

FACTORS INFLUENCING THE ANDRAGOGY COMPETENCY LEVEL OF THE INDONESIAN GOVERNMENT SOCIAL EXTENSION AGENTS

SUSIE SUGIARTI ^{1*}, SUMARDJO ², ANNA FATCHIYA ³ and DWI SADONO ⁴

¹ Doctoral Student in Development Communication Program, Faculty of Human Ecology, IPB University, Bogor-West Java, Indonesia. *Corresponding Author Email: susiesug_susie@apps.ipb.ac.id

^{2,3,4} Faculty of Human Ecology, IPB University, Bogor-West Java, Indonesia.

ORCID ID: ¹<https://orcid.org/0009-0005-4653-8193>, ²<https://orcid.org/0000-0002-6597-2893>,

³<https://orcid.org/0000-0003-0357-3544>, ⁴<https://orcid.org/0000-0001-9024-0830>

Abstract

Social extension agents have important roles in developing social welfare, including as educators for the community. This study aims to analyze the factors that influence the andragogy competency level of the Indonesian government social extension agents. The data collection was conducted in January 2023 through an e-survey using Google Forms. A total of 279 agents from 25 provinces in Indonesia decided to participate. Data were processed using multiple Ordinary Least Squares (OLS) linear regression analysis. The results showed that the andragogy competency level was in the medium category. Based on the model in this study, the learning factor has a significant influence while individual characteristics, role understanding, work environment, and ICT utilization factors are not statistically significant in influencing the level of andragogy competency of the Indonesian government social extension agents.

Keywords: Competency, Andragogy, Social Extension Agent

INTRODUCTION

One effort to improve the quality of social welfare services for the community is by increasing the capacity of government officials implementing the program (Skorková, 2016; Suharno & Despinur, 2017). Social extension agent is an occupation that requires mastery of knowledge, skills, and practical values of social extension in carrying out the task of administering social welfare in central and regional government agencies and other social organizations and institutions (National Occupation Map or Peta Okupasi Nasional, 2019). Social extension agents have an important role in realizing a new paradigm for social welfare development, especially in efforts to prevent the emergence of social problems in society. They need to have the ability to explore community needs through mapping potential resources and social problems that occur in the field as well as involving the community to become active actors in development programs through empowerment activities.

Social welfare programs in Indonesia are varied, among others Rastra (food/rice program), Rutilahu (housing program), Energy Subsidy Assistance, ATENSI (social rehabilitation program), PKH (family-based social assistance program), PIP (scholarship program), Ultra-micro financing, Joint Business Groups (KUBE), Small Business Training, Social Insurance (BPJS), and Elderly Assistance and Rehabilitation. The government social extension agents play an important role in supporting various activities in those government programs so the program objectives can be achieved effectively. The social welfare programs implementation will be better if involve social extension agents because their performance is a good mediator

between institutions or organizations and the community (Kadir et al., 2016). Social extension agents have important roles in developing social welfare, including as educators for the community. Sumardjo (2019) states that the competencies possessed by extension agents consist of at least four: personal competency, social competency, andragogy competency, and innovative communication competency. Andragogy competency is related to the methodical abilities and didactical or developing learning experiences to influence and change the knowledge, skills, and attitudes, stimulating needs for a better life, and educating the extension targets to realize their needs and develop their capabilities. One essential competency is to master the andragogic learning approach, especially in mastering the concepts of extension and adult education (Huda, 2010). Andragogical competencies are highlighted as one of the key determinants of education quality and adult learning (Blaskova et al., 2015; Saito et al., 2013).

The subjects of social extension activities carried out by government social extension agents are the elements of communities that are included as the potential and sources of social welfare, for example, community-based social extension agents, social welfare institutions, social volunteers, and private institutions. They can also provide services directly to the wider community. Social extension agents, in carrying out their duties as educators, need to help the community diagnose their needs for particular learnings within the scope of the given situation (the diagnostic function) (Knowles, 1980). Different needs of community members matter when choosing learning strategies to avoid treating the community members as dependent and disrespecting their identity and to take into account the limits and skills of an adult learner who is capable and independent (Machynska & Boiko, 2020). Knowles identifies the following key assumptions about adult learners: (1) adults are driven to learn because they have needs and interests that learning will satisfy; (2) adults have a life-centered orientation to learning; (3) experience is the richest source of learning for adults; (4) adults have a strong need for self-directing; and (5) distinct characteristics among individuals increase with age (Saito et al., 2013). (Salleh et al., 2015) state that teachers or instructors have to make sure that adult learners' requirements are appropriately met using a proper andragogical approach because they must recognize their need to learn.

