



Da'wah approach, cultural communication and psychology islam in prevention fire forest and land

Trisia Megawati Kusuma Dewi^{1,*}

¹ *Islamic Study, Universitas Islam Negeri Syarif Hidayatullah Jakarta, South Tangerang, Banten, 15412, Indonesia.*

*Correspondence: trisia.megawati@upnvj.ac.id

Received Date: January 26, 2025

Revised Date: February 19, 2025

Accepted Date: February 28, 2025

ABSTRACT

Background: This article aims to explore the role of da'wah, cultural communication and Islamic psychology in change. The psychological approach in Islamic studies is one of the approaches widely used to identify human behavior. **Methods:** This research is a qualitative research with a library research method based on reference searches sourced from several books and journals that can be accessed online through Scopus which are analyzed using bibliometric analysis with VOSviewer and analysis from Scopus. **Findings:** The findings indicate that effective forest and land fire prevention in Indonesia requires an integrated communication model that incorporates intercultural da'wah approaches, Islamic ethical guidance (e.g., MUI fatwas), socioecological perspectives, and cultural wisdom—especially in adapting message design using behavior change theories (TRA and TPB) to influence public attitudes and actions, particularly among farming communities who traditionally use burning practices for land clearing. **Conclusion:** This study concludes that an intercultural communication approach integrated with Islamic values, local wisdom, and behavioral theories can enhance the effectiveness of da'wah messages in preventing forest and land fires in multicultural communities. **Novelty/Originality of this article:** The novelty of this study lies in its integrative approach that combines da'wah, cultural communication, and Islamic psychology through bibliometric analysis to understand behavioral change in Islamic contexts.

KEYWORDS: culture; da'wah; fire forest and land; islam; psychology.

1. Introduction

The psychology of religion is a branch of psychology that studies how religious beliefs, practices, and experiences influence individuals' behavior, emotions, and thoughts (Widmann, 2022). It encompasses research on various aspects of religion, such as beliefs, rituals, spirituality, and the influence of religion on everyday life. The psychology of religion seeks to understand how religious factors influence well-being, psychological And behavior man as well as How These psychological aspects can contribute to a deeper understanding of religion and spirituality.

According to Peter Connolly There is difference between psychology religion (psychology of religion) And psychology religious (religious psychology). Psychology religion refers to the application of psychological methods and data to the study of religious beliefs, experiences, and attitudes, while religious psychology refers to the use of psychological methods and data by religious people for the purpose of enriching And or defend belief, experience And behavior religious (Leventhal et al., 1965).

Cite This Article:

Dewi, T. M. K. (2025). Da'wah approach, cultural communication and psychology islam in prevention fire forest and land. *Linkage*, 2(1), 17-30. <https://doi.org/10.61511/linkage.v2i1.2025.1771>

Copyright: © 2025 by the authors. This article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).



The psychology of religion is a controversial field that deals with the truth or falsity of religious beliefs, and offers an arena in which radically different accounts of religious phenomena can be presented. The psychology of religion in the context of the communication process approach is interesting and important to study further. How are the components communication plays a role under development aspect cognition, affection and conation for change attitude in life religion become important For discussed in Islamic studies.

Islamic studies reached a peak in ancient times, which helped the development of science in later times. This is due to several reasons, one of which is the internal drive of Islam¹ to seek knowledge without time constraints (Spielberger et al., 2017). Several important revelations (nash) regarding science have become the support and response of Islam to science and civilization which made the scientific tradition so fertile and vibrant in the following periods² including the psychology of religion approach (Albarracín, 2002).

The psychology of religion in the context of the communication process approach is interesting and important to study further (Li et al., 2013). How are the components communication plays a role under development cognitive aspects, affection and conation for changes in attitudes in religious life becomes important to discuss in Islamic studies.

Islamic Psychology is a branch of psychology that integrates the principles of modern psychology with Islamic teachings and values. In Islamic Psychology, concepts related to the human soul, behavior, and mentality are understood within the framework of Islamic beliefs and teachings. For example, the concepts of *nafs* (soul), *ruh* (spirit), and *qalb* (heart) in Islam play an important role in understanding emotional and mental conditions. human. Islamic psychology also emphasizes the importance of human relationship with Allah (taqwa), as well as behavior that is in harmony with Islamic teachings as a way to achieve psychological and spiritual balance.

In addition, Islamic Psychology highlights aspects such as mental well-being, self-control, and good morals as part of holistic mental health. Healing in this psychology is often associated with spiritual approaches such as dhikr, prayer, and introspection to improve psychological conditions. Islamic Psychology seeks to unite the spiritual and mental needs of humans with the ultimate goal of achieving happiness in this world and the hereafter through a harmonious approach between psychological science and Islamic teachings.

The case of forest and land fires became interesting to study after the Indonesian Ulema Council/*Majelis Ulama Indonesia* (MUI) issued a Fatwa prohibiting deforestation and burning of forests and land. The MUI Fatwa related to the prohibition of burning is FATWA MUI no 30 years 2016 concerning the Law on Forest and Land Burning and its Control and MUI FATWA No. 86 of 2023 concerning the Law Global Climate Change Control. This MUI fatwa is in line with the prohibition in the Qur'an which is commanded by Allah in the Qur'an:

"Eat and drink from Allah's sustenance (given) and do not roam the earth causing mischief" (QS al-Baqarah: 60).

"And do not cause mischief on the face of the earth, after (Allah) fix it And pray to Him with flavor Afraid (won't accepted) And hope (will granted). Indeed grace Allah very close to people who did good" (QS al-A'râf: 56).

The history of forest and land fires in Indonesia has experienced a significant decline when seen from fire great Which happen on 2015 as wide as more from 2.6 million hectares And year 2019 as wide as more from 1.6 million hectares And year 2021 only approximately 350,000 hectares as described in Figure 1.

