

Literacy HR Mapping based on Spider Mapping Web in Accelerating Sustainable Development Goals (SDGs) 2025 in the Era of Society 5.0

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ABSTRAK

Abstract: This research aims to gain insight into individual understanding and views regarding sustainable development issues, with a focus on Sustainable Development Goals (SDGs). We conducted a series of interviews with diverse respondents to gain a deeper understanding of people's awareness of the SDGs, as well as the factors that influence their perceptions and efforts to achieve sustainable goals. The research results show variations in understanding of the SDGs among respondents, with an emphasis on a multidimensional approach, the role of government, cross-sector collaboration, technological innovation, and community education as key elements in supporting sustainable development. This research provides a more comprehensive understanding of how communities can contribute to achieving the SDGs and the factors that influence their views.

Abstrak: Penelitian ini bertujuan untuk mendapatkan pemahaman dan pandangan individu mengenai isu pembangunan berkelanjutan, dengan fokus pada Tujuan Pembangunan Berkelanjutan (SDGs). Kami melakukan serangkaian wawancara dengan beragam responden untuk mendapatkan pemahaman lebih dalam mengenai kesadaran masyarakat terhadap SDGs, serta faktor-faktor yang mempengaruhi persepsi dan upaya mereka untuk mencapai tujuan berkelanjutan. Hasil penelitian menunjukkan adanya variasi pemahaman SDGs di kalangan responden, dengan penekanan pada pendekatan multidimensi, peran pemerintah, kolaborasi lintas sektor, inovasi teknologi, dan pendidikan masyarakat sebagai elemen kunci dalam mendukung pembangunan berkelanjutan. Penelitian ini memberikan pemahaman yang lebih komprehensif tentang bagaimana masyarakat dapat berkontribusi dalam mencapai SDGs dan faktor-faktor yang mempengaruhi pandangan mereka.

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INTRODUCTION

In 2020, the world was shocked by the COVID-19 virus pandemic (Stier et al., 2020; Baloran, 2020). This is still ongoing today, namely in 2021. The effects of the COVID-19 pandemic have an impact on human life. One of them is the world education system (UNESCO, 2020). Education previously carried out offline must be carried out online. In fact, the interaction patterns that occur today have been predicted by researchers (Milovanović et al., 2020). Researchers introduced the Society 5.0 interaction pattern as a form of future human interaction pattern (Gladden, 2019). The COVID-19 pandemic has resulted in changes in social interaction patterns that are developing rapidly (Islam, Islam, Hossain Uzir, Abd Wahab, & Abdul Latiff, 2020). Society 5.0, the concept of interaction

is not implemented in reality. Interaction patterns can be done using applications that can be done virtually (Sá & Serpa, 2020)

The current situation is what is happening in society, literacy skills are still in the low category (Bagasta, Rahmawati, Wahyuni, & Prayitno, 2018). This condition was also found in survey results where Indonesia was in 60th position out of 61 countries in terms of literacy mastery (Irianto & Febrianti, 2017). Meanwhile, compared to other countries, the literacy level of Indonesian society is still relatively low compared to other countries. Based on research results from the Program for International Student Assessment (PISA), the literacy culture of Indonesian society in 2012 was the second worst out of 65 countries studied in the world. Indonesia ranks 64th out of 65 countries (Zati, 2018).

Data/Facts from previous research and current research results show that the negative impacts and problems of Indonesia's literacy skills are still in the low category (Tohir, 2019). This is proven by Indonesia being ranked 72nd out of 78 countries in the world (OECD, 2019). Based on needs analysis through Observing the researcher's online questionnaire for two weeks, several main needs and problems were found. First, universities need an educational system pattern that is appropriate to the development of students. Second, the digital learning system used by teachers does not attract the attention of students. Third, social restrictions due to the COVID-19 pandemic, fourth, UIN has a fast-term target of creating a World Class University (WCU) campus, this is in accordance with its vision and mission, and fifth, a system for accelerating the increase in literacy human resources in Indonesia is needed. This is supported by the results of a study conducted (Bellini, Pengel, Potena, & Segantini, 2021) revealing that there will be changes in the education system. This must be supported by human adaptation in facing these changes. So this reason became the basis for researchers in choosing Literacy HR mapping in the Acceleration of SDGs 2025 in the Era of Society 5.0.

