SUMBAR MADANI ; LOCAL WISDOM LEADERSHIP IN THE VUCA ERA

Afrinaldi Yuwanda¹, Rozidateno Putri Hanida^{2*}, Meuotia Aulia Zahara³ ^{1,2,3} Department of Public Administration, Faculty of Social and Political Science, Andalas University

*Korespondensi : ozidateno@soc.unand.ac.id

ABSTRACT

The world is currently facing the VUCA era characterized by rapid change, uncertainty, complexity, and ambiguity. Local wisdom-based leadership is an approach that can be used to increase the resilience of communities and organizations in facing this era. This study uses a library research method by reviewing relevant literature sources. Data were collected from books, journals, government documents, and other references that discuss leadership and policy implementation based on local wisdom. The results of the study show that Mahyeldi's leadership as Governor of West Sumatra for the 2019-2024 period emphasizes the philosophy of Adaik Basandi Syara', Syara' Basandi Kitabullah (ABS-SBK). The programs implemented, such as the development of sharia economics, social assistance, local content curriculum, and national literacy movements, contribute to increasing the cultural and social resilience of the community. However, there are challenges in implementing the program, such as the complexity of inter-agency coordination, uncertainty in long-term effectiveness, and ambiguity in the transition to a sharia economic system. Although several programs have shown success, better management is still needed to increase community resilience in facing challenges in the VUCA era. Government support and active community participation are important in ensuring the sustainability of the program. Local wisdom-based leadership has great potential in strengthening community resilience in the VUCA era. Continuous evaluation and adaptive policies are needed to ensure the sustainability and effectiveness of programs that have been implemented.

Keywords : Leadership, VUCA Era, Mahyeldi.

A. INTRODUCTION

Leadership plays a crucial role in maintaining the continuity and effectiveness of an organization. In order for an organization to adapt to the dynamics of the times, leadership is needed that is able to respond to external changes and encourage innovation. Along with the development of an increasingly complex global environment, the study of leadership continues to be relevant and attracts attention. In a dynamic era, such as the VUCA era (Volatility, Uncertainty, Complexity, Ambiguity), leaders are required to not only manage the internal organization but also navigate the ever-changing external challenges. If leaders fail to respond to change, the organization is at risk of decline. A relevant example is the case of Nokia. According to research (Setyoko at Wood, 2022), Nokia's failure to maintain its position in the global mobile phone market was due to premature complacency when they were at the peak of their success, so they did not realize the threat from new, more innovative competitors.

Unstable, uncertain, and complex conditions encourage organizations to be more responsive (Utama, 2023). These unstable, uncertain, and complex conditions are known as the VUCA era. VUCA is an acronym consisting of volatility. uncertainty, complexity, and ambiguit . This term was introduced by Warren Bennis and Burt Nanus in 1986 to describe a situation that is experiencing rapid change (Wood, 2022). The VUCA concept was applied and developed in military leadership training at the US Army War College to explain the volatile, uncertain, and complex global political, military, and security situation, especially after the cold war (Whiteman, 1998).

Volatility refers to frequent and unstable changes where, although information is available and the situation is generally understood, shifts still happen unpredictably. When facing uncertain changes, the best approach is to strengthen existing capabilities. If change is inevitable but its scale, direction, and duration remain unclear, effective organizational leaders focus on building and maximizing the strengths of their current resources.(Bennett & Lemoine, 2014).

Uncertainty pertains to a condition in are which the causal relationships recognized, yet there is insufficient knowledge to determine whether a particular event will result in substantial consequences. Although the mechanisms of cause and effect are understood, the potential for the event to generate significant change remains unknown. Uncertainty arises from a lack of equivalent information, so overcome it by getting information (Bennett & Lemoine, 2014).

Complexity refers to the number of interconnected parts forming a complex, often multifaceted and convoluted network of information and procedures, but does not necessarily involve change. Complex situations demand tailored responses, emphasizing the risks associated with misinterpreting or inadequately defining the challenges an organization encounters. In conditions of uncertainty, merely accumulating resources proves ineffective if there is no clear understanding of how to strategically deploy them within a complex environment. (Bennett & Lemoine, 2014).