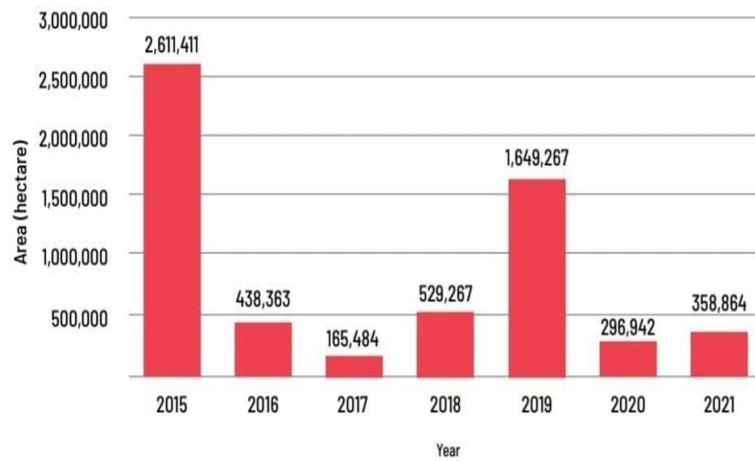


Fig. 1. Fire forest And land period 2015 – 2021
(The State of Indonesia's Forest, 2022)

When a fire occurs forest and land so emissions produced Also to increase so that prevention need done For press height Greenhouse Gas (GHG) Emissions. Communication that invites the community to want to prevent forest and land fires is persuasive communication and one way is through preaching that aims to strengthen faith and provide life guidance to protect the earth and the environment (Chen, 2014, 2015). In a multicultural context, cultural communication is the key to the success of preaching because culture influences the reception of messages (Larson, 2009).

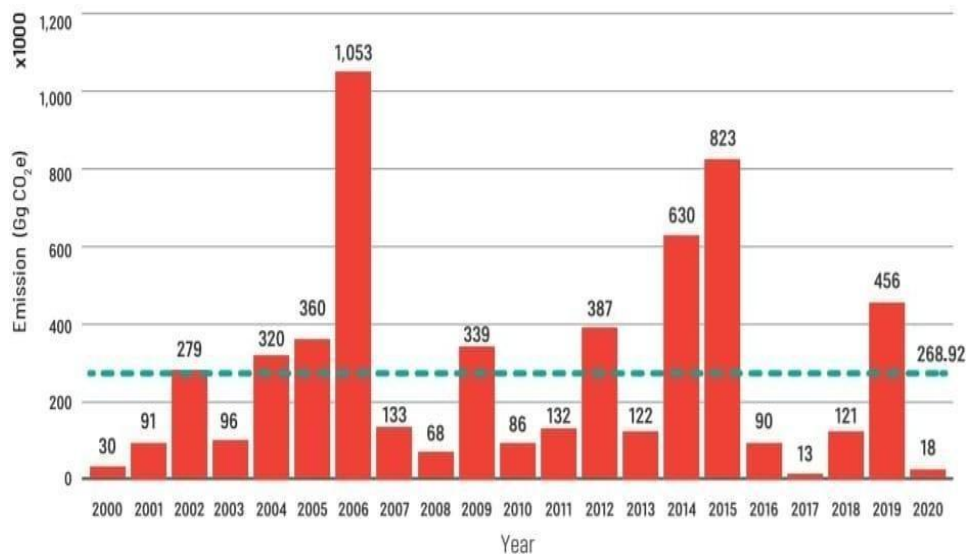


Fig. 2. Emission which produced in fire forest and land period 2015 – 2020
(The State of Indonesia's Forest, 2022)

This article examines the perspective of cultural communication in da'wah through communication theory and interdisciplinary approaches from cultural science, semiotics, and social sciences. John Fiske's theory of meaning construction and other intercultural communication theories highlight the influence of local cultural values, norms, and symbols (Tannenbaum et al., 2015). The cultural approach is influential in inviting the community to want to prevent forest and land fires.

2. Methods

This article is a qualitative research with the characteristic of data (Afrizal, 2019). in the form of concepts and descriptive descriptions based on a literature review that examines communication, culture, psychology, especially in the study of Islam. The data

search was conducted through the Scopus database and 33 articles were found. use keywords Culture, Psychology, Religion, And Islam (TITLE - ABS KEY (culture AND psychology AND Islam AND communication). Then analyzed with Scopus to examine aspects of the year of publication of the article, the subject area of the research conducted, and the countries that have conducted this research. The results of this data processing will show the position of the research being conducted and the potential for innovation that will emerge. The search results for this article will also be analyzed. with use VOSviewer to see position article in the period 1990 – 2020 as shown in Figure 3.

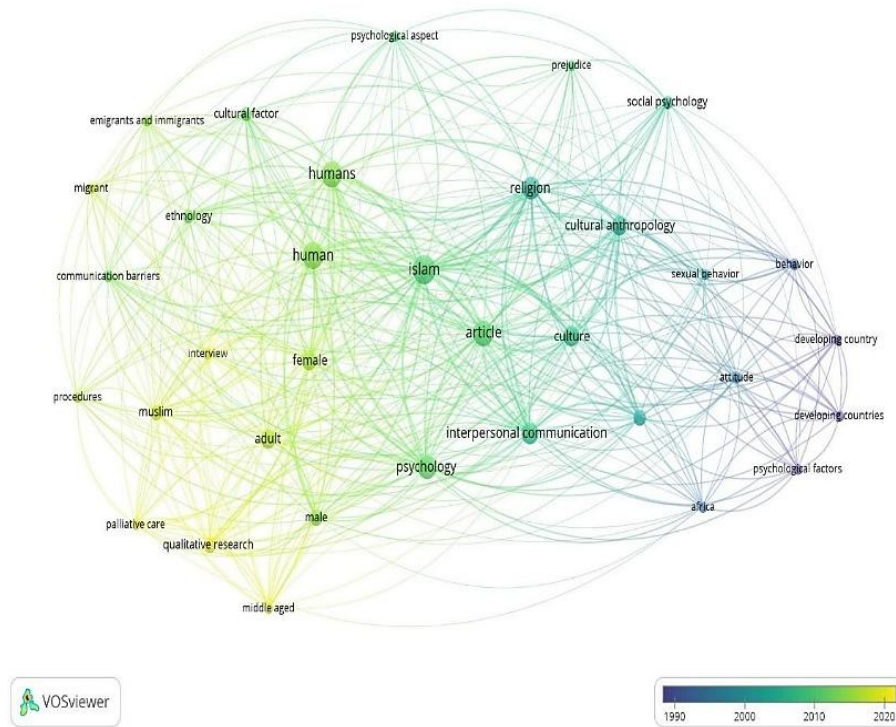


Fig. 3. Results search through VOSviewer For see research position

Based on year rise article most Lots in year 2020 as much as 4 article and in 2019 there were 2 articles as shown in Figure 4.