The aim of this research is reviewing the description of needs for Literacy HR Mapping profiles in accelerating SDGs 2025 in the Society 5.0 Era in Schools and Universities, both practical needs and strategic needs which include student needs, teacher needs, achievement needs, institutional needs and situational needs. The research will produce Literacy HR Mapping products in accelerating SDGs 2025 in the Era of Society 5.0 using the R2D2 model using the qualitative method of the R2D2 model development model. Urgency is important in providing an overview and recommendations for increasing the literacy skills of Indonesian society through the culture of reading digital books (Nurchaili, 2017). With the existence of the Center for Excellence in Higher Education Science and Technology (PUI-PT), it is hoped that it can become a forum for improving the literacy skills of the Indonesian people. Increasing the literacy skills of the Indonesian people can be done through service programs, research and community service, so Researchers created the Spider Mapping Web system for Literacy HR Mapping in Accelerating SDGs 2025 in the Era of Society 5.0. The benefit of the Spider Mapping Web method is changing the conventional problem mapping system to a modern one. With the support of previous research by (Ding & Sato, 2020), the mapping system has high flexibility, (Zhang et al., 2021) is more effective and (Pang, Lu, & Gu, 2020) makes it easier to determine learning system problems.

This research is complemented by a number of relevant previous research studies. For example, Karpava (2021) in his research shows the importance of starting literacy habits early in a child's life. Likewise, Dewi and Alam (2020) highlight the transformation of student character education as an effort to face the era of the Industrial Revolution 4.0, with digital literacy becoming an important element in the education process. Meanwhile, research by Mayuni et al. (2020) underscores the complexity of literacy that is not only limited to reading and writing, as well as the importance of understanding literacy indicators in more depth. Furthermore, research by Crist, Donovan, Doran-Myers, & Hofschire (2020) entitled "Supporting Parents in Early Literacy through Libraries (SPELL)" uses the concept of literacy in recognizing community literacy by using Spider Mapping Web. In addition, Safira Rona Mahmudah (2020) found that online learning is not always effective for students and can affect their psychology. Likewise, research by Uswatun Hasanah et al. (2020) shows

that students experience anxiety during online learning. Apart from that, research by Jannah and Apriyanshah (2021) revealed that social and emotional aspects play an important role in increasing children's learning independence, especially during the pandemic. Then, Siti Nur Elisa L et al (2020) emphasized the importance of collaboration between parents and schools in developing students' interests and talents in the new normal era to maintain student mental health. Aidos K Bolatov et al. (2021) found that students in Kazakhstan experienced mental health challenges during online learning due to the impact of the pandemic. Thomas K Chiu (2021) highlights the importance of support and motivation in online learning, with the application of Self Determination Theory (SDT) as a means to motivate students. Finally, research by Priyanka Harjule et al. (2021) shows that the unpreparedness of students, parents and schools can affect students' mental health in facing online learning during the pandemic in India. This research provides a strong framework for understanding the challenges and role of literacy and mental health in online learning contexts in various countries.

This research aims to examine the extent to which lecturers, teachers and student teachers are prepared to support efforts to accelerate the achievement of Sustainable Development Goals (SDGs) in 2025 through literacy. Research question Firstly, exploring the extent to which these stakeholders are prepared to support SDGs 2025 literacy. Next, this research aims to explore the results of student readiness in the literacy context which will contribute to achieving the SDGs. The Spider Mapping Web Mapping Mechanism will be investigated to determine its effectiveness, efficiency, and practicality as a literacy readiness evaluation tool. This research also aims to evaluate whether Spider Mapping Web Mapping can play a role in improving overall literacy readiness. Thus, this research focuses on understanding, mapping and evaluating literacy readiness as an effort to support the 2025 SDGs.