Ambiguity refers to a lack of knowledge about the rules of the "ground rules of the game", cause and effect are not understood and no leader is able to predict what will happen. This ambiguity is characterized as a situation where there is doubt about the nature of the cause-effect relationship. In ambiguous conditions, uncertainty occurs due to a lack of understanding of how Actions or changes affect the final outcome (Bennett & Lemoine, 2014).

The rapid unpredictable and development of the world creates a major challenge for leaders to maintain organizational stability (Sarkar, 2016). In addition to the challenges presented by the VUCA era, globalization also affects the social and cultural order in many countries, including Indonesia. Foreign cultures that enter through social media, films, and music have influenced people's way of life, especially among the younger generation (Kompas, 2021). In the midst of this globalization, the threat to the sustainability of local culture is increasingly real, especially because of new cultures that are

considered more modern and interesting (Setyaningrum, 2018).

Indonesia as a multicultural country faces serious challenges in maintaining its cultural identity. The shift in local cultural values has the potential to threaten the cultural diversity that has become the nation's hallmark. However, efforts to maintain local culture continue to be made, both at the national and regional levels. The central government, for example, has allocated a cultural fund of 2 trillion rupiah to protect and promote cultural heritage strategic through programs bv the Coordinating Ministry for Human Development and Culture (Kemenko PMK, 2023).

West Sumatra, as a province rich in local traditions, strives to maintain the existence of its culture through the philosophy of adaik basandi syara', syara' basandi kitabullah (ABS-SBK). The official recognition of this philosophy through Law Number 17 of 2022 emphasizes the importance of maintaining cultural values in the face of global change. This philosophy is a strong foundation in the efforts of West Sumatra Province in maintaining its identity amidst the onslaught of globalization and the challenges of the VUCA era.

West Sumatra as one of the regions in Indonesia that is thick with local culture has its own way of maintaining the existence of culture. Through Law Number 17 of 2022 concerning West Sumatra which regulates the improvement of the legal basis, adjustment of the scope of the area, confirmation of characteristics, and synchronization of laws and regulations governing the Province of West Sumatra that already existed previously. The uniqueness of this Law is the recognition of the philosophy of "Adaik Basandi Syara'. Basandi Svara' Kitabullah" as a characteristic of the West Sumatra region. This legal recognition gives special privileges to the Province of West Sumatra. On the other hand, this de jure recognition has triggered a little conflict for the Mentawai people. Mentawai is geographically located in the Province of West Sumatra, but when viewed from a cultural perspective, Mentawai has a different culture from Minangkabau.

Adaik Basandi Syara', Syara' Basandi Kitabullah (ABS-SBK) has a long history in West Sumatra. Starting from a conflict that turned into a way of life, in the past the Minangkabau people were Hindu-Buddhist, then the entry of Islam to the coast of West Sumatra caused conflict between the traditional and religious communities. To ease this conflict, the ABS-SBK philosophy was used as a middle way (Fajria & Fitrisia, 2024). This ABS-SBK philosophy means that every joint of customary norms is supported by Islamic values.

The Minangkabau people not only adhere to the philosophy of custom, but also have their own criteria for appointing a leader. Becoming a leader for the Minang people is not an easy task, because those who are led can deny the leader if they cannot be fair in exercising power. This is related to the egalitarian nature of the Minang ethnic group who hold firmly to the proverb "the pious king is worshipped, the cruel king is denied" (Khusairi dkk., 2023). Various leadership principles from Minangkabau wisdom form a strong and characterful society. One of them is "kamakan barajo ka mamak, mamak barajo ka penghulu" which means upholding justice based on applicable rules. In addition, there is a proverb "lost nan ka

mancari, anyuik ka maminteh, luluih nan ka salami", which illustrates that a leader must have deep concern and attention to his community (Amir, 1997). The Minang ethnic group itself is known to be critical in choosing a leader. They are difficult to direct in determining a candidate for leader, because they usually already have their own strong choices that are difficult to change (Khusairi dkk., 2023).

