# Community of Practice, Social Learning and Social Presence Model for Sustaining Religious Virtual Community

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### Abstract

This study aims to explore theoretical factors in order to increase the sustainability of an online community based on religious value or we termed as a religious virtual community (RVC). Social Presence Theory is the degree by which an individual is perceived to be a 'real person' in online communities. Meanwhile, social learning theory states that individuals as humans have a motive to learn to sustain their lives. While, the religious virtual community is an online community with the aim of deepening the study or knowledge of the religious field. We selected Islamic Based Virtual Community which has been so many in our community. The existence of this community will increase knowledge of the religious values of its members. Since, this online community is very beneficial for sharing and caring about religious knowledge, then, we must think about how to sustain this community and prevent harm from the existence of this community. Those three theories lens will be used to develop the factors. Future research agendas are also provided for the direction of future work. This research is expected to give a contribution in an effort to sustain religious virtual communities.

Keywords: Virtual Community Sustainability, Social Presence Model, Virtual Religious Knowledge

#### Introduction

Communities of practice are a group of people who share concerns, a series of problems, or discuss such topics, which deepen their knowledge and expertise in this area by interacting on an ongoing basis (Wenger et al., 2002). Learning as a center of this activity means that individuals need to be involved and contribute to these community practices. Wenger (1998) explained that, for society, long live learning activities need to be continuously improved to ensure the emergence of the next generation. The Holy Qur'an also states that lifelong learning, especially religious studies are important to dignify humans, and in Islam it determines the life of the hereafter. Hence, lifelong education as a principle of Islamic education which can be achieve from formal or informal mode. In Islam, one of the principles believed in the search for knowledge (education) is the principle of continuity or sustainability. This is because in Islam, looking for knowledge is an obligation that never and should not end. The exclamation to "read" that is in Holy Qur'an (HQ. Al-'Alaq: 1) which stated that seeking knowledge at any time, is the principle that is always held by Muslims. In generals, human needs to join a community becomes an urgency because humans are social creatures. In this current era, the existence of online communities is an alternative to strengthen the strength of the congregation and maintain the quality of friendship. There are many options for an individual to join a particular online group. The desire to join an online community is mostly to get information, share information and acquire new knowledge.

However, the ability to choose an online community is sometimes limited by the lack of information about the origin of a community, the aims and objectives of the community and the requirements to becomes a member. Instead of increasing knowledge, what happens then is the existence of misleading information and errors in processing information. Another issue is the absence of the one's physical resources in the online community. Limited physical contact with an online community sometimes creates conflict and is prone to interference (Campbell & Evolvi, 2019). One of the virtual communities chosen by community members is the religious virtual community. According to (Campbell & Evolvi, 2019; Solahudin & Fakhruroji, 2020) a religious virtual community is an online community that aims to share knowledge about religious activities, worship practices, faith, belief and in the long run it is hoped that it will increase the religiosity of its members. If so, then there are many benefits to gained by establishing or building virtual religious communities. However, the results of the study indicated that the survival of a virtual community was often disrupted due to limited physical encounters. Distance and location as well as internet-based communication media are a challenge in themselves. Members of a virtual communities may be unfamiliar and never meet face to face, they only interact via the virtual media they have chosen. Therefore, maintaining the sustainability of these communities becomes important along with the many benefits obtained from the existence of these virtual communities.

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One approach that can be used to maintain the sustainability of these virtual communities is Social Presence Theory. In the existing literature, several methodologies and best practices have been described to maintain the sustainability of this community, including (Fachrunnisa, 2016); (Fachrunnisa & Hussain, 2020) who state that trustworthiness and continuous performance monitoring. Thus, this study aims to explore theoretical factors in efforts to increase the sustainability of a Religious Virtual Communities by utilizing Social Presence Theory, Social Learning Theory and Community of Practice.

### **Literature Review**

# Social Presence and Social Learning Theory (Ardian)

Social presence theory was developed by (Short et al., 1976; Whiteside et al., 2017). Social presence as the degree of salience or the sense of presence of others across different media. However, researchers following Short et al. (1976) defined social presence differently. While Gunarwardena (1995) defined social presence as perception of others as real people in technology-mediated environments, Garrison et al. (2000) defined it as the ability of participants to project themselves in online environments, and Tu & McIsaac (2002) equated it with a sense of being connected. More recently, Garrison (2016) combined all these definitions to describe social presence as "the ability of participants to identify with a group, communicate openly in a trusting environment, and develop personal and affective relationships progressively by way of protecting their individual personalities" (p. 79) in online or technology-mediated environments. Social presence is also the perception of a person being present Dunlap & Lowenthal (2014) in a technology-mediated or virtual environment.