The number of government social extension agents continues to increase as a consequence of the implementation of government policy regarding the transition of structural positions to functional positions through the Minister of State Apparatus Utilization and Bureaucratic Reform Regulation No. 28 Year 2019 which has been revised through the regulation No. 17 Year 2021 and No. 7 Year 2022. In March 2020 the number was only 185 people and increased to 696 people within three years. It is expected that increasing the number of social extension agents will improve the quality of social welfare services for the community. Andragogy competency needs to be possessed by the extension agents so that they can mobilize the community to understand the needs for learning and consciously make changes (Sumardjo, 2019). The competencies that government social extension agents must have as a certification requirement include basic competencies, technical competencies, and expert competencies (Minister of Social Affairs Regulation no. 16 Year 2017). Andragogy competency is an important part of the technical competency of social extension which includes communication, information, motivation, and education for the community. The social extension activities can

be carried out independently or through assignments as government civil servants. Studies regarding the competency of social extension agents, specifically their relations to adult learning are limited. This study was conducted to determine factors influencing the andragogy competency level of the Indonesian government social extension agents.

LITERATURE REVIEW

Individual Characteristic Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

In general, competency is a combination of skills, personal attributes and knowledge which are reflected through job performance behaviour that can be observed, measured and evaluated (Komara, 2019). Individual characteristics, such as work experience, level of expertise, and motivation, impact to the competency to deliver good quality education. Study on the competency of agricultural extension agent in three areas in Indonesia (Garut, Magelang and Tuban) found that the factors that determine the competency of extension agents include internal factors, such as age, work experience, non-formal education, cosmopolitanism, motivation (Widodo, 2010). Research by (Chua & Jamil, 2012) on content knowledge among Technical Vocational Education and Training instructors in Malaysia found that work experience helps instructors develop knowledge to improve their competence in teaching and learning process.

(Immonen et al., 2022) also found that work experience play critical roles in developing educators' competence. Motivation is considered as empowering individuals to perform at high levels and removing obstacles to change. Human conduct is guided, controlled, and persistent by motivation. Individuals with high motivation show greater commitment, including in competency improvement (Tohidi & Jabbari, 2012). A study on work productivity at Local Government Transportation Office of Bandung showed that motivation significantly impacted competency level at 22,85%. The number increased to 85,28% when the motivation and training simultaneously impacted competency level (Satria & Kuswara, 2013). The higher motivation the higher competency has also shown by a study on the competency of local midwives in Malang Regency (Ma'ruf & Siswanto, 2012). This study includes the social extension agents' position level which reflects their expertise and responsibilities in social extension activities.

Learning Factors Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Individual competencies can be developed through the learning process. The economies are changing, and the extent of information and skill on any particular topic is growing more rapidly than what can be provided in educational institutions (Iosifescu, 2014). (Johnson, 1998) stated that the competency of community-based service agents is influenced by work groups and collaborating with paraprofessional workers (volunteers, assistants). According to Klausmeier and Goodwin (1966), the effectiveness and efficiency of learning to develop competency is influenced by teacher characteristics, teacher behaviour in learning, learning

facilities, student characteristics, lesson materials, study group characteristics and other supports. (Sumardjo, 1999) analogized this concept in the adult learning process of extension agents to improve their competencies, to: characteristics of information sources, interaction of information sources with extension agents as learners, learning facilities, characteristics of extension agents, innovation/information (learning materials), characteristics of extension working groups, and supporting institutions.

(Widodo, 2010) showed that training and learning media availabilities determine the competency of extension agents. (Dobos & Jenei, 2013) mentioned that in order to develop the competencies of local government employees and citizens to successfully deal with changing expectations and challenges at times of shrinking financial resources, a common platform for doing so is the wide variety of types and functions of forums as well as methods used for community involvement. Learning factors in this study include trainings frequencies level, discussion with peers and paraprofessional frequencies, level of information utilization, access to learning facilities and learning materials sufficiencies.