In choosing a leader, there are four main criteria that must be met, namely tokoh, takah, tageh, and toke. Tageh refers to firmness and courage in attitude and action, including readiness to bear risks in leadership. Meanwhile, toke refers to someone who has more wealth than others. A financially stable leader is expected to be willing to sacrifice for the common good and is less likely to abuse power to enrich himself. This principle is related to the leadership of the penghulu kamu in Ranah Minang, who has productive heirlooms to support his leadership (Khusairi dkk., 2023).

During the 2019–2024 period, West Sumatra was governed by Mahyeldi, who had previously served two terms as the Mayor of Padang. His leadership during that time demonstrated his competence and effectiveness. Under his administration, Padang — the capital city of West Sumatra Province ____ experienced significant progress and development. Furthermore, Mahyeldi's personal characteristics contributed to the formation of his political branding. His charismatic, religious, welleducated, approachable, and modest persona, coupled with his consistency in fulfilling campaign promises, played a crucial role in shaping his political success during the 2019 regional elections. (Handika & Rafni, 2022).

Mahyeldi's political strength is rooted in the characteristics of the party that supported him during the 2019 election, which is strongly influenced by Islamic values. His leadership credentials were further reinforced by his previous tenure as the Mayor of Padang, where he became known for his charismatic, religious, modest, and highly educated persona. Moreover, the role of party ideology is essential, as it serves as a guiding framework for the values underpinning political programs and activities. (Romli, 2011). Mahveldi in the 2019 Pilkada was supported by two religious parties, namely PKS and PPP. The effectiveness of these two parties is quite good in West Sumatra because the majority of the people of West Sumatra are Muslim and obey religious law, this strengthens Mahyeldi's political (Handika & Rafni, 2022)branding.

In the 2019 regional election (Pilkada), Mahyeldi promoted the tagline "Basamo Mambangun Sumatera Barat Madani #MilenialManang". His vision and mission emphasized enhancing the quality of human resources, strengthening the social fabric of society grounded in the philosophy of adaik basandi syara', syara' basandi kitabullah, boosting economic development, advancing infrastructure, and ensuring the delivery of clean, accountable, and high-quality public services.

To realize West Sumatra based on the Minangkabau philosophy, at least Mahyeldi has implemented four related programs in accordance with his second mission, namely improving the social order of society based on the ABS-SBK philosophy. First, the sharia economic development program. The development of the sharia economy is carried out as an effort towards West Sumatra as the center of the national halal industry in 2024. Second, the assistance program for orphanages and social institutions. This social assistance is an effort to support the attention of the existence of orphanages in West Sumatra so that they continue to advance and develop in providing guidance, training, and skills for people in need. Third, including local content in the education curriculum at the high school and vocational school levels (SMA/SMK). Local content in this education curriculum is created to increase students' awareness of local culture, local content in this curriculum is regulated in Governor Regulation Number 36 of 2022 concerning Minangkabau Subjects. And finally, the national literacy movement (GLN) program aims to build a culture of literacy for the people of West Sumatra.

Through these four programs, the Mahyeldi government hopes that West Sumatra will have local cultural resilience in its youth. Through youth, culture can be maintained, when the youth have abandoned local culture then this culture will slowly fade, so it is necessary to foster awareness of local culture. On the other hand, the rapid and complex development of the era raises new questions, can policies and programs that have local content and pay attention to culture increase community resilience in facing the VUCA era? Or is it possible that policies with local content will then cause a decline for society in the VUCA era? Through this study, researchers will answer how the cultural programs implemented during the Mahyeldi administration in facing the VUCA era.

B. RESEARCH METHODE

This study uses library researc, a study that emphasizes theories that have been produced by scientists. The study approach uses library sources to obtain data and analyze it. In drawing conclusions, the author integrates the ideas of his findings into a formulation.