In social presence theory, the projection or perception of a person as "real" is determined by intimacy and immediacy through a communication medium (Cui et al., 2013; Hodges & Cowan, 2012; Short et al., 1976; Sung & Mayer, 2012). Both intimacy and immediacy are communication channels for verbal and non-verbal responses with the virtual environment. Intimacy Argyle & Dean (1965) and immediacy Biocca et al. (2003) refer to the intensity and immediate social responses such as eye contact, smiling, body movements, proximity, and response time (Wiener & Mehrabian, 1968). Therefore, in the context of virtual environments, social presence is the perception of "real people" having both verbal and non-verbal meaningful interactions and responses to foster team trust, communication, collaboration, and performance improvement through virtual technologies.

## Social Learning Theory

In the context of online communities, the quality of communication can be explained through the Social Learning Theory approach which is often seen as a ritual. This ritual is described as a process in which individuals exchange knowledge that is not out of personal interest or for the accumulation of information from the community itself.

Social learning theory by Wenger et al. (2002) has four premises. The first is humans as social beings and this is an important aspect of learning. Individual knowledge is related to self-competence, this needs to be strengthened that knowledge requires a process of upgrading and updating of knowledge. This makes involvement activity in a community one of the reasons for individuals to update their knowledge. In the context of a Religious Virtual Community, the experience of learning about religious law is to produce deep meanings about life and live. Wenger's theory integrates the four components that make up social participation, into (a) meaning, (b) practice, (c) society and (d) identity. Meaning is used to define our ability to experience our life and the world as meaningful and can be done individually or collectively. Practice is the sharing of the historical and social resources, frameworks, and perspectives that can safeguard collective action against action. Society/ community is a social arrangement in which the identity of a religious community is worth fighting for and the participation of its members is considered an ability.

## Religious Virtual Community

Religious Virtual Community originates from a concept developed by Chicago University in the form of online-based religious activities or rituals known as "CommunitiTree". Rheingold (1993) states that religious virtual community is an online activity as a way of documenting religious rituals converted on the internet by growing virtual communities into discussion platforms and web-based houses as a means of worship, for example Cyber-church, religious rituals, prayer, etc. Meanwhile, the role of the internet as a media virtual religion has shown a development (Hoover & Lundby, 1997; Campbell, 2005b) developed a study that focuses more on several core themes including ritual authority, group or community, and identity. Religious online communities are also defined as religious group, entities or community that carry out traditional religious ritual activities using the internet and adapting to the latest digital technology to translate offline religious worship practices into virtual communities (Campbell, 2005a).

Literature that discusses the role of the internet in fostering and maintaining the social functions, rituals and ideology of offline (traditional) religious communities are still limited. According to el-Nawawy & Khamis (2009) religious community in virtual form by utilizing an Islamic website to form an online discussion community can foster a new Da'wah forum. This community provides a means for members to participate in carrying out communal ritual practices so as to create a virtual community of worship. However, public trust in the availability of information provided by the Islamic website as a virtual community media is still limited and there is a potential for a digital-divide.

The approach by Campbell & Evolvi (2019) looks at the religious virtual community with a digitally mediated context. This approach emphasizes the role of various forms of digital technology to mediate a religious understanding and experience, including identity, authority, and community. In other words, a religious virtual community is defined as an exploration process of linkages, connectedness, interrelation and engagement to bridge, fuse and mingle between online and offline religions. Furthermore, the religious virtual community is understood as the use of social media platforms as a means of information from the internet to facilitate religious (Islamic) agents to deliver religion (Islamic) learning into a media-friendly culture community (Solahudin & Fakhruroji, 2020).