Role Understanding Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Competence-related beliefs are crucial in determining professional competence and instructional quality (Runge et al., 2023). According to (Salehi et al., 2020), a comprehensive understanding of positive change can result from an awareness of the role of social change agents. Social extension agents plays three key roles in the social welfare development: as educators, motivators, and communicators. Openness, empathy, supporting attitudes, positive attitudes, and equality are indicators of effective communication (Devito, 2011).

(Bahua & Musa, 2017) found that agricultural extension competency was impacted by their independence. A study to explore innovative practices of citizen engagement in the United States, Norway, the Netherlands, Germany, Italy and Hungary found that local government professionals agreed on the need for change in society in general and among all local players in particular. They need to re-identify their own roles, and adopt new methods to facilitate and spread win-win (Dobos & Jenei, 2013). Other study in Riyadh, KSA found that workers who have the view that their work is meaningful will have a sense of competence, and will have a significant impact in the workplace (Alsughayir, 2021).

Work environment Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

(Immonen et al., 2022) conducted a study to identify and describe social and healthcare educators' competence and found that organizational support play essential roles in development of educators' competence. (Iwuchukwu et al., 2015) stated that funding and government support are factors that influence the role of youth groups in developing village communities.

Study conducted by (Widodo, 2010) also reported that organization, superior support, and facility support determine the competency of extension agents. Study on the impact of

organizational support on the transfer of learning to practice by (Futris et al., 2015) showed that those who reported lower levels of learning impact were more likely to implement the training materials if they experienced stronger organizational support.

ICT Utilization Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Hanewald and Ng (2011) stated that knowledge is created once the instructor has found, arranged, and processed the raw information and turned it into meaningful information (Chua & Jamil, 2012). A study on the anti-drug extension agents in Indonesia found that digital media utilization patterns has significant impact toward the agents' competency level (Rizal et al., 2021). (Lee & Sing, 2013) conducted a study on social media as an informal learning platform for adults in Singapore and found that the social media has effectively provided the users with lots of relevant information which helped increase their knowledge in the subject matter. The ICT utilization is measured through access to digital media and the level of intensity of using digital media.

METHOD

The population in this study were the Indonesian Government Social Extension Agents throughout Indonesia, totaling 696 people, based on the Ministry of Social Affairs data in January 2023. Primary data was obtained through a census using an online digital application questionnaire, Google Forms. This study used descriptive analysis to determine factors' categories based on survey data. Descriptive analysis refers to the indicator score results of respondents' answers which are calculated using the indicator index transformation formula (Sumardjo, 1999). Scores are grouped into three levels, namely 0 to 33.33 is low, 33.34 to 66.66 is medium, and 66.67 to 100 is high. Multiple Ordinary Least Square (OLS) linear regression analysis was carried out to test the significant level of direct influence of individual characteristics, learning factors, role understanding, work environment, and ICT utilization toward the level of andragogy competency. The data regression was carried out using SPSS 26 software.

RESULTS AND DISCUSSION

Individual Characteristic Has a Positive But Not Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Competency is influenced by years of work experience (Huda, 2010; Pradnyani et al., 2016) and motivation (E. O. M. Anwas et al., 2010). This study defines individual characteristics as person-specific attributes such as work-related factors (years of work experience, agents' position level) and psychological factor (learning motivation). Andragogy competency in this study is measured by learning methods and techniques knowledge and the ability to explore learning needs. Standardized Regression individual characteristics on andragogy competency level of 1.287 with a significance of 0.199, because the significance value of $0.199 > 0.05$, it can be concluded that individual characteristics has a positive but not significant effect toward

andragogy competency level of the Indonesian social extension agents. It is important to improve the knowledge and application of andragogy-based learning methods in conducting social extension works.

