kovach, V. (2020). Realities of practical andragogy in the condition of the COVID-19 pandemic: migration pedagogy in Ukraine. *ScienceRise: Pedagogical Education*, 0(5 (38)), 4–10. <https://doi.org/10.15587/2519-4984.2020.212892>
- Dewi, P. Y. A., & Primayana, K. H. (2021). Penggunaan Pendekatan Andragogi Dalam Proses Pembelajaran Nonformal. *Maha Widya Bhuwana: Jurnal Pendidikan, Agama Dan Budaya*, 4(2), 94–100.
- Digital Promise. (2016). Designing Technology for Adult Learners: Applying Adult Learning Theory. *National Center for Research in Advanced Information and Digital Technologies*, 1–9. www.digitalpromise.org
- Fadkhurosi, A., & Kusmaryani, R. E. (2022). Counseling Based on Andragogy Via WhatsApp to Reduce Students' Anxiety During COVID-19 Pandemic. *Proceedings of the International Seminar on Innovative and Creative Guidance and Counseling Service (ICGCS 2021)*, 657(Icgcs 2021), 5–12. <https://doi.org/10.2991/assehr.k.220405.002>
- Fern, P., & Vergara, D. (2023). *Perception of the Use of Virtual Reality Didactic Tools among Faculty in Mexico*.
- Henschke, J. A. (2011). Considerations Regarding the Future of Andragogy. *Adult Learning*, 22(1), 34–37. <https://doi.org/10.1177/104515951102200109>
- Hiryanto. (2009). Optimalisasi penerapan konsep andragogi dalam peningkatan mutu lulusan. *Jurnal Ilmiah Pendidik Dan Tenaga Kependidikan Pendidikan Non Formal*, 4(2), 161–174.
- Hiryanto. (2017). Pedagogi, Andragogi dan Heutagogi serta Implikasinya dalam Pemberdayaan Masyarakat. *Dinamika Pendidikan*, 22, 65–71.

- Knowles, M. (1977). Adult Learning Processes: Pedagogy and Andragogy. *Religious Education*, 72(2), 202–211. <https://doi.org/10.1080/0034408770720210>
- Knowles, M. (1980). THE MODERN PRACTICE OF ADULT EDUCATION From Pedagogy to Andragogy REVISED AND UPDATED 4 What Is Andragogy? In the Beginning Was Pedagogy. *Religious Education*. <https://pdfs.semanticscholar.org/8948/296248bbf58415cbd21b36a3e4b37b9c08b1.pdf>
- Knowles, M., Holton, E., & Swanson, R. (2005). *The ADULT LEARNER: The Definitive Classic in Adult Education and Human Resource Development* (sixth edit). Elsevier Ltd.
- Kroth, B., & Michael, T. (2009). Andragogy's Transition Into The Future: Meta-Analysis of Andragogy and Its Search for a Measurable Instrument. *Journal of Adult Education*, 38(1), 22–42.
- Loeng, S. (2018). Various ways of understanding the concept of andragogy. *Cogent Education*, 5(1), 1–15. <https://doi.org/10.1080/2331186X.2018.1496643>
- Ndraha, ewi darmawan, Simamora, S., Anastasya, A., Wahyuni, H., Saragih, putri amelia, Anjani, P., & Hasibuan, J. (2022). Analisis Penerapan Pendekatan dan Masalah Andragogi di PKBM Cahaya Binjai. *DIKLUS : Jurnal Pendidikan Luar Sekolah*, 2(September), 174–191.
- Novitasari, D., & Sugito, S. (2018). Improving the skill of early childhood education teachers in making lesson plans through an andragogy-based training. *Journal of Nonformal Education*, 4(1), 97–106.
- Rachal, J. R. (2002). Andragogy's Detectives: A Critique of The Present and a Proposal For The Future. *Learning*, III(3), 29. <http://www.colorado.edu/ftep/sites/default/files/attached-files/andybassdisruptingourselves-theproblemoflearninginhighereducation.pdf> <http://www.nmc.org/publications/2014-horizon-report-higher-ed/> <http://www.futuristspeaker.com/2013/07/by-2030-over->
- Raharjo, T. J., & Suminar, T. (2016). Penerapan Pedagogi Dan Andragogi Pada Pembelajaran Pendidikan Kesetaraan Kelompok Belajar Paket a, B, Dan C Di Kota Semarang. *FIP Universitas Negeri Semarang*, 1(1), 3.