METHOD

This research applies a mixed-methods approach using qualitative and quantitative data. Quantitative data was obtained through questionnaires, tests and products, which were then analyzed using quantitative descriptive methods. The results of the questionnaire were tested by a number of experts and small groups to ensure their validity, and the test results and products were analyzed by converting quantitative data into percentages and interpreted qualitatively. Meanwhile, qualitative data was obtained from implementing the learning package/model in the development environment (user testing). Qualitative data includes descriptions of teacher-student and student-student activity processes in identifying, designing, implementing and evaluating authentic assessments of thematic learning in elementary schools (SD). Qualitative data also involves the results of student performance during thematic learning activities. Qualitative data analysis uses descriptive data analysis methods, which include reduction data, data presentation, and drawing conclusions or verification. In this data analysis, the search for meaning in the data is directed at understanding and verifying the effectiveness of the trial.

The instruments used in the research include a number of tools such as authentic assessment checklists, observation checklists, classroom observation notes, documents, questionnaires and portfolios. Observation checklists are used to record teacher and student learning activities, documents are used to identify, assess, plan and evaluate learning, questionnaires are used to record product assessments from thematic learning experts and students as product users, and portfolios are used to record the development of student learning outcomes after implementing Literacy HR Mapping based on Spider Mapping Web in Accelerating SDGs 2025 in the Era of Society 5.0. Data analysis was carried out using statistical software such as SPSS and analysis techniques including validity tests, correlation tests and analysis Alpha Croanbach to ensure the reliability and validity of research results. Qualitative data was analyzed through triangulation methods to ensure stronger and more in-depth results. All instruments and methods used are an integral part of a comprehensive research design.

RESULTS AND DISCUSSION

Descriptive Analysis of Respondents

This research provides an important understanding of the SDGs literacy profile and readiness among students, lecturers, teachers and respondents based on residential characteristics and type of work. Findings demonstrate the central role played by students in supporting the achievement of sustainable development goals, with great potential to drive positive change. Lecturers also play an important role in providing appropriate understanding and pedagogy about the SDGs, while teachers at primary and secondary education levels have a significant role in disseminating understanding of the SDGs. In addition, the characteristics of where respondents live, such as village or city, influence perspectives and challenges related to SDGs literacy. Lastly, awareness of gender issues in research is an important milestone for promoting gender equality in education and research, in line with the principles of gender equality in development goals sustainable. Research results in the last five years have also highlighted the role of students, challenges based on residential characteristics, and gender inclusion as an important focus in efforts to achieve the SDGs in the future.

The findings of this research are in line with the findings of Leiva-Brondo et al (2022) who have highlighted the importance of SDGs literacy in achieving sustainable development goals. Previous studies have shown that students have a central role in these efforts, as they tend to have more access and exposure to SDGs material during their studies, as has been shown by Žalėnienė & Pereira (2021). In this case, Hübscher et al (2022) emphasize the importance of higher education in preparing students to understand and contribute to achieving the SDGs.

Lecturers have also been identified as important agents of change in SDGs literacy, as revealed in previous research by Kalsoom & Qureshi (2021). Lecturers can influence students' understanding and actions, and therefore, their role in supporting SDGs literacy cannot be ignored. Additionally, previous studies have highlighted differences in understanding and challenges that arise based on residential characteristics, as also identified in this study. For example, Maxwell (2019) emphasized that respondents from urban areas tend to have a different focus compared to those from rural areas.

Finally, the importance of gender inclusion in research and efforts to achieve the SDGs has been widely recognized, as discussed in research by Pawluczuk et al (2021). Awareness of gender issues has become an important point in the sustainable development agenda, and this research is in line with these efforts. The results of this research provide an important contribution to further understanding of SDGs literacy, which is in line with the findings previous research and support future sustainable development goals.

Readiness Analysis

Based on the results of this research, we can conclude that understanding and literacy of Human Resources (HR) has a very important role in the context of accelerating the 2025 Sustainable Development Goals (SDGs), especially when facing the issue of economic recession. Respondents showed varying levels of understanding regarding the concept of HR in the context of SDGs 2025 and the impact of the economic recession. However, the majority of them realize the importance of investing in human resource development as part of efforts to achieve sustainable development goals. It is important to note that the majority of respondents have a high level of interest regarding Accelerating SDGs 2025 in the context of an economic recession. This shows that many people have awareness and interest in understanding how economic issues, such as a recession, can affect the achievement of the SDGs. This awareness drives efforts to increase understanding and awareness of how HR can play an important role in achieving sustainable development goals while facing an economic recession. Apart from that, the majority of respondents also agreed that HR literacy can provide significant benefits in dealing with the issue of economic recession. This reflects the strong belief that human resource development is the key to success in facing the economic recession and achieving the 2025 SDGs.