Learning Factor Has a Positive and Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Learning factor in this study is assessed through number of trainings received, number of discussions with peers, intensity of information utilization, access to learning facilities, and learning materials' sufficiency (O. M. Anwas, 2013, 2015). Descriptive research results show that learning factor is also at medium level. Standardized Regression learning factor on andragogy competency level of 2.279 with a significance of 0.023, because the significance value of $0.023 < 0.05$, it can be concluded that learning factor has a positive and significant effect on andragogy competency level of the Indonesian Social Extension Agents. An evaluation study on training for Civil Service Aparatus in Makassar, Indonesia found that the training have a positive impact on the performance of participants and also their work units (Iskandar, 2019). Further researches on training methods which involve theories and practices approach to improve the social extension program implementation is strongly suggested.

Role Understanding Has a Negative And Not Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Descriptive research results show that role understanding is at medium level. Role understanding is assessed from the work routine, effective communication, and independence in implementing extension works. Standardized Regression role understanding on andragogy competency level of -0.076 with a significance of 0.939, because the significance value of $0.939 > 0.05$, it can be concluded that understanding role has a negative and not significant effect toward andragogy competency level of the Indonesian Social Extension Agents. Workers who have the view that their work is meaningful will have a sense of competence, and will have a significant impact on the workplace (Alsughayir, 2021). This study shows that the social extension agents need to improve their understanding about their role as educator for adults in social extension works. (Pramujo, 2021) mentioned that social extension agents need to equip themselves with communication theories relevant to social extension. They need to improve their communication skills and sharpen their creativity in implementing social extension works.

Work Environment Has a Positive But Not Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Work environment is assessed from organizational structure, superior support, colleagues support, communication, financial support, and workload. Descriptive research shows that work environment is at medium level. Social extension agents perceive that the division of work and job responsibilities in the office is in accordance with existing regulations. Standardized Regression work environment on andragogy competency level of 0.726 with a significance of 0.469, because the significance value of $0.469 > 0.05$, it can be concluded that work environment is not significant toward andragogy competency level of the Indonesian

Social Extension Agents. This is contrary to previous research which found that the work environment has a real influence on human resource competence (Indriyani & Dewi, 2020), the work environment influences the level of agricultural extension agents' competence through the level of superior support (Widodo, 2010) and financial support (Iwuchukwu et al., 2015). The existing works environment is expected to support the implementation of social extension programs as the media to improve social extension agents' andragogical knowledge and to explore the learning needs of the communities.

ICT Utilization Has a Positive But Not Significant Effect on Andragogy Competency Level of the Indonesian Social Extension Agents

Research on anti-drug extension agents in Indonesia found that the agent's competency level was influenced by digital media utilization patterns (Rizal et al., 2021). ICT utilization in this study is measured through access to digital media and the intensity level of digital media use. Standardized Regression ICT utilization on andragogy competency level of 1.635 with a significance of 0.103, because the significance value of $0.103 > 0.05$, it can be concluded that ICT utilization is not significant toward andragogy competency level of the Indonesian Social Extension Agents. Descriptive research results show that ICT utilization is at the medium level. In Singapore, using social media to achieve learning objectives has been greatly determined by the perceptions of the learners. The majority still do not consider social media to be a reliable source of information. (Lee & Sing, 2013). A review and analysis of information dissemination models in China found that the interest in using digital media for information access depends on the level of digital literacy and system comprehension (Zhang et al., 2016). Three main aspects of digital literacy are using, creating, and expressing digital content (Spiers et al., 2017). The social extension agents' digital literacy improvement is expected will lead to a better ICT utilization.

CONCLUSION

This study was conducted to assess the influence of the individual characteristics, learning factors, role understanding, work environment, and ICT utilization on andragogy competency level of social extension agents. Based on the results, the learning factor has a significant influence while individual characteristics, role understanding, work environment, and ICT utilization factors are not statistically significant in influencing the level of andragogy competency. The results are different from earlier research, and there may be contextual explanations for them. Furthermore, it is valuable both on a local and national levels. There were acknowledged limitations to this study, which led to recommendations for additional research.