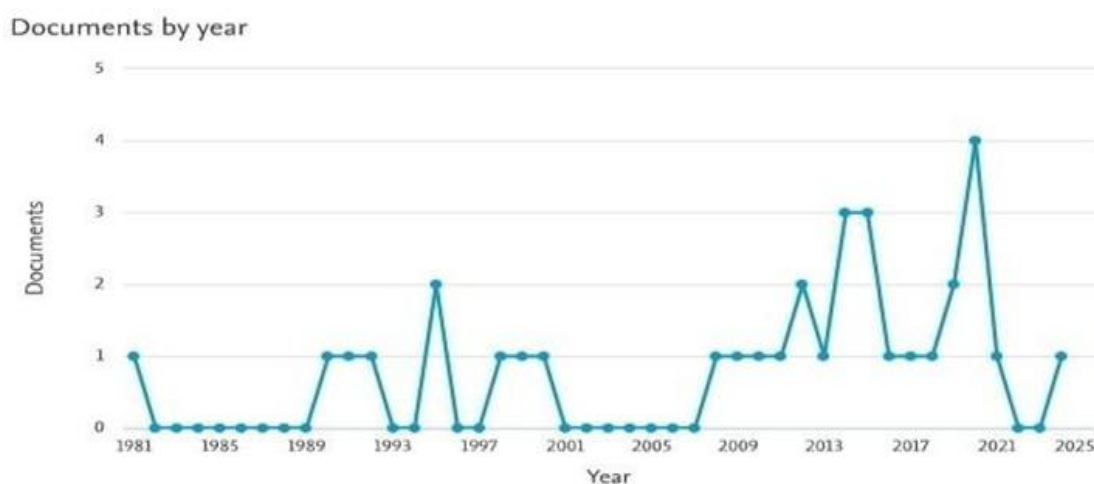


Fig. 4. Data article based on year published (Scopus)

Article Which produced during period time 2016 – 2024 most Still focuses on the topics of medicine (45.8%), social science (16.7%), nursing (12.5%), Art and \humanism (10.4%) And psychology (8.3%) like shown in Figure 5.

Documents by subject area

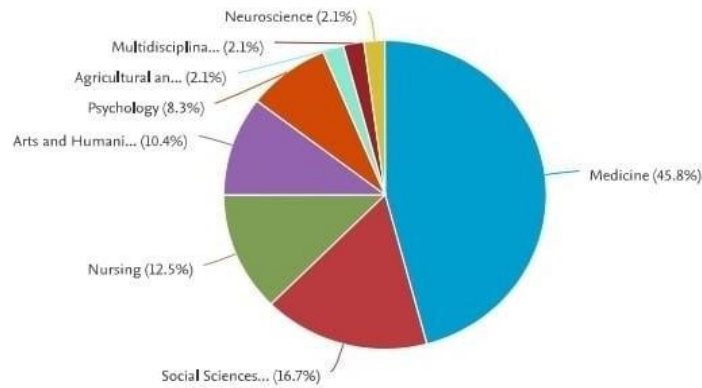


Fig. 5. Data article based on area research

Country Which produce study more Lots is United States of America as many as 8 articles and English as many as 6 articles.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

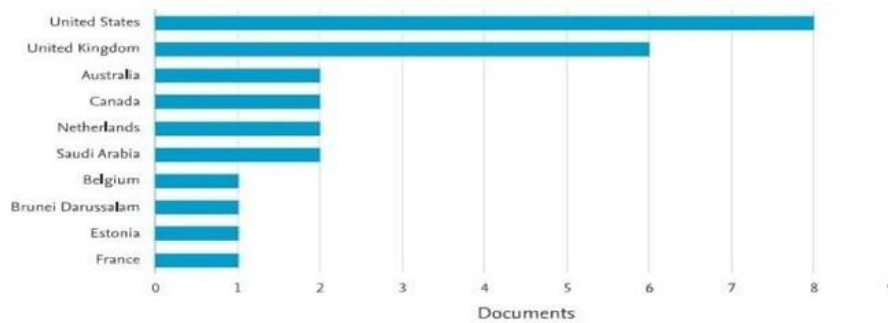


Fig. 6. Data article based on country

3. Results and Discussion

In 2015, Indonesia experienced major forest and land fires covering around 2.6 million hectares or four and a half times the size of the island of Bali. The fires were caused by artificial fires. man, around more from 100,000 Which used For preparation land agriculture Because the cost Which cheap. Year 2015, Fire in Indonesia is estimated to cost USD 16.1 billion or IDR 221 trillion. 4 The causes of fires in Indonesia and other tropical countries are mainly due to by aspect anthropogenic. Reason fire happen in a way accidental or deliberate. How to manage fire prevention properly is also still unclear, including finding key components to identify fire sources and safe land use. 5 Referring to research results which show that forest and land burning is common done by man so role studies Islam to be relevant And important. This consideration also underlies the MUI in issuing fatwa no. 30/2016 concerning the prohibition of deforestation and forest burning and land that is issued on July 27, 2016 and FATWA MUI No. 86 of 2023. MUI Fatwa This should be included in the missionary communication that invites the community not to burn forests and land.

Da'wah is an activity of conveying religious messages that aims to strengthen faith and provide life guidance for society. In an increasingly multicultural global context, intercultural communication is a key factor in the success of da'wah, because cultural diversity affects the way society receives and understands messages. This article discusses the perspective of intercultural communication in da'wah through a study of several relevant communication theories. Interdisciplinary approaches from political science, cultural studies, semiotics, and social sciences are used to explore how da'wah messages can be adapted to be effective in diverse societies. John Fiske, in Introduction to

Communication Studies, emphasizes the importance of understanding the meanings constructed and exchanged in the communication process. This article also highlights other intercultural communication theories to see how local cultural values, norms, and symbols influence the reception of da'wah messages. Through an understanding of different cultural and social contexts, it is hoped that da'wah can be more inclusive, relevant, and able to create harmonious dialogue in a multicultural society.