# Community of Practice (CoP)

Theoretically, the CoP concept comes from social psychology, and is then applied in broader research contexts such as business, education, industry and health. The idea of the CoP concept was conveyed and developed by the Wenger-Trayner partnership which is well known in the field of education. In particular, Lave & Wenger (1991) emphasized that learning is not just a socially shared cognition process whose end result is the internationalization of individual knowledge, but learning is a process of becoming a member of a sustainable community. The identity of community members, such as members of the religious community, is important in the context of CoP for improving organizational performance (Nurhidayati & Fachrunnisa, 2020). In addition, because CoP puts more emphasis on processes, informal or semi-informal activities by professionals will further encourage the effectiveness of community performance (Hussein, 2017); (O'Donnell & Tobbell, 2007). Furthermore, Kasl & Yorks (2002), states that CoP is type of collaborative inquiry, where members try to find meaningful ways to be able to know, know and understand from the experiences of other members who are usually free, open-source and involve the same place/ position.

Community of Practice has three basic structural elements, namely the domain, the problem or knowledge that will be built by the community. This domain will build an image or identity, as well as build inspirational goals for each individual who is part of the community (Wenger et al., 2002). The second element is community itself, consisting of people who care about the domain. In CoP, 'learning and sharing is an intellectual process which involved heart and mind' Wenger et al. (2002) also stated that the sustainability of the communities depends on members motivation and energy. The third element is shared knowledge or value. A religious virtual community will have a knowledge baseline which will be a full understanding of its member. Wenger et al. (2002) also argued that knowledge exploration and knowledge explanation become main activities in the communities which then lead to creating tacit and explicit knowledge among them.

### Theoretical Framework on Sustaining Religious Virtual Community

The CoP model creates a virtual environment fostering learning through three key elements: cognitive presence, social presence, and teaching presence (Garrison, 2016; Garrison et al., 2000; Whiteside, 2015). The Social Presence Model has five integrated elements to improve social presence: affective association, community cohesion, instructor involvement, interaction intensity, and knowledge and experience. Both CoP and the Social Presence Model are designed to improve social presence during online knowledge sharing and could help instructors and learners feel personally connected (Sung & Mayer, 2012). As discussed below, it can be reasoned that CoP, Social Learning, and Social Presence Model could enhance the social presence of Religious Virtual Communities which then lead to its Sustainability.

We introduce the theoretical factors to sustain Religious Virtual Communities derived from CoP, Social Learning and Social Presence Model. There are three factors as following

### 1. Cognitive Presence

Cognitive presence, through continuous communication, facilitates understanding and meaning and enhances critical thinking. Religious Virtual Community members can maintain continuous communication interactions from disparate locations throughout the day to collaborate, critically evaluate opinion and knowledge, and strengthening each other. In the context of CoP, social presence supports cognitive presence in establishing the need for a supportive and trusting environment where interpersonal relationships develop. The opportunity to create an environment of continuous communication fosters and supports relationship building and develops educational opportunities, which may lead to sustain the community.

#### 2. Social Presence

Social Presence Model developed by (Bickle et al., 2019) can be used to aid instructional designers in planning a program or learning content utilizing affective association, community cohesion, instructor investment, interaction intensity, and knowledge and experience. As in face-to-face environments, it is important to identify and foster emotional connections, develop relationships, and improve the personal experience between members in online communities (Elwood et al., 2014; Whiteside, 2015). Thus, affective association could be used during a program to build the emotional connections that may occur, such as self-disclosure, showing emotions, and sharing humor. Likewise, community cohesion creates an opportunity to share materials, resources, and insight, along with community building activities. The senior members' involvement is equally important in this process. Invested members foster and participate in the build of community. Interaction intensity is the level and intensity of communication and support between the participants and instructor. Knowledge and experience are the prior knowledge and experiences of the members that enrich the learning experiences for the learning community. In a Religious Virtual Community setting, team administrator, similar to instructor involvement, could implement the Social Presence Model to gather knowledge and experience, create personal connections, and develop community cohesion and processes while improving member communication through virtual environments.

# 3. Learning Presence

Learning Presence involved gaining members' attention, informing members of goals, stimulating recall of prior learning, presenting content, providing learning guidance, eliciting performance, providing feedback, assessing performance, enhancing retention and transfer. It is a strong model in which to research and implement social presence theory improving intimacy/immediacy along with the projection of a "real person" with real motives and interest in a learning environment or course. In Virtual Religious Knowledge, this process can be achieved through 2I of Knowledge, which are Immediacy and Intimacy of Religious Learning. In social presence theory, the projection or perception of a person as "real" is determined by intimacy and immediacy through a communication medium (Cui et al., 2013; Hodges & Cowan, 2012; Short et al., 1976; Sung & Mayer, 2012). Both intimacy and immediacy are communication channels for verbal and nonverbal responses with the virtual environment. Intimacy (Argyle & Dean, 1965) and immediacy (Biocca et al., 2003) refer to the intensity and immediate social responses such as eye contact, smiling, body movements, proximity, and response time (Wiener & Mehrabian, 1968).