Declaration of Interest Statement

The authors report there are no competing interests to declare

Data Availability Statement

The data that has been used is confidential

References

- 1) Alsughayir, A. (2021). The effect of emotional intelligence on organizational commitment: Understanding the mediating role of job satisfaction. *Management Science Letters*, 11(4), 1309–1316. <https://doi.org/10.5267/j.msl.2020.11.008>
- 2) Anwas, E. O. M., Sumardjo, S., Asngari, P. S., & Tjitropranoto, P. (2010). Model pengembangan kompetensi penyuluh berbasis pemanfaatan media (Kasus di Kabupaten Karawang dan Garut, Provinsi Jawa Barat). *Jurnal Penyuluhan*, 6(1). <https://doi.org/https://doi.org/10.25015/penyuluhan.v6i1.10660>
- 3) Anwas, O. M. (2013). Pengaruh pendidikan formal, pelatihan, dan intensitas pertemuan terhadap kompetensi penyuluh pertanian. *Jurnal Pendidikan Dan Kebudayaan*, 19(1), 50–62. <https://doi.org/https://doi.org/10.24832/jpnk.v19i1.107>
- 4) Anwas, O. M. (2015). Pemanfaatan teknologi informasi dan komunikasi pada pesantren rakyat Sumber Pucung Malang. *Jurnal Pendidikan Dan Kebudayaan*, 21(3), 207–220. <https://doi.org/https://doi.org/10.24832/jpnk.v21i3.187>
- 5) Bahua, M. I., & Musa, N. (2017). Pengaruh kompetensi pada kinerja penyuluh pertanian dan dampaknya pada perilaku petani jagung. *Prosiding Seminar Nasional Pengembangan Teknologi Pertanian*. <https://doi.org/https://doi.org/10.25181/prosemnas.v0i0.728>
- 6) Blaskova, M., Blasko, R., Matuska, E., & Rosak-Szyrocka, J. (2015). Development of Key Competences of University Teachers and Managers. *Procedia - Social and Behavioral Sciences*, 182, 187–196. <https://doi.org/https://doi.org/10.1016/j.sbspro.2015.04.755>
- 7) Chua, J. H., & Jamil, H. (2012). Factors Influencing the Technological Pedagogical Content Knowledge (TPACK) among TVET instructors in Malaysian TVET Institution. *Procedia - Social and Behavioral Sciences*, 69, 1539–1547. <https://doi.org/https://doi.org/10.1016/j.sbspro.2012.12.096>
- 8) DeVito JA. 2011. Komunikasi Antarmanusia Edisi Kelima. Maulana A, penerjemah. Tangerang Selatan: Karisma
- 9) Dobos, Á., & Jenei, Á. (2013). Citizen Engagement as a Learning Experience. *Procedia - Social and Behavioral Sciences*, 93, 1085–1089. <https://doi.org/10.1016/j.sbspro.2013.09.335>
- 10) Futris, T. G., Schramm, D. G., Richardson, E. W., & Lee, T. K. (2015). The impact of organizational support on the transfer of learning to practice. *Children and Youth Services Review*, 51, 36–43. <https://doi.org/https://doi.org/10.1016/j.chilyouth.2015.01.019>
- 11) Huda, N. (2010). Tingkat Kompetensi Andragogik Lulusan Program Studi S1 Agribisnis Universitas Terbuka. *Jurnal Pendidikan*, 11(1), 20–27. <https://doi.org/https://doi.org/10.33830/jp.v11i1.530.2010>
- 12) Immonen, K., Tuomikoski, A.-M., Kääriäinen, M., Oikarinen, A., Holopainen, A., Kuivila, H., Männistö, M., Mikkonen, K., Mattila, O., Vesterinen, S., Päätaalo, K., Koivunen, K., Ylimäki, S., & Mikkonen, K. (2022). Evidence-based healthcare competence of social and healthcare educators: A systematic review of mixed methods. *Nurse Education Today*, 108, 105190. <https://doi.org/https://doi.org/10.1016/j.nedt.2021.105190>
- 13) Indriyani, R., & Dewi, M. (2020). Pengaruh Lingkungan Kerja Terhadap Kinerja Melalui Kompetensi Sdm Sebagai Variabel Intervening Pada Ukm Keripik Tempe Malang. *Jurnal Manajemen Perhotelan*, 6(2), 53–61. <https://doi.org/https://doi.org/10.9744/jmp.6.2.53-61>
- 14) Iosifescu, C. Ş. (2014). The Foundation of Success in Adult Learning: Dilemmas and Concerns. *Procedia - Social and Behavioral Sciences*, 142, 403–409. <https://doi.org/https://doi.org/10.1016/j.sbspro.2014.07.700>