Library research is a research method that is carried out by collecting information and data with the help of various sources from the library, such as books, research articles. journals, notes. and other references that are relevant to the problem to be solved. This process is carried out systematically in collecting, processing, and drawing conclusions from the data (Sari & Asmendri. obtained 2020). According to (Herliandry dkk.. 2020)library research, it is a model used to collect data sources that are relevant to a topic. The purpose of this study is to describe the core content based on the information obtained.

According to Zed, there are four main characteristics that need to be considered. First, the author interacts directly with text or numerical data, not with direct experience in the field. Second, data from the library is "ready to use", where researchers do not need to go directly to the field because they can access sources available in the library. Third, library data is generally a secondary source, not original data obtained directly from the field. Fourth, the condition of library data is not bound by space and time constraints (Supriyadi, 2017).

The research procedure consists of four stages, namely: (1) collecting data relevant to the theme being researched, (2) the researcher presents the data that has been collected by the researcher, (3) data reduction and inventory, and (4) drawing conclusions based on valid and reliable data verification. Some of the research source data was obtained through literature

reviews from various references and analysis of previous research results with data processing and analysis processes. (Meliyanti dkk., 2021).

Based on this, data collection in this study was carried out by reviewing 1 book, 50 journals, and 9 government documents in the form of RPJMD, LAKIP and regulations, in the form of electronic media, and other sources that are in accordance with the context of the same study.

C. RESULT AND DISCUSSION

The research findings are grounded in the related discoveries to programs with Minangkabau cultural content in the Mahyeldi leadership era, then analyzed using the VUCA indicators by Bennet and Lemoine. The results are briefly presented by the author in table 1 below:

Table 1 Culture-based programs in West Sumatra

Sumatra		
Program	Implementation	
Sharia economic	Ambiguity: The	
development	sharia economic	
program	development	
	program raises	
	doubts from	
	various parties, the	
	transition to a	
	sharia economy	
	must be in line with	
	the public's	
	understanding of	
	how the sharia	
	economy works so	
	that the public can	
	understand and	
	enjoy the sharia	
	economic program.	
	Public	

	understanding will
	reduce conflicts
	that occur due to
	the public and
	banking's lack of
	understanding of
	sharia principles
	such as usury,
	zakat, and profit
	sharing.
Assistance	Volatility:
program for social	Orphanages and
institutions and	social homes have
orphanages	unpredictable
	changes in needs at
	all times, needs can
	change depending
	on the number of
	residents,
	commodity prices,
	health conditions
	and other urgent
	conditions. Stable
	funding is needed
	to avoid economic
	problems. In
	addition, changes
	in social trends or
	public perceptions
	about adoption and
	care of children in
	institutions create
	volatility.
Local content	Complexity: There
curriculum	needs to be
	coordination
	between
	institutions, lack of
	coordination can
	cause inconsistency
	in its
	implementation.
	Furthermore, there

	is the readiness of	infrastructure.
	teachers to teach	Source. Researcher's work 2024
	local content	Volatility
	materials.	Volatility or volatility is a relatively
National literacy	Uncertainty:	no change, there is information that can be
movement (GLN)	When viewed from	accessed and understandable situations, but
	the long-term	changes occur frequently and are
	aspect, this national	sometimes unpredictable. When uncertain
	literacy movement	change is expected, the best way to prepare
	program is the	is to develop capabilities. When change is
	effectiveness of the	imminent but its magnitude, direction, and
	program in	duration are unknown, effective
	increasing reading	organizational leaders will build on the
	interest in the	capabilities of existing resources (Bennett
	current digital era,	& Lemoine, 2014).
	where visual	Organizations that survive in an era
	entertainment and	of volatility are those that have a high
	information from	ability to respond to environmental
	the internet	changes. This includes innovation in
	increasingly	resource management and adaptation to
	dominate public	emerging conditions.
	attention. Then it is	In the face of economic and social
	difficult to predict	volatility, the sharia economic development
	community	policy in West Sumatra is implemented to
	participation due to	ensure stable economic growth based on
	various factors	Islamic principles. Mahyeldi emphasized
	such as education	that West Sumatra will become the center
	levels, access to	of the national halal industry in 2024 as a
	resources, and	strategic step in facing global economic
	different life	fluctuations (Elfisha & Antoni, 2023).
	priorities. So this	The assistance program for
	national literacy	orphanages and social institutions in West
	movement	Sumatra is a program of providing
	program, although	assistance through a routine proportional
	it aims to build a	budget from the West Sumatra Provincial
	strong literacy	Government. This program aims to provide
	culture, its success	budget support and attention to social
	depends on	institutions, with this program the
	community	government expects progress in social
	empowerment, as	institutions in West Sumatra Province in
	well as the	providing guidance, training, and skills for
	availability of	people in need of social welfare services
	resources and	(PKKS).