Argyle & Dean (1965) suggested that if one component of intimacy was decreased, a person would increase other components to maintain social presence equilibrium. Whiteside et al. (2017) classified face-to-face communication and synchronous video-mediated communication as having high degree of salience, whereas asynchronous and text-based communication as possessing low degree of salience. Within a Religious Virtual Communities, member sometimes can utilize cameras and audio so each member could see and hear each other would increase intimacy and immediacy. Both nonverbal (perceived eye contact and agreement with a nod of the head) and verbal responses could be recognized and understood immediately. With the use of audio or text only, the administrator would need to solicit responses to understand the feelings of the participants. Therefore, in the context of virtual environments, social presence is the perception of "real people" having both verbal and non-verbal meaningful interactions and responses to foster team trust, communication, collaboration, and sustainability improvement through virtual technologies. This theoretical framework can be illustrated in Figure 1.

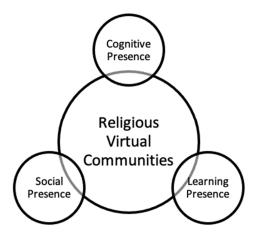


Figure 1: Theoretical Framework of Religious Virtual Communities Sustainability

### **Conclusions and Recommendations**

This study aims to explore the theoretical factors that are predicted to increase the sustainability of the Religious Virtual Community. One of the main factors determining the sustainability of the RVC is the focus of the members of the reasons for their existence in order to increase knowledge about the law and practice of their religious worship. This is important, because understanding the science of religion will bring benefits in the world and hereafter. By utilizing Social Learning Theory, Social Presence Theory dan Communities of Practice, we conclude that three factors can determined the sustainability which are: Cognitive Presence, Social presence and learning presence. Those three factors are intertwined and interlink activities which need to understood by administrator or founder an online community.

There are still research room related efforts to sustain religious virtual community. Some issues that must be explored in future research are whether and how interactive technology can increase social presence and social learning in a community that aims to strengthen religious knowledge. Research on the importance of shared network will also help to sustain the community. Knowledge quality is also another important factor to attend. We plan to validate this theoretical framework into an empirical model and going to be tested in certain Religious Virtual Community.

### References

- Holy Our'an
- Argyle, M., & Dean, J. (1965). Eye-contact, distance and affiliation. Sociometry, 28, 289–304.
- Bickle, J. T., Hirudayaraj, M., & Doyle, A. (2019). Social Presence Theory: Relevance for HRD/VHRD Research and Practice. *Advances in Developing Human Resources*, 21(3), 383–399. https://doi.org/10.1177/1523422319851477
- Biocca, F., Harms, C., & Burgoon, J. K. (2003). Toward a more robust theory and measure of social presence: Review and suggested criteria. *Teleoperators and Virtual Environments*, 12, 456–480. https://doi.org/10.1162/105474603322761270
- Campbell, H. A. (2005a). Considering spiritual dimensions within computer-mediated communication studies. *New Media and Society*, 7(1), 110–134. https://doi.org/10.1177/1461444805049147
- Campbell, H. A. (2005b). Making space for religion in Internet studies. *Information Society*, 21(4), 309–315. https://doi.org/10.1080/01972240591007625
- Campbell, H. A., & Evolvi, G. (2019). Contextualizing current digital religion research on emerging technologies. *Human Behavior and Emerging Technologies*, 2, 5–17. https://doi.org/10.1002/hbe2.149
- Cui, G., Lockee, B., & Meng, C. (2013). Building modern online social presence: A review of social presence theory and its instructional design implications for future trends. *Education and Information Technologies*, 18, 661–685. https://doi.org/10.1007/s10639-012-9192-1
- Dunlap, J. C., & Lowenthal, P. R. (2014). The power of presence: Our quest for the right mix of social presence in online courses. In A. A. Piña & M. A. P (Eds.), *Real life distance education: Case studies in practice* (pp. 41–66). Information Age Publishing.
- El-Nawawy, M., & Khamis, S. (2009). Religion in the Virtual Public Sphere: The Case of Islam. In *Islam Dot Com*. Palgrave Macmillan Series in International Political Communication. Palgrave Macmillan. https://doi.org/10.1057/9780230622661\_3
- Elwood, S., McCaleb, K., Fernandez, M., & Keengwe, J. (2014). A theoretical framework and model towards mediarich social presence design practices. *Education and Information Technologies*, 19(1), 239–249. https://doi.org/10.1007/s10639-012-9212-1
- Fachrunnisa, O. (2016). Towards sustainability of virtual business community through trustworthy behaviour-based mechanism. *International Journal of Web Based Communities*, 12(3), 296–322. https://doi.org/10.1504/IJWBC.2016.077756
- Fachrunnisa, O., & Hussain, F. K. (2020). A methodology for creating sustainable communities based on dynamic factors in virtual environments. *International Journal of Electronic Business*, 15(2), 133–159. https://doi.org/10.1504/IJEB.2020.106504
- Garrison, D. R. (2016). *E-learning in the 21st century* (3rd ed.). Routledge.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105.
- Gunarwardena, C. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International Journal of Educational Telecommunications*, *1*(2), 147–166.