- 15) Iskandar, A. (2019). Evaluasi Diklat ASN Model Kirkpatrick (Studi Kasus Pelatihan Effective Negotiation Skill Balai Diklat Keuangan Makassar)(Kirkpatrick Evaluation Model On Civil Servant Training (Case Study Of Financial Education And Training Agency Of Makassar)). *Jurnal Pendidikan*, 20, 18–39. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3416425
- 16) Iwuchukwu, J. C., Ogbonna, O. I., & Agboti, I. O. (2015). Roles of youths groups in rural community development in Ebonyi State, Nigeria. *Journal of Agricultural Extension and Rural Development*, 7(2), 41–47. <https://doi.org/https://doi.org/10.5897/JAERD2014.0639>
- 17) Johnson, A. K. (1998). The Revitalization of Community Practice: Characteristics, Competencies, and Curricula for Community-Based Services. *Journal of Community Practice*, 5(3), 37–62. https://doi.org/10.1300/J125v05n03_03
- 18) Kadir, S., Hariadi, S. S., & Subejo, S. (2016). Pengaruh Dukungan Organisasi dan Kemampuan Individu terhadap Kinerja Penyuluh Sosial dan Partisipasi Masyarakat. *Sosio Konsepsia: Jurnal Penelitian Dan Pengembangan Kesejahteraan Sosial*, 6(1), 39–55. <https://doi.org/https://doi.org/10.33007/ska.v6i1>
- 19) Komara, E. (2019). Kompetensi profesional pegawai asn (aparatur sipil negara) di indonesia. *Mimbar Pendidikan*, 4(1), 73–84. <https://doi.org/https://doi.org/10.17509/mimbardik.v4i1.16971>
- 20) Lee, B., & Sing, A. S. (2013). Social Media as an Informal Learning Platform: Case Study on Adult Learning at SIM University, Singapore. *Procedia - Social and Behavioral Sciences*, 93, 1158–1161. <https://doi.org/https://doi.org/10.1016/j.sbspro.2013.10.007>
- 21) Ma'ruf, N. A., & Siswanto, S. (2012). Pengaruh motivasi terhadap peningkatan kompetensi bidan desa di Kabupaten Malang. *Buletin Penelitian Sistem Kesehatan*, 13(1), 61972.
- 22) Machynska, N., & Boiko, H. (2020). Andragogy–The science of adult education: Theoretical aspects. *Journal of Innovation in Psychology, Education and Didactics*, 24(1), 25–34.
- 23) [Kemensos]. Kemensos. 2019. Peta Okupasi Nasional dalam Kerangka Kualifikasi Bidang Kesejahteraan Sosial.
- 24) Pradnyani, K. D., Lubis, D. P., & Mulyani, E. S. (2016). Kompetensi Komunikasi Pendamping Dan Kepuasan Petani Dalam Pelaksanaan Program Simantri (Communication Competence of Facilitator and Farmer Satisfaction on Simantri Programme). *Jurnal Komunikasi Pembangunan*, 14(2). <https://doi.org/https://doi.org/10.46937/14201613763>
- 25) Pramujjo, Y. A. N. (2021). Pemanfaatan Medium Digital Online Dalam Penyuluhan Sosial: Sebuah Tinjauan Konseptual. *Sosio Informa: Kajian Permasalahan Sosial Dan Usaha Kesejahteraan Sosial*, 7(1), 58–72. <https://doi.org/10.33007/inf.v7i1.2650>
- 26) Rizal, A., Fatchiya, A., & Sadono, D. (2021). Faktor-Faktor yang Memengaruhi Kompetensi Penyuluh Narkoba dalam Penyuluhan Digital. *Jurnal Penyuluhan*, 17(2), 156–176. <https://doi.org/https://doi.org/10.25015/17202135050>
- 27) Runge, I., Lazarides, R., Rubach, C., Richter, D., & Scheiter, K. (2023). Teacher-reported instructional quality in the context of technology-enhanced teaching: The role of teachers' digital competence-related beliefs in empowering learners. *Computers & Education*, 198, 104761. <https://doi.org/https://doi.org/10.1016/j.compedu.2023.104761>
- 28) Saito, N., Akita, M., Shimizu, S., Har, Y. B., & Ohara, Y. (2013). *Challenging Education for Future Changee*. <https://doi.org/10.13140/RG.2.2.20425.13928>
- 29) Salehi, A., Sebar, B., Whitehead, D., Hatam, N., Coyne, E., & Harris, N. (2020). Young Iranian women as agents of social change: A qualitative study. *Women's Studies International Forum*, 79, 102341. <https://doi.org/https://doi.org/10.1016/j.wsif.2020.102341>