The success of preaching in diverse societies depends greatly on the ability to understand and apply intercultural communication effectively. Da'wah, as one of the important activities in religion, must pay attention to cultural differences so that the message conveyed can be well received by various community groups (Nabi & Myrick, 2018). Sensitivity to these differences is very important so that da'wah does not only function as a means of conveying information, but also as a means of building deeper understanding.

Intercultural communication plays a central role in building a harmonious dialogue between the preacher and the audience who come from different cultural backgrounds. In the context of preaching, effective communication is one that is able to penetrate cultural boundaries and open up space for dialogue and mutual understanding. Without understanding the cultural context of the audience, the message of preaching has the potential to be misinterpreted or not achieve the expected goals. Therefore, it is important for preachers to understand the basic principles of intercultural communication in order to be able to bridge the existing differences. Intercultural communication in preaching is not only limited to delivering messages, but also functions as a bridge of understanding between the preacher and the audience. In a multicultural society, differences in values, norms, and perspectives on religion and everyday life affect how messages are received and interpreted. Through an approach that respects these differences, preaching can play a broader role as a medium to promote tolerance and mutual understanding between cultures.

3.1 Elements communication in al- qur'an

The Qur'an, as the holy book of Islam, contains numerous verses that convey messages about communication. It describes how Allah sends messages to humanity through His prophets and messengers. For instance, Prophet Muhammad was sent to deliver God's revelations to mankind. The Qur'an highlights the power of words to influence human thoughts, emotions, and actions. Words are often used to offer advice, provide motivation, or serve as reminders for humanity. Furthermore, the Qur'an encourages Muslims to communicate in a good and honest manner. It teaches the importance of speaking the truth, avoiding slander, and treating others with fairness and kindness. In addition, the Qur'an emphasizes the value of attentive listening. It advises people to pay close attention and be mindful of the messages conveyed, whether in daily conversations or in receiving divine revelations. The Qur'an also offers guidance on how Muslims should convey religious messages to others. Prophets such as Abraham, Moses, and Muhammad employed various strategies of persuasion and preaching to influence others' thoughts and behaviors. Lastly, the Qur'an provides instructions for resolving conflicts peacefully through effective communication and wise decision-making.

3.2 Theory the reason action and theory the planned behavior

Theory of reasons action (TRA) is a psychological model that aims to explain and predict human behavior in certain contexts. The main component of this theory is focusing on a person's intention to behave in a certain way, which is influenced by beliefs and attitudes they towards the behavior (Hardeman et al., 2011; Passos et al., 2013). This theory describes a person's behavior as predictable by looking desire audience And his attitude to subjective norms. The assumption attitude can predicted through trust And norm subjective. Researchers agree with This theory is because the use of this theory allows

researchers to design messages that can influence farmers' attitudes towards forest and land fire prevention by increasing their belief in the importance of forest and land fire prevention measures. Public trust in desired attitudes and how the audience evaluates these attitudes can influence attitude change (Hügel & Davies, 2020). Normative beliefs and the desire to comply with existing norms can influence audience attitudes in responding to forest fire prevention in climate change (Hale et al., 2002; Montano & Kasprzyk, 2015). Study Which use theory TRA Wrong the only one conducted in Vietnam, namely the theory of environmentally conscious behavior in the prevention of dengue fever which was applied to 796 students in Vietnamese. Results study show that attitude student have influence significant to desire in act, temporary the influence of subjective norms is not dominant. Other factors that influence students' attitudes are past experiences, knowledge, and gender. Findings This own implications important for study change attitude (Nguyen et al., 2018).

This theory is divided into two main components, namely attitudes towards behavior and subjective norms. Attitudes towards behavior reflect an individual's positive or negative evaluation of the behavior, while subjective norms represent pressure social Which felt individual For do or not perform the behavior (Dewi & Zein, 2017). This theory has also been applied in various behavioral contexts, including decision making in consumer Which care to the problem environment and social (Shaw et al., 2015). This theory also has been used to predict and explain individual intentions in using e-government services with research results finding a significant correlation between attitudes, subjective norms, and intentions in using the service (Gultom et al., 2020; Alryalat et al., 2020; Abu-Shanab, 2021).

Researchers have different opinions regarding the addition of constructs in the TRA model, namely the relationship between model components and their ability to predict as a whole (Shaw et al., 2015). Some criticisms are also directed at the TRA theory which is limited only as cross-sectoral model and there needs to be an in-depth study of the impact of national culture and its relationship to the components contained in the TRA. Some study show connection Which more strong seen in cultural aspects with influence the power that tall (Hassan et al., 2016). The results of other studies show attitudes Individuals and water saving activities in daily life have a positive but insignificant influence on subjective norms (Untaru et al., 2016).

The limitations of TRA gave rise to a new theory, namely the theory of planned behavior (TPB). Both of these theories have been widely used in studying human behavior and decision-making processes in various fields such as health, marketing, and psychology. The main components of these two theories are TRA emphasizes behavior that is determined by the strength of a person's intention to carry out the behavior and how much control the person has in carrying out the behavior (Hardeman et al., 2011; Veludo-de-Oliveira et al., 2017), while the components of the TPB theory are to expand theory TRA with add control behavior which is perceived as a key component, emphasizing that behavioral intentions determined by attitudes toward the behavior, subjective norms, and perceived behavioral control (Hardeman et al., 2011; Robert et et al., 2014).

The main difference between TRA and TPB lies in the inclusion of perceived behavioral control as a component in TPB which is absent in TRA (Hardeman et al., 2011; Ajzen, 2020). Both theories discuss the role of attitudes and subjective norms in predicting behavior (Littlejohn et al., 2016). However, TRA emphasizes the influence of attitudes and subjective norms on behavioral intentions, while TPB adds behavioral control which is felt as determinants of intentions and behavior (Ajzen, 2020; Hardeman et al., 2011; Roberto et al., 2014; Veludo-de-Oliveira et al., 2017).

3.3 Approach socioecology And culture in prevention forest fires

Socioecological, economic, and cultural approaches play a crucial role in preventing forest and land fires. Each approach offers a unique perspective that helps deepen our understanding of the root causes behind these disasters. While the socioecological approach focuses on the relationship between humans and their environment, the economic and

cultural approaches address underlying incentives and traditional practices. Together, these perspectives complement one another to form a more holistic and effective strategy for prevention.