Orphanages and social institutions are currently experiencing unpredictable changes in needs, fluctuating commodity prices, health conditions and other urgent conditions. So that the provision of this financial assistance will help stabilize the available. Currently, resources West Sumatra has 117 social institutions, of which there are 8 government-owned institutions and 109 privately owned institutions (Putri D. Widi, 2024). All of these institutions will receive regular budgets with classifications, namely orphanages for children from poor families orphans, social institutions for or abandoned and dropped-out children, institutions for the disabled, institutions for the elderly, to social institutions for women with social disabilities.

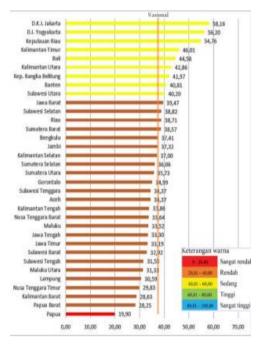
In fact, if the government only provides assistance to social institutions, it will cause dependence on government assistance. In facing volatility, social institutions must be able to find their own resources without having to wait for any form of assistance. By having more resources and being able to utilize them, institutions social will be more independent, not dependent the on government so that when unpredictable changes occur, for example in commodity prices, social institutions already have sufficient resource reserves to meet needs, so that to overcome a condition of such rapid change, a long-term solution is needed, not just providing assistance. Providing assistance is not a long-term solution for the sustainability of the foundation of social institutions.

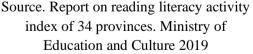
Uncertainty

Uncertainty refers to the lack of science about that has a significant consequences, the causability effect are understood but it is not known whether an event that creates drastic changes. Uncertainty arises from a lack of equivalent information, so overcome it by getting information (Bennett & Lemoine, 2014).

The national literacy movement is one of the activities programmed in the strategic plan of the Language and Book Development Agency. This literacy movement program was carried out due to the lack of interest in reading among the Indonesian people, especially West Sumatra.

Figure 1 Alibaba index of provinces ranked from high to low



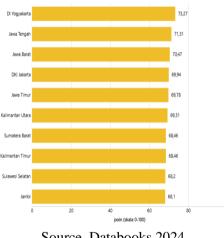


We can see in graph 1 how the literacy rate of each province in Indonesia, West Sumatra itself is ranked 13th nationally with 38.57 points, this literacy

rate can be said to be still far from the national literacy standard of 40 points. Based on these data, increasing literacy for the community, especially the people of West Sumatra, is important, considering that literacy is an important part of improving the quality of human resources.

Four years later, the national literacy movement program in West Sumatra has shown success by helping to increase the reading interest index of West Sumatra, which was initially ranked 13th nationally to 7th nationally with 68.46 points. It can be seen in Figure 2 10 provinces with the highest national reading interest rates in 2023.

Figure 2 Reading habit index



Source. Databooks 2024

The success of the literacy movement is highly dependent on the active participation of the community, schools and families. Participation is difficult to predict due to differences in education levels, access to resources, and community life priorities. In addition, there is uncertainty regarding the availability and distribution of resources such as books, library facilities, and adequate internet access in various regions. If the supporting infrastructure is inadequate, the goals of the national literacy movement may not be fully achieved, especially for areas with inadequate infrastructure.