- Rahim, K. R., & Widodo. (2021). Konsep Andragogi Dalam Pembelajaran Kursus Dan Pelatihan Jarak. *Selama Pandemi Covid-19, Banyak Kursus Dan Pelatihan Yang Diikuti Orang Dewasa Secara Online. Penelitian Ini Dilakukan Untuk Mengetahui Penerapan Prinsip Andragogi Dalam Program Pelatihan Online Terutama Yang Dilaksanakan Selama Masa Pandemi. Metode Penel*, 10(1), 285–293.
- Rahmat, I. (2020). *Implementasi Andragogi Platform E-learning pada Blended Learning di Universitas Negeri Padang*. 4(20), 133–140.
- Ramirez, A., & Inga, E. (2022). Educational Innovation in Adult Learning Considering Digital Transformation for Social Inclusion. *Education Sciences*, 12(12). <https://doi.org/10.3390/educsci12120882>
- Raymer, A. L. (2021). Andragogy of Hope and Learning Cities. *American Association for Adult and Continuing Education*, 177–182.
- Sayuti, M. I. (2022). PENERAPAN KONSEP ANDRAGOGI PADA PEMBELAJARAN ONLINE SEBAGAI UPAYA MENINGKATKAN KEMAMPUAN BERPIKIR KRITIS Muhammad Irsyad Sayuti. *Wahana Didaktika*, 20(2), 310–320.
- Schuller, T., & Desjardins, R. (2010). Wider Benefits of Adult Education. *International Encyclopedia of Education, Third Edition*, 229–233. <https://doi.org/10.1016/B978-0-08-044894-7.00045-2>
- Scott, H., Bennett, P., & Hammond, C. (2022). ' Silence is the sentence ': adult learners ' experiences of a co-created curriculum constructed through free writing tasks. 5(1).
- Sinulingga, A., Saputro, D. P., & Nova, A. (2021). The Differences Between Learning Model

- of Inquiry and Direct Instruction Toward Learning Outcomes of Discus Throw. *Journal Sport Area*, 6(1), 20–27. [https://doi.org/10.25299/sportarea.2021.vol6\(1\).4856](https://doi.org/10.25299/sportarea.2021.vol6(1).4856)
- Sopyandi, S. (2020). Care Pattern Based on the Learning of Adults (Andragogi) To Students of Directors in Bintara Police Spn Cisarua Polda Jabar. *EMPOWERMENT : Jurnal Ilmiah Program Studi Pendidikan Luar Sekolah*, 9(2), 170–176. <http://e-journal.stkipsiliwangi.ac.id/index.php/empowerment/article/view/1670/1070>
- Suprijanto. (2012). *Pendidikan Orang Dewasa*. PT Bumi Aksara.
- Syahrudin, A., Madjid, A., Yuliani, L., & Qomariah D, N. (2019). Penerapan Konsep Andragogi Oleh Tutor Kesetaraan Paket C Dalam Meningkatkan Motivasi Belajar pada Warga Belajar. *Jurnal Cendekiawan Ilmiah PLS*, 4(1), 26–30.
- Tezcan, F. (2022). Andragogy or Pedagogy: Views of Young Adults on the Learning Environment. *International Education Studies*, 15(1), 136. <https://doi.org/10.5539/ies.v15n1p136>
- UIL. (2022). Global Report on Adult Learning and Education. *UNESCO Institute for Lifelong Learning*. <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED540497>
- Yusri, Y. (2017). Strategi Pembelajaran Andragogi. *Al-Fikra : Jurnal Ilmiah Keislaman*, 12(1), 25. <https://doi.org/10.24014/af.v12i1.3861>
- Yusuf, R. N., Musyadad, V. F., Iskandar, Y. Z., & Widiawati, D. (2021). Implikasi Asumsi Konsep Diri Dalam Pembelajaran Orang Dewasa. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1144–1151. <https://edukatif.org/index.php/edukatif/article/view/513>
- Zawacki-richter, O., & Latchem, C. (2018). Computers & Education Exploring four decades of research in Computers & Education. *Computers & Education*, 122(April), 136–152. <https://doi.org/10.1016/j.compedu.2018.04.001>
- Zhirkova, G. P. (2019). *E-learning within the Field of Andragogy*. 148–156.
- Zubaidah, S. (2020). Self Regulated Learning : Pembelajaran dan Tantangan pada Era Revolusi Industri 4 .0. *Publikasi Ilmiah*, 5(April), 1–19. https://publikasiilmiah.ums.ac.id/xmlui/bitstream/handle/11617/12234/p.1-19_siti_zubaidah.pdf?sequence=1&isAllowed=y