3.3.1 Approach Socioecology

The socioecological approach sees forest and land fires as the result of complex interactions between humans and nature, where unsustainable land use practices and climate change increase the risk of fire. This Also emphasize importance guard balance between activity man And health ecosystem. Socioecological activities covering development strategy in interaction between humans And natural, rule use environment by man, and the principles of conservation and environmental protection (Topchiyev & Sych, 2020).

The socioecological model provides a multidimensional perspective on social and ecological systems, emphasizing interconnectedness, energy and matter flows, and feedbacks (Boyd, 2020). Socio-ecological systems theory recognizes the interactions between society and natural systems, highlighting the human sources of ecological change and the driving forces that motivate human action (Petrosillo et al., 2018). Socio-ecology seeks to overcome the view long Which separate man And natural. Environmental sociologist has play a role important in develop analysis of human interaction with the environment through various approaches, such as human ecology and system integrated human-nature (Caniglia & Mayer, 2021).

The field of human ecology focuses on the interrelationships between humans and the natural environment with an emphasis on understanding how human interactions affect ecological systems. Environmental sociology involves the study of social interactions and social dynamics related to environmental issues such as social influences on the formation of public attitudes, behaviors, and decisions regarding the environment. Environmental sociology has contributed to a broader understanding of How factor social, culture, politics, And economy interacts with the environment and influences human attitudes towards environmental issues. Community knowledge when linked to culture can be a driving force in mobilizing the community to participate in suggested activities (Kumpu, 2022; Sa'ban et al., 2021). Impressive developments in the fields of human ecology, environmental sociology, and political ecology provide valuable contributions in formulating sustainable solutions and policies in facing today's environmental challenges.

3.3.2 Approach culture burn as wisdom local

Culture influences and is influenced by environmental sustainability in economic systems, emphasizing the need for a moral perspective in promoting sustainable economic growth (Venkatesan, M, 2021). When culture is seen as an ecology, it can be treated as a system, opening up multiple perspectives in understanding how culture functions and influence governance and funding decisions (Holden, 2023). The practice of burning is culturally practiced in many parts of the world. Some countries such as Indonesia And Canada Also do practice burn forest For opening up agricultural land. It's just that there is a systems approach taken some differences from the aspects of Perceptions, authority, and jurisdiction; Governance, laws, and management; Access, accreditation, and training; Liabilities and insurance; Capacity and resources (Hoffman et al., 2022) and Policy environment; Policy barriers; and Impacts on practices (Megawati et al., 2024).

Most Indonesian people are farmers who need land. Because land is limited, forests are often cleared for farming, even though cutting and burning trees is prohibited by law. However, there are exceptions in local wisdom that allow burning up to 2 hectares per family with local plants, which are maintained so that does not spread the fire from the burning. The results of the study showed the role of local wisdom in forest fire prevention is constitutionally recognized And can help prevent fire forest Which big (Nasution, 2020).

Traditional forest burning in Indonesia is a way of clearing land in agriculture allowed And except from considered as criminal acts in Indonesia. However, this exception should not be interpreted to mean that all traditional forest burning practices are sustainable. Changes in habitat, socio-cultural conditions, and economics can make practice Which in the past sustainable This No in accordance in context And environment certain.

This discussion of the environmental damage caused by traditional forest burning practices is not intended to call for a total ban on the practice, nor does it suggest that aggressive criminal law enforcement is necessary. Discussion This intended in explain practice which should be protected and which should be handled through various approaches to minimize damage (Fajrini, 2022).

The causes of fires in Indonesia and other tropical countries, especially due to by aspect anthropogenic. Reason fire happens by chance or is done intentionally. People's habits in cleaning land with method burn Also is Wrong One triggers for peat fires widespread (Yasir et al., 2021). Research shows that 69% of people clear land by cutting down bushes and then burning them (Arifudin et al., 2019).

Culture burn No only done in Indonesia but Also in Canada is known for Indigenous-led Fire Stewardship . Canada has experienced many forest fires. In reviving the governance of land clearing by burning by indigenous people, need to remove barriers and appreciate local wisdom and different experiences. Steps needed include redressing power imbalances, building capacity, and supporting a culture of burning without excessive supervision. Intensive communication must occur early on with sufficient frequency and must take into account land governance and non- Indigenous values.

Colonial prejudice and misinformation remain barriers. Better communication about the benefits of indigenous burning management is needed to change colonial perceptions for the benefit of Canadians (Hoffman et al., 2022). Research shows that role And not quite enough answer actor, institutional structure, heterogeneity of rural areas, fire phenomena, and The role of forests is a major factor in fire prevention. With collaboration between the actors involved, the fire management system which can be more effective in preventing and reducing the risk of fire (Goncalves, 2020). However, the technical aspects of good forest fire prevention management are still unclear, including finding key components in identifying fire sources and how to use land safely (Cattau et al., 2016).

Researcher agree that approach culture emphasize importance understand the value And tradition local Which influence interaction public with the forest And land, as well as integrating knowledge local in fire prevention. In addition, education and public awareness regarding fire prevention fire, through use symbol culture or local narratives can make forest fire prevention messages more effective and relevant (Hovland et al., 2021). The approaches of these three fields complement each other in understanding the complexity of interactions between humans and the environment and highlight the importance of the interrelationships between social, cultural, and economic aspects in achieving sustainability goals.

Socio-ecological, cultural and economic aspects are also considered understand factors contextual Which influence attitude humans in the context of climate change. Local cultural wisdom is important in encouraging changes in attitudes. This framework can be used to provide new contributions to the development of model design message forest fire prevention Which can implemented in forest fire prevention efforts in Indonesia (Gunawan et al., 2016). Socioecological, economic, and cultural factors are also important in the analysis in this study.