- 30) Salleh, K. M., Khalid, N. H., Sulaiman, N. L., Mohamad, M. M., & Sern, L. C. (2015). Competency of Adult Learners in Learning: Application of the Iceberg Competency Model. *Procedia - Social and Behavioral Sciences*, 204, 326–334. <https://doi.org/https://doi.org/10.1016/j.sbspro.2015.08.160>
- 31) Satria, R. O., & Kuswara, A. (2013). Pengaruh motivasi dan pelatihan terhadap kompetensi kerja serta implikasinya pada produktivitas pegawai Dinas Perhubungan Kota Bandung. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, 7(2), 74–83.
- 32) Skorková, Z. (2016). Competency models in public sector. *Procedia-Social and Behavioral Sciences*, 230, 226–234. <https://doi.org/https://doi.org/10.1016/j.sbspro.2016.09.029>
- 33) Spiers, H., Kerkoff, S., & Medlock Paul, C. (2017). *Digital Literacy for the 21st Century. Encyclopedia of Information Science and Technology*, (January), 11. <https://doi.org/10.4018/978-1-5225-7659-4.ch002>
- 34) Suharno, P., & Despinur, D. (2017). The impact of work motivation and competence on employee performance through service quality in administrative staff of Universitas Negeri Jakarta, Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 61(1), 160–171. <https://doi.org/DOI> <https://doi.org/10.18551/rjoas.2017-01.16>
- 35) Sumardjo. 1999. Transformasi model penyuluhan pertanian menuju pengembangan kemandirian petani kasus di Provinsi Jawa Barat [disertasi]. Bogor: Institut Pertanian Bogor
- 36) Sumardjo. 2019. Sinergi Penyuluhan dan Komunikasi Pembangunan di Era Komunikasi Digital dalam Mewujudkan Kesejahteraan. Di dalam: Tanjung HB, Basyar B, Madarisa F, Zulvera, Wahyuni S, editor. Kontribusi Ilmu Penyuluhan dan Komunikasi Pembangunan untuk Memperkuat Kemandirian Masyarakat Indonesia pada Era Revolusi Industri 4.0. Prosiding Seminar Nasional Penyuluhan, Komunikasi Pembangunan dan Pemberdayaan Masyarakat 2019; 2019 Mei 2; Program Pascasarjana Universitas Andalas, Padang, Indonesia. Padang: hlm 23-52; [diakses 2022 Feb 1]. <http://repository.lppm.unila.ac.id/16028/1/PROSIDING%20SEMNAS%20PKP%20PM%202%20MEI%202019-p-616-631.pdf>
- 37) Tohidi, H., & Jabbari, M. M. (2012). The effects of motivation in education. *Procedia - Social and Behavioral Sciences*, 31, 820–824. <https://doi.org/https://doi.org/10.1016/j.sbspro.2011.12.148>
- 38) Widodo S. 2010. Kompetensi Penyuluh Pertanian Terampil berdasarkan pendidikan: Kasus di Kabupaten Garut, Magelang dan Tuban [disertasi]. Bogor: Institut Pertanian Bogor
- 39) Zhang, Y., Wang, L., & Duan, Y. (2016). Agricultural information dissemination using ICTs: A review and analysis of information dissemination models in China. *Information Processing in Agriculture*, 3(1), 17–29. <https://doi.org/https://doi.org/10.1016/j.inpa.2015.11.002>