In general, this national literacy movement will help the uncertainty that will occur, through knowledge will increase awareness and effective strategies because of the provision of knowledge. However, the government must be able to ensure that this program can run properly.

Complexity

Complexity refers to the number of interconnected parts forming a complex, often multifaceted and convoluted network of information and procedures, but does not necessarily involve change. Complex situations require different responses, highlights the dangers of not being able to properly understand and define the challenges to the organization. In uncertain state, hoarding resources that are not useful if unable to understand how to allocate it against a complex environment. (Bennett & Lemoine, 2014).

Governor Regulation Number 36 of 2020 concerning Minangkabau Subjects explains that subjects with Minangkabau cultural content will be applied in Senior High School/Vocational Education. This program is also a mandate of Law Number 5 of 2017 concerning Cultural Advancement.

Currently, Minang culture is starting to be eroded by time, modernization is slowly eroding Minang customs and culture, this can be seen from the condition of the young generation of Minangkabau who are now increasingly distant from traditional life, not only in urban areas but also in rural areas which are commonly known as kenagarian. This cultural erosion can be seen from how the interactions carried out by Minangkabau youth who are now starting to rarely use Minang language and prefer to use Indonesian.

Ambiguity

Ambiguity refers to a lack of knowledge about the rules of the "ground rules of the game", cause and effect are not understood and no leader is able to predict what will happen. This ambiguity is characterized as a situations relationship. In ambiguous conditions, uncertainty occurs due to a lack of understanding of how Actions or changes affect the final outcome (Bennett & Lemoine, 2014).

Islam and Minangkabau have a very close relationship, it can be seen from the philosophy held tightly by the Minangkabau people, namely adaik basandi syara', syara' basandi kitabullah, through this philosophy various values and norms are developed. This ABS-SBK philosophy was then appointed as Mahyeldi's mission in leading West Sumatra which then encouraged the development of sharia economics.

The sharia economic development program raises doubts from various parties, the transition to a sharia economy must be in line with the public's understanding of how the sharia economy works so that the public can understand and enjoy the sharia economic program. Public understanding will reduce conflicts that occur due to the lack of understanding of the public and banking regarding sharia principles such as usury, zakat, and profit sharing.

The sharia economic development program seen from a religious perspective is indeed very good to be implemented, but then will this implementation complicate or facilitate banking and customers, especially during the transition period. Basically, in facing the ambiguity of the world, a fair and ethical economic system according to sharia economics is a strong alternative in facing global economic uncertainty, but it is necessary to focusing on the application of sharia economics and the effects of economic transition on society.

The main challenge facing leaders today is the ability to adapt to an environment that continues to experience drastic changes. The leadership needed in the VUCA era is responsible leadership, able to think and act strategically, and has the ability to adapt and innovate

D. CONCLUSION

Programs launched by the Mahyeldi government, such as the development of sharia economics, assistance for social institutions, curriculum with local content, and the national literacy movement have the potential to increase the resilience of the West Sumatra community. However, in practice, better management is still needed so that the program can run as it should. The national literacy movement program is a major program that is able to increase community resilience in the VUCA era, where increased human resource capabilities are needed to survive and compete.

In practice, more supervision and commitment from the government is needed to continue to monitor the development of these programs. Evaluation is an important factor in supporting existing programs to then increase community resilience in the VUCA era. Finally, a consistent government role is needed so that these programs continue to run properly and even get better.