Several communication experts have developed effective communication models to enhance audience awareness, particularly in delivering messages related to the prevention of forest and land fires. These models aim to improve how messages are received, understood, and acted upon by the public. Among the notable contributions are the Osgood and Schramm Circular Model (Schramm, 1954), the Theory of Consonance and Dissonance (Van Cuilenburg & Noomen, 1984), Maletzke's Model of Mass Communication Process (Maletzke, 1963), and Rogers and Shoemaker's Model of Innovation Diffusion (Rogers & Shoemaker, 1971). Other important models include the Transmission Model of News

Learning (Comstock, 1978; Lemal & Van den Bulck, 2009), the Model of Differential Audience Reach (Claus, 1968), the Communication Campaign Model (Nowak & Warneryd, 1985), the Channel Model for Forest Fire Prevention Prediction (Soewarso, 2003), and the Message Design Communication Model (Venus, 2019).

Based on the model created by the experts, the author tries to create a model framework based on the 9 roots that the author cited. The model is as shown in Figure 7.

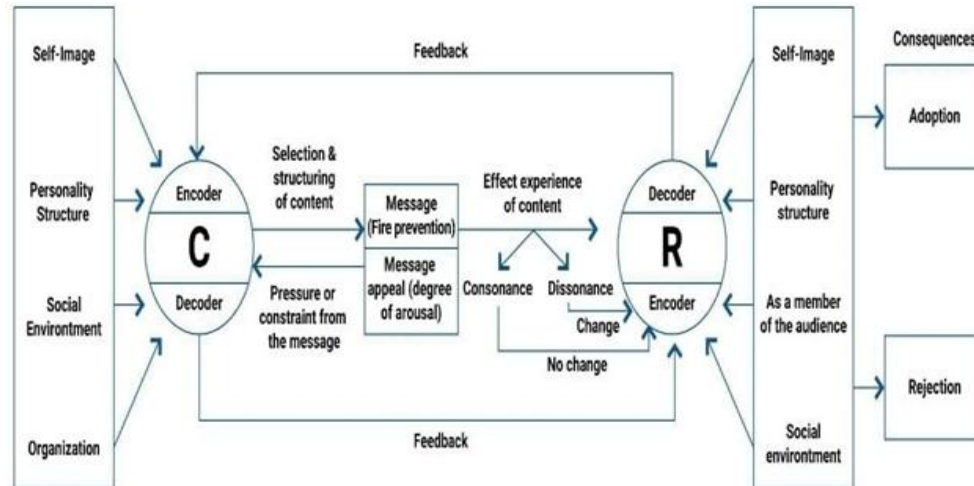


Fig. 7. Model communication in change attitude and behavior (9 communication model experts)

4. Conclusions

Effective communication can raise public awareness and educate about forest and land fire prevention practices and mobilize support to involve all stakeholders. The integration of da'wah, cultural communication and Islamic psychology is very helpful in increasing the effectiveness of communication results. In summary, the main cultural considerations in intercultural communication during da'wah include the impact of cultural paradigms, empathy and antipathy, and challenges related to interactional mismatches and stress/adaptation. These considerations have implications for message delivery, which can lead to potential misunderstandings and operational difficulties, while emphasizing the importance of cultural sensitivity and adaptation. In addition, from a linguistic perspective, the influence of language factors in intercultural communication and the management of intercultural difficulties are important aspects that must be considered. Some theories that can be considered for effective changes in attitudes and behavior are The Reason Action Theory and The Planned Behavior Theory which explain how changes in attitudes can be achieved by understanding the intentions that exist in each individual.

Acknowledgement

The author would like to express their sincere gratitude to all parties who contributed to the completion of this research.

Author Contribution

The author contributed equally to the conception, design, analysis, and writing of this manuscript.

Funding

This research received no external funding.

Ethical Review Board Statement

Not available.

Informed Consent Statement

Not available.

Data Availability Statement

Not available.

Conflicts of Interest

The author declare no conflict of interest.

Open Access

©2025. The author(s). This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>

References

- Abu-Shanab, E. (2021). Examining factors influencing citizen adoption of e-government services: A TRA/TPB approach. *International Journal of Electronic Government Research*.
<https://ijaseit.insightsociety.org/index.php/ijaseit/article/download/19868/4407/48435>
- Afrizal. (2019). *Qualitative Research Methods: An Effort to Support the Use of Qualitative Research in Various Disciplines*. Rajawali Pers.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Hum Behav & Emerg Tech*, 2: 314–324. <https://doi.org/10.1002/hbe2.195>
- Albarracín, D. (2002). Cognition in persuasion: An analysis of information processing in response to persuasive communications. In *Advances in experimental social psychology* 34, 61-130. [https://doi.org/10.1016/S0065-2601\(02\)80004-1](https://doi.org/10.1016/S0065-2601(02)80004-1)
- Alryalat, M. A. A., Rana, N. P., & Dwivedi, Y. K. (2020). Citizen's adoption of an e-government system: Validating the extended Theory of Reasoned Action. *IGI Global*. (TRApp. 651–674. <https://www.igi-global.com/article/citizens-adoption-of-an-e-government-system/147642>
- Arifudin, A., Syahza, A., Kozan, O., Mizuno, K., Mizuno, K., Isnaini, Z., Iskandar, W., Hadi, S., Asnawi, A., Natasya, A., & Hasrullah, H. (2019) Dinamika Penggunaan, Kebakaran, dan Upaya Restorasi Lahan Gambut: Studi Kasus di Desa Tanjung Leban, Bengkalis. Unri Conference Series: Agriculture and Food Security, 1, 40-45. <https://doi.org/10.31258/unricsagr.1a6>
- Bompard, J. M., & Philippe, G. (1999). *Land Management in the Province of South Sumatra, Indonesia. Fanning the Flames : The Institutional Causes of Vegetation Fires*. CEC.
- Boyd, W. E. (2020). "It is not a question of either/or, but of 'and... and'": The Socioecological Learner as Learner-Teacher-Researcher. *Touchstones for Deterritorializing Socioecological Learning: The Anthropocene, Posthumanism and Common Worlds as Creative Milieux*, 99-138. https://doi.org/10.1007/978-3-030-12212-6_5
- Caniglia, B.S. & Mayer, B. (2021). Socio-Ecological Systems. *Handbooks of Sociology and Social Research*. https://doi.org/10.1007/978-3-030-77712-8_25
- Cattau, M. E., Harrison, M., Shinyo, I., Tungau, S., Uriarte, M., & Defries, R. (2016). Sources of anthropogenic fire ignitions on the peat-swamp landscape in Kalimantan,