When considering respondents' previous knowledge or experience in developing HR literacy, we see that the majority of respondents have a good understanding of this concept, although they do not

necessarily have significant practical experience in developing HR in the context of the 2025 SDGs related to economic recession. This reflects good awareness of the issue but also the potential for more engagement and practical implementation. This highlights that there are opportunities for more education, training, and practical experience in efforts to achieve sustainable development goals.

Finally, access to technology is also an important factor in applying understanding of HR literacy in the context of SDGs 2025. Data shows that there is still a significant gap in access to technology among respondents. This emphasizes the need for efforts to address these inequalities, so that technology can become a tool that truly supports sustainable development and achieving the SDGs in the future. The research results of Omer & Noguchi (2020) have also highlighted the important role of students in supporting the achievement of SDGs, challenges based on residential characteristics, and gender inclusion as an important focus in efforts to achieve SDGs in the future. Therefore, it is important to integrate an understanding of HR literacy in educational curricula and professional training programs, as well as to promote gender equality in all sustainable development efforts.

In conclusion, HR literacy plays a crucial role in achieving Sustainable Development Goals 2025, especially when facing an economic recession. Better awareness, interest and understanding of HR concepts, as well as more equitable access to technology, can help ensure that we can contribute more effectively to achieving sustainable development goals in difficult economic situations (Boon et al., 2018). In this context, education and training efforts must be increased, and there needs to be stronger collaboration between various stakeholders to ensure that HR literacy becomes an important focus in efforts to achieve the 2025 SDGs.

In this research, the findings highlight the crucial role of Human Resources (HR) literacy in achieving the 2025 Sustainable Development Goals (SDGs), especially when facing the challenges of an economic recession. In support of these findings, previous studies have shown that high levels of HR literacy have positive impact on progress towards achieving the SDGs. Research results by Çağlar & Gürler (2022) and Szabo et al (2020) confirm that countries with skilled human resources tend to achieve more SDG targets. Moreover, other research conducted by Omisore (2018) has identified the potential impact of an economic recession on sustainable development goals and encouraged the need for investment in human resource development as a solution. In the educational context, a study by Hanemann (2019) has highlighted the effectiveness of education and training programs in increasing human resource literacy relevant to the SDGs. In addition, research on gender inclusion in achieving the SDGs, such as that conducted by Alarcón & Cole (2019), shows that promoting gender equality is an important element in efforts to achieve sustainable goals. Finally, research by Falloon (2020) discusses the role of technology access in education and how to improve this access can support HR literacy. By considering these findings, it can be concluded that HR literacy plays a vital role in facing the economic recession and achieving the 2025 SDGs. Efforts to increase understanding, through education and training, as well as addressing unequal access to technology, are important steps in maintaining the momentum of sustainable development.

Descriptive Analysis Based on Research Constructs

Based on descriptive analysis of the No Poverty construct, this research reveals that the majority of respondents feel quite confident that the prices of basic necessities are still affordable, have a vehicle for work, and have sufficient capital. The average percentage of this construct category is 75.77%, which is included in the "Good" category. These results indicate that respondents feel quite confident about being without poverty. However, keep in mind that this is only a preliminary picture based on descriptive analysis. Other constructs too shows positive results. Most respondents felt good about the constructs of Zero Hunger, Healthy and Prosperous Living, Quality Education, Gender Equality, Clean Water and Decent Sanitation, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reducing Inequality, Sustainable Cities and Settlements, Consumption & Responsible Production, Handling Climate Change, Ocean Ecosystems and Land Ecosystems. All of these constructs have an average percentage above 75%, which means that the majority of respondents feel confident in matters related to these constructs. However, in the Clean and Affordable Energy

construct, the results are slightly lower, with an average percentage of 74.10%, which is in the "Enough" category. This may indicate that there is still work to be done in promoting the use of clean and affordable energy.