E. REFERENCES

Buku :

- Amir, M. S. (1997). Adat Minangkabau: Pola dan tujuan hidup orang Minang. (No Title).
- Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. Business horizons, 57(3), 311–317.
- Elfisha, M., & Antoni, S. (2023). Sumbar beri penghargaan nagari dengan implementasi ABS-SBK terbaik. ANTARA NEWS. https://sumbar.antaranews.com/berit a/594408/sumbar-beri-penghargaannagari-dengan-implementasi-abssbk-terbaik
- Fajria, R., & Fitrisia, A. (2024). Tinjauan Literatur Falsafah Adat Minangkabau: Adat Basandi Syarak, Syarak Basandi Kitabullah. Journal of Education Research, 5(2), 1811– 1816.
- Handika, R., & Rafni, A. (2022). Mahyeldi-Audy Political Marketing Innovation During the Covid-19 Pandemic During the 2020 West Sumatra Regional Election. Politicon: Jurnal Ilmu Politik, 4(1), 91–110.
- Herliandry, L. D., Nurhasanah, N., Suban,
 M. E., & Kuswanto, H. (2020).
 Pembelajaran pada masa pandemi covid-19. JTP-Jurnal Teknologi Pendidikan, 22(1), 65–70.
- Kemenko PMK. (2023). Pemerintah Serius Dalam Memajukan Kebudayaan Indonesia. https://www.kemenkopmk.go.id/pe

merintah-serius-dalam-memajukankebudayaan-indonesia

Khusairi, A., Nasir, M., & Fata, A. K.

(2023). Kemenangan Ideologis dan Kekalahan Politik: Wacana Politik Etnis Minang dalam Pemilihan Presiden 2014 dan 2019. JRP (Jurnal Review Politik), 13(2).

Kompas. (2021). Pengaruh Budaya Barat terhadap Kebiasaan Kebiasaan dan Gaya Hidup Generasi Z di Indonesia. Kompasiana. https://www.kompasiana.com/esterv ictoriauliarina2586/6007c3288ede48

1f043731f2/pengaruh-budaya-baratterhadap-kebiasaan-kebiasaan-dangaya-hidup-generasi-z-di-indonesia

- Meliyanti, M., Raraswati, P., Hidayat, D. N., & Aryanto, S. (2021). Kajian Literatur: Perkembangan literasi dan numerasi di lingkungan keluarga. Jurnal Pendidikan Tambusai, 5(3), 6504–6512.
- Putri D. Widi. (2024). Pemprov Sumbar Anggarkan Rp49 M untuk Kebutuhan Panti Sosial. RRI. https://www.rri.co.id/advertorial/989 218/pemprov-sumbar-anggarkanrp49-m-untuk-kebutuhan-pantisosial
- Sari, M., & Asmendri, A. (2020). Penelitian Kepustakaan (Library Research) dalam Penelitian Pendidikan IPA. Natural Science, 6(1), 41–53. https://doi.org/10.15548/nsc.v6i1.15 55
- Sarkar, A. (2016). We live in a VUCA World: the importance of responsible leadership. Development and Learning in Organizations: An International Journal, 30(3), 9–12.
- Setyaningrum, N. D. B. (2018). Budaya lokal di era global. Ekspresi Seni: Jurnal Ilmu Pengetahuan dan Karya Seni, 20(2), 102–112.

Supriyadi, S. (2017). Community of

practitioners: Solusi alternatif berbagi pengetahuan antar pustakawan. Lentera Pustaka: Jurnal Kajian Ilmu Perpustakaan, Informasi Dan Kearsipan, 2(2), 83–93.

- Utama, H. F. (2023). Pandangan hidup Kejawen (Asta Brata) sebagai konsep kepemimpinan di era VUCA (Volatility, Uncertainty, Complexity, and Ambiguity). Satwika: Kajian Ilmu Budaya dan Perubahan Sosial, 7(1), 237–245.
- Whiteman, W. E. (1998). Training and educating army officers for the 21st century: Implications for the United States Military Academy. US Army War College.
- Wood, B. (2022). KEPEMIMPINAN ORGANISASIONAL ERA VUCA. KEPEMIMPINAN TRANSFORMASIONAL PADA ERA VOLATILITY, UNCERTAINTY, COMPLEXITY AND AMBIGUITY (VUCA), 1.