- Indonesia. *Global Environmental Change*, 39, 205-219. <https://doi.org/10.1016/j.gloenvcha.2016.05.005>
- Chen, M. F. (2014, July). The Impacts Of Fear Appeals On Pro-Environmental Behavior And Important Determinants. In *Global Marketing Conference*, 439-439. <https://db.koreascholar.com/article/Detail/271111>
- Chen, M. F. (2015). Impact of fear appeals on pro-environmental behavior and crucial determinants. *International Journal of Advertising*, 35(1), 74–92. <https://doi.org/10.1080/02650487.2015.1101908>
- Claude, R. (1968). *Typologie des messages de masse*. Revue Française de Sociologie.
- Comstock, G. (1978). *Television and Human Behavior*. Columbia University Press.
- Costa, P. L., Graça, A. M., Marques-Quinteiro, P., Santos, C. M., Caetano, A., & Passos, A. M. (2013). Multilevel research in the field of organizational behavior: An empirical look at 10 years of theory and research. *Sage Open*, 3(3). <https://doi.org/10.1177/2158244013498244>
- Dewi, T. K., & Zein, R. A. (2017). Predicting Intention Perform Breast Self-Examination: Application of the Theory of Reasoned Action. *Asian Pacific journal of cancer prevention: APJCP*, 18(11), 2945–2952. <https://doi.org/10.22034/APJCP.2017.18.11.2945>
- Fajrini, R. (2022). Environmental Harm and Decriminalization of Traditional Slash-and-Burn Practice in Indonesia . *International Journal for Crime, Justice and Social Democracy*, 11(1), 28-43. <https://doi.org/10.5204/ijcisd.2034>
- Glauber, A. J., Moyer, S., Adriani, M., & Gunawan, I. (2016). The cost of fire: an economic analysis of Indonesia's 2015 fire crisis. *World Bank*. <https://doi.org/10.1596/23840>
- Gonçalves, A. S. (2020) Reinvestment Risk and the Equity Term Structure. Kenan Institute of Private Enterprise Research Paper Forthcoming, *Journal of Finance*, Forthcoming, <http://dx.doi.org/10.2139/ssrn.2980925>
- Gultom, S., Dalle, J., Restu, B., Baharuddin, Hairudinoar, & Gultom, S. (2020). The influence of attitude and subjective norm on citizens' intention to use e-government services. *Journal of Security and Sustainability Issues*, 9(May), 173–186. [https://doi.org/10.9770/jssi.2020.9.M\(14\)](https://doi.org/10.9770/jssi.2020.9.M(14))
- Hale, J., Householder, B., & Greene, K. (2002). The theory of reasoned action, in the persuasion handbook: *Developments in theory and practice*. 259-288. https://www.researchgate.net/publication/309045638_The_theory_of_reasoned_action_in_the_persuasion_handbook_Developments_in_theory_and_practice
- Hardeman, W., Kinmonth, A. L., Michie, S., & Sutton, S. (2011). Theory of planned behaviour cognitions do not predict self-reported or objective physical activity levels or change in the ProActive trial. *British journal of health psychology*, 16(Pt 1), 135–150. <https://doi.org/10.1348/135910710X523481>
- Hassan, H., Asad, S., & Hoshino, Y. (2016). Determinants of leadership style in big five personality dimensions. *Universal Journal of Management*, 4(4), 161–179. <https://doi.org/10.13189/ujm.2016.040402>
- Hill, D. (1991). Charles Michael Stanton. Higher Learning in Islam: The Classical Period A.D. 700–1300. Savage, Maryland: Rowman & Littlefield, 1990. Pp. xiii + 205. ISBN 0-8476-7637-4. \$42.50. *The British Journal for the History of Science*, 24(3), 373–374. <https://doi.org/10.1017/S0007087400027436>
- Hoffman, K., Christianson, A., Gray, R., & Daniels, L. (2022). Western Canada's new wildfire reality needs a new approach to fire management. *Environmental Research Letters*. 17 (6). <https://iopscience.iop.org/article/10.1088/1748-9326/ac7345>
- Holden, J. (2023). *The ecology of culture – from theory to practice*. Cultural Governance.
- Hovland, C., Milliken, B., & Niederriter, J. (2021). Interprofessional simulation education and nursing students: Assessing and understanding empathy. *Clinical Simulation in Nursing*, 60, 25-31. <https://doi.org/10.1016/j.ecns.2021.07.002>
- Hügel, S., & Davies, A. R. (2020). Public participation, engagement, and climate change adaptation: A review of the research literature. *Wiley interdisciplinary reviews. Climate change*, 11(4), e645. <https://doi.org/10.1002/wcc.645>