- Hodges, C. B., & Cowan, S. F. (2012). Preservice teachers' views of instructor presence in online courses. *Journal of Digital Learning in Teacher Education*, 28, 139–145. https://doi.org/10.1080/21532974.2012.10784694
- Hoover, S. M., & Lundby, K. (1997). *Rethinking media, religion, and culture*. Sage Publications, Inc. https://www.doi.org/10.4135/9781452243559
- Hussein, J. W. (2017). The role of Community of Practice (CoP) to Ensure Teacher Development and Sense of Professionalism: The Implication for University Teachers. *Bahir Dar Journal Education*, 17(2). https://journals.bdu.edu.et/index.php/bje/article/view/39/83
- Kasl, E., & Yorks, L. (2002). An Extended Epistimology for transformative Learning Theory and Its Application Through Collaborative Inquiry. TCRecord Online. http://www.scu.edu.au/schools/gcm/ar/w/Kasl\_and\_Yorks.pdf
- Lave, J., & Wenger, E. (1991). Situated Learning: Legitimate peripheral participation. Cambridge University Press.
- Nurhidayati, & Fachrunnisa, O. (2020). Communal Identity and Shared Value Toward Organizational Performance
  in the Context of Religious Knowledge Management. In L. Barolli, F. Hussain, & M. Ikeda (Eds.), Complex,
  Intelligent, and Software Intensive Systems. CISIS 2019. Advances in Intelligent Systems and Computing, vol 933.
  Springer. https://doi.org/10.1007/978-3-030-22354-0\_87
- O'Donnell, V. L., & Tobbell, J. (2007). The transition of adult atudents to higher education: Legitimate peripheral participation in a community of practice? *Adult Education Quarterly*, 50(4), 312–328.
- Rheingold, H. (1993). The Virtual Community. In *Homesteading on the Electronic Frontier*. Addison-Wesley Publishing Company. https://doi.org/10.4324/9781315158259-10
- Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications. John Wiley.
- Solahudin, D., & Fakhruroji, M. (2020). Internet and islamic learning practices in Indonesia: Social media, religious populism, and religious authority. *Religions*, 11(1), 1–12. https://doi.org/10.3390/rel11010019
- Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computer in Human Behavior*, 28, 1738–1747. https://doi.org/10.1016/j.chb.2012.04.014
- Tu, C.-H., & McIsaac, M. (2002). The relationship of social presence and interaction in online classes. *The American Journal of Distance Education*, *16*(3), 131–150.
- Wenger, E. (1998). Communities of Practice: Learning, Meaning and Identity. Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Harvard Business School Press.
- Whiteside, A. L. (2015). Introducing the social presence model to explore online and blended learning experiences. *Journal of Asynchronous Learning Network*, 19(2). https://doi.org/10.24059/olj.v19i2.453
- Whiteside, A. L., Dikkers, A. G., & Swan, K. (2017). Social presence in online learning: Multiple perspectives on practice and research. Stylus Publishing, LLC.
- Wiener, M., & Mehrabian, A. (1968). *Language within language: Immediacy, a channel in verbal communication*. Ardent Media.