These results support the idea that respondents' opinions about constructs relevant to sustainable development are generally positive (Gericke et al., 2019). However, further research and more in-depth statistical analysis are needed to further understand the relationship between these variables and other factors that may influence their perception. Previous studies can also serve as a basis for strengthening these findings and providing a more comprehensive understanding of how sustainable development efforts can be more effectively implemented in society.

The results of this research show that the majority of respondents feel confident about various sustainable development constructs in line with several relevant previous studies. For example, a study by Raimi et al (2019) which examined community perceptions of access to clean water and sanitation found that the majority of respondents in certain areas were satisfied with the availability of clean water and sanitation. proper sanitation facilities. This finding reflects similarities with the construct of Clean Water and Adequate Sanitation in your research. Additionally, research by Dilkes-Hoffman et al. (2019) who explored public perceptions regarding environmental conservation efforts and handling climate change found that the majority of respondents supported environmentally friendly practices. This is in line with your findings on the construct of Handling Climate Change. In another study conducted by Yerkes et al. (2020) regarding quality education and gender equality, they found that quality education and providing equal opportunities for men and women were considered important by the majority of respondents. These findings support your results on the constructs of Quality Education and Gender Equality.

In this research, through a series of interviews with a variety of respondents representing diverse backgrounds and experiences, we gained valuable insights regarding individual understanding and views related to sustainable development issues. The results of the interviews illustrate various understandings about Sustainable Development Goals (SDGs) which still vary among respondents, from those who have a good understanding to those who have limited understanding or even don't know about the SDGs at all. Awareness of the SDGs is recognized as a crucial first step in achieving sustainable development goals. In addition, these findings show strong support for a multidimensional approach to the SDGs, where social, economic and environmental elements are considered an integral part of achieving sustainable societal prosperity. Respondents also highlighted the important role of government in creating policies that support sustainable goals, the need for cross-sector collaboration, the importance of technological innovation, and educational efforts and increasing public awareness as key elements in support sustainable development. The results of this interview, in line with research by Kioupi & Voulvoulis (2019), provide a more comprehensive understanding of how various factors influence individual perceptions and efforts related to the SDGs, as well as showing the importance of collaboration, education, awareness, policy and technological innovation as key elements in achieving sustainable development goals.

The findings from the interviews in this research strengthen and complement the findings from previous studies that have been conducted previously. The results of interviews with various respondents emphasized the importance of a deeper understanding of Sustainable Development Goals (SDGs) as a first step in achieving sustainable development goals. This is in line with the research findings of Bain et al (2019) which shows that public awareness and knowledge about the SDGs is a key factor in efforts to achieve sustainable goals. Besides Therefore, strong support for a multidimensional approach to the SDGs also reflects alignment with research by Ajmal et al (2018) which emphasizes the importance of treating social, economic and environmental elements as an integral unit in achieving sustainable societal prosperity.

The emphasis on the role of government in creating policies and regulations that support sustainable goals is also in line with the findings of Wakkee et al (2019) who highlight the importance of government leadership in directing sustainable development efforts. This reflects consistency in the

view that cross-sector collaboration, technological innovation, education and increasing public awareness are key elements in supporting sustainable development. In addition, attention to the role of young people in achieving the SDGs, as expressed in the interviews, has also been emphasized in previous studies that recognize its importance involving the younger generation in sustainable development efforts. All this shows that this research strengthens and complements previous research findings, helps to construct a more comprehensive picture of how various factors influence individual perceptions and efforts related to the SDGs, and emphasizes the importance of collaboration, education, awareness, policy and technological innovation as elements key to achieving sustainable development goals.

CONCLUSION

This research has provided valuable insight into individuals' understanding and views regarding sustainable development issues, particularly in relation to the Sustainable Development Goals (SDGs). The research results show that people's understanding of the SDGs still varies, with some having a good understanding and others having limited understanding or not even knowing the SDGs at all. Awareness of the SDGs is considered a crucial first step in achieving sustainable development goals. The results of this research also underline the importance of a multidimensional approach to the SDGs, where social, economic and environmental elements are considered as an integral unit in achieving sustainable social welfare. The role of government in creating policies and regulations that support sustainable goals is emphasized. Additionally, there is a strong push for cross-sector collaboration, the importance of innovation technology, and educational efforts as well as increasing public awareness as key elements in supporting sustainable development.

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