- Kumpu, V. (2022). What is Public Engagement and How Does it Help to Address Climate Change? A Review of Climate Communication Research. *Environmental Communication*, 16(3), 304–316. <https://doi.org/10.1080/17524032.2022.2055601>
- Larson, C. (2009). *Persuasion : Reception and Responsibility*. Cengage Learning.
- Lemal, M., & Van den Bulck, J. (2009). Television news exposure is related to fear of breast cancer. *Preventive Medicine*, 48(2), 189–192. <https://doi.org/10.1016/j.ypmed.2008.11.011>
- Leventhal, H., Singer, R., & Jones, S. (1965). Effects of fear and specificity of recommendation upon attitudes and behavior. *Journal of Personality and Social Psychology*, 2(1), 20–29. <https://doi.org/10.1037/h0022089>
- Li, S. N., Qian, L. Q., Ma, J. L., Xia, Z. Y., Liu, G. Y., Gao, F., Yang, D. Y., Yu, Y., Zheng, B. L., & Zhang, J. H. (2013). A randomized trial of Chinese medicine Lirukang Granule combined with psychological intervention for cyclomastopathy and menoxenia. *Chinese journal of integrative medicine*, 19(1), 22–28. <https://doi.org/10.1007/s11655-013-1321-6>
- Littlejohn, S. W., Foss, K. A., & Utomo, E. P. (2016). *Theories of Human Communication*. Eleventh E. Illinois: Waveland Press.
- Maletzke, G. (1963). *Psychologie der Massenkommunikation; Theorie und Systematik*. Hans Bredow-Institut.
- Megawati, S., Alfarizi, M., & Syamsul, M. R. (2024). Key Advantages of the Green Government Initiative in Achieving Local Public Service Performance and Sustainable Development. *International Journal of Sustainable Development & Planning*, 19(11). <https://doi.org/10.1007/s11655-013-1321-6>
- Montaño, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. "V." Viswanath (Eds.), *Health behavior: Theory, research, and practice*, 5th ed. 95–124. <https://psycnet.apa.org/record/2015-35837-006>
- Nabi, R. L., & Myrick, J. G. (2018). Uplifting Fear Appeals: Considering the Role of Hope in Fear-Based Persuasive Messages. *Health Communication*, 34(4), 463–474. <https://doi.org/10.1080/10410236.2017.1422847>
- Nasution, H. (1985). *Islam Reviewed From Various Aspects*. University of Indonesia.
- Nguyen, Q. A., Hens, L., MacAlister, C., Johnson, L., Lebel, B., Bach Tan, S., Manh Nguyen, H., Nguyen, T. N., & Lebel, L. (2018). Theory of Reasoned Action as a Framework for Communicating Climate Risk: A Case Study of Schoolchildren in the Mekong Delta in Vietnam. *Sustainability*, 10(6), 2019. <https://doi.org/10.3390/su10062019>
- Nowak, K., & Wärneryd, K. E. (1985). *Kommunikation och åsiktsförändring*. Stockholm: Prisma.
- Pandey, R., Kumar, P., Archie, K. M., Gupta, A. K., Joshi, P. K., Valente, D., & Petrosillo, I. (2018). Climate change adaptation in the western-Himalayas: Household level perspectives on impacts and barriers. *Ecological Indicators*, 84, 27–37. <https://doi.org/10.1016/j.ecolind.2017.08.021>
- Roberto, A. J., Krieger, J. L., Katz, M. L., Goei, R., & Jain, P. (2011). Predicting Pediatricians' Communication With Parents About the Human Papillomavirus (HPV) Vaccine: An Application of the Theory of Reasoned Action. *Health Communication*, 26(4), 303–312. <https://doi.org/10.1080/10410236.2010.550021>
- Rogers, E. M., & Shoemaker, F. F. (1971). *Communication of innovations: A cross-cultural approach* (2nd ed.). Free Press.
- Sa'ban, L. A., Sadat, A., & Nazar, A. (2021). Jurnal PKM Meningkatkan Pengetahuan Masyarakat Dalam Perbaikan Sanitasi Lingkungan. *DINAMISIA: Jurnal Pengabdian Kepada Masyarakat*, 5(1). <https://doi.org/10.31849/dinamisia.v5i1.4365>
- Schramm, W. (1954). Procedures and Effects of Mass Communication. *Teachers College Record*, 55(10), 113–138. <https://doi.org/10.1177/016146815405501006>
- Shaw, J. B., Erickson, A., & Nasirzadeh, F. (2015). Destructive leader behavior: A comparison of Australian, American, and Iranian leaders using the Destructive Leadership

- Questionnaire. *Leadership. Advance online publication.*
<https://doi.org/10.1177/1470595815606740>
- Soewarso (2003). Penyusunan Pencegahan Kebakaran Hutan Rawa Gambut dengan menggunakan Model Prediksi. *Institut Pertanian Bogor.*
- Spielberger, C. D., Gonzalez-Reigosa, F., Martinez-Urrutia, A., Natalicio, L. F., & Natalicio, D. S. (2017). The State-Trait Anxiety Inventory. *Revista Interamericana De Psicología/Interamerican Journal of Psychology*, 5(3 & 4).
<https://doi.org/10.30849/rip/ijp.v5i3 & 4.620>
- Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological bulletin*, 141(6), 1178–1204. <https://doi.org/10.1037/a0039729>
- Topchiyev, O.G., & Sych, V.A. (2020). Problems of clustering and structuring of socio-natural economic activities in geographical studies. *Ukrainian Geographical Journal.*
<https://doi.org/10.15407/ugz2020.02.065>
- Untaru, E.-N., Ispas, A., Candrea, A., Luca, M., & Epuran, G. (2016). Predictors of individuals' intention to conserve water in a lodging context: The application of an extended Theory of Reasoned Action. *International Journal of Hospitality Management*, 59, 50–59.
<https://doi.org/10.1016/j.ijhm.2016.07.008>
- Van Cuilenberg, J. J., & Noomen, G. W. (1984). *Communicatiewetenschap*. Coutinho.
- Veludo-de-Oliveira, T. M., Alhaidari, I. S., Yani-de-Soriano, M., & Foxall, G. R. (2017). Comparing the explanatory and predictive power of intention-based theories of personal monetary donation to charitable organizations. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 28, 571–593.
<https://doi.org/10.1007/s11266-016-9690-7>
- Venkatesan, M. (2021). The Role of Culture and Moral Responsibility in Facilitating a Sustainable Bioeconomy. *Sustainable Bioeconomy.* https://doi.org/10.1007/978-981-15-7321-7_2
- Venus, A. (2019). *Manajemen Kampanye*. Simbiosia Rekatama Media.
- Widmann, T. (2022). Fear, Hope, and COVID-19: Emotional Elite Rhetoric and Its Impact on the Public During the First Wave of the COVID-19. *Pandemic. Political psychology*, <https://doi.org/10.1111/pops.12831>
- Yasir, Y., Firdaus, M., Nurjanah, N., & Salam, N. E. (2021, November). Environmental communication model through community-based tourism development in overcoming mangrove damage. In IOP Conference Series: Earth and Environmental Science, 886 (1), 012022. <https://doi.org/10.1088/1755-1>

Biography of Author

Trisia Megawati Kusuma Dewi, Islamic Study, Universitas Islam Negeri Syarif Hidayatullah Jakarta, South Tangerang, Banten, 15412, Indonesia.

- Email: trisia.megawati@upnvj.ac.id
- ORCID: 0009-0000-3953-3291
- Web of Science ResearcherID: N/A
- Scopus Author ID: 59260956300
- Homepage: <https://sinta.kemdikbud.go.id/authors/profile/6879897>