"MAKE SENSE OF IT!": THE ROLE OF MEDIATION AND PERCEIVED BENEFIT IN AN ONLINE LEARNING ENVIRONMENT

Ignasius Heri Satrya Wangsa
Program Studi Manajemen, Fakultas Bisnis dan Akuntansi,
Universitas Katolik Musi Charitas

e-mail: ig_heri@ukmc.ac.id

ABSTRACT

The use of online learning platforms has significantly influenced critical understanding on the role of mediation and perceived-benefit. Those who are involved in an online learning environment have to expend effort to make sense of their virtual interaction. The goal in any online learning environment is to achieve authentic interaction. This conceptual research proposes two pillars in the rationalisation of virtual interaction. First, the existence of mediation should be based on its function as a medium to trigger active participation. Within this perspective the concept of involvement is explored. Second, there should be a mechanism to develop perceived-benefit orientation through which all parties involved in the interaction can achieve collective agreement, i.e. they can satisfy their own interests. Some practical implications are also discussed.

Keywords: Mediation, Perceived-Benefit, Involvement

A. INTRODUCTION

The advent of the Covid-19 pandemic has urged educational institutions to revolutionise interactive processes in the learning environment, in which technology is used in the provision of online learning platforms. This context has made relevant the presence of virtual interaction.

While it does make sense that the use of media is significant and beneficial (Song & Hill, 2007) in the discourse of interactive virtual interaction, the displacement of normal and natural ways of human social interaction might cause social disconnectedness.

In the meantime, an innovative mind-set must creatively seek the best use of media to deal with the social aspect of virtual interaction ie. in what way that the virtuality could contribute more on the learning values related to the adoption of the newness. However, this might not be sufficient when compared against displacement issues that emerge in virtual interactions.

This research also represents an effort to minimise the gap between the reality of virtual interaction and the implication of disconnectedness (Hall, 2007; Al-Kumaim *et al.*, 2021) by intro-

ducing the role of mediation and perceived-benefit. Mediation is the intervention of technological entity in the interactive process conditioned by a learning environment. It performs the role of facilitation so that the interactive process can be directed to achieve what is called 'authenticity'. Relevant to the mediating role of technological entity is human intervention, i.e. the involvement of certain levels of capacity. It represents active participation in an effort to achieve authenticity in interaction.

The technical participation (Al-Kumaim *et al.*, 2021) is the involvement of "hard" skills especially in dealing with the operationalisation of the technological tool. On the other hand, it is necessary to build certain capacity, i.e. the ability to develop perceived benefit.

The author proposes economic rationality in reshaping authenticity in the reality of virtual interaction. All human activities are manifestations of economic motives. This will view perceived-benefit as fundamental in virtual interaction, where all parties can basically connect by the distribution of benefit.

Putting on the significant role of mediation and perceived-benefit within the context of an online learning environment, the author proposes this exploratory research to provide pre-discussion to guide general understanding on the discourse of authenticity in a virtual learning environment.

B. LITERATURE REVIEW

1. Virtuality in an online learning environment

The reallity of virtual interaction may attract the debate over its limitation to replace the role of human by focusing more on the technology (Salmon et al., 2015). As a product of modernization, virtuality in the context of human-to-human interaction may cause disadvantages. This is the reason that a critical evaluation might be necessary.

Online learning is an option in distance education (Wang *et al.*, 2013) in which physical presence and face-to-face interaction are lacking. Online learning could also be deliberately designed for specific learning objectives. While it has its own limitations, this learning approach creates value of responsibility, i.e. the formation of learning styles in which all cognitive and metacognitive strategies are used to monitor, control, regulate, and adjust the learning style (Wang *et al.*, 2013).

Wang *et al.* (2013) states that there are challenges in an online learning environment that may reduce certain capabilities. Those who are resistant to computer technology or lack computer skills may experience disorientation. In contrast, those who favour or are comfortable with computer technology may become more optimistic and motivated. This perspective represents what Wang *et al*. (2013) calls self-

regulatory control processes:

From this point of view, students with positive self-efficacy toward learning in online courses are usually more motivated and perform better in these courses. In addition to self-efficacy in the specific online course, the skills of using online learning technologies are also important. These skills include, for example, the use of emails, discussion boards, and Internet searches. Students who fear computer technologies may experience confusion, anxiety, a loss of personal control, frus- tration, and withdrawal **(Wang *et al.*, 2013).**

Online learning can be traced back to the invention of computer-mediated communica- tion (CMC). Later on, this was followed by a more sophisticated and wider use of the computer as the main tool in the era of virtuality. According to Kehrwald (2008), there is a theoretical construct of social presence in an inclusive CMC construct that has evolved and changed. In addition, this indicates the primary role of social presence ie. the importance of human dimension. Meanwhile, Tu (2002) identified some negative aspects in CMC such as frustration, critical attitude and lack of social presence.

An online learning environment contains social elements such as learners, subject matter, experts, and support staff. In coming together, their collective interactive learning qualities are considered as interactivist, transactional and relational learning. There is exchange between individual actors in online learning. The term 'connectivity' is afforded by a networked communication technology. This online environment phenomenon produces inter personal interaction, involving the process of cognitive interaction and learning (Kehrwald, 2008). A description of the social element in virtuality can be best illustrated by the following:

As experienced users of online environments, they indi- cated that they made assumptions about, and generally attributed human qualities to, other online participants. This was seen as a consequence of an empathetic relation in which they recognized similarity with other participants and attributed characteristics of 'sameness' to them. A portion of this sameness was the notion of being real: if I am real and you are like me, then you must also be real. Respondents viewed social presence as a quality of individuals and associated it with relations between themselves and other inha bitants of the online environment as both real people and salient social actors. **(Kehrwald, 2008)**

2. Mediation

Mediation has played a significant role in influencing learners' experiences in online learning. It is the participants'

responsibility to get involved in communicative exchange (Kehrwald, 2008).

The involvement covers their expertise in media usage. A high-level involvement indicates active participation in the inte- ractivity, while a low-level invol- vement indicates only a minimal level of contribution in the inte- ractivity. Kehrwald (2008) states the potential technological entity taking part in the mediation process (Herrington, 2003) is responsible for causing social and psychological distance.

This is where there are differences in participants' expe- riences. In the conventional way of social interaction, i.e. face-to-face interaction, social intera- ctivity is relatively easy to recog- nise. Within the mindset of social virtuality, mediation should be developed to provide tools for self- actualization so that partici- pants could see themselves through other people.

3. Authenticity

In comparison to non-virtual interaction, virtual interaction provides different experiences. What might be a real experience in virtuality is the displacement of one's physical presence. Where physical presence can be socially experienced in an authentic way in face-to-face interactions, virtual interaction requires certain capa- bilities (Barab *et al.*, 2000) to make sense of virtual presence. Herrington *et al.* (2003) describes an experience in virtuality as a process of immersion within realistic situations.

The virtual existence is governed by certain conditions. Within the learners' mind-set there should be a well-established perception of benefit (internality) (Chen & Jang, 2010) and accep- tance of other factors that affect virtuality (externality). Both internality and externality co-exist to allow a dynamic inte- raction in online learning environ- ment (Herrington *et al.*, 2003).

Referring to Al-Kumaim *et al.* (2021), externality can repre- sent acceptance and adjustment to certain contexts that are not directly perceived as beneficial. Rather, it represents the adoption of new values that have a direct impact on the quality of interact- tivity in an online learning environment. Herrington *et al.* (2003) uses the term 'agreement' to determine externality in online learning, as follows:

It is a simulation of a client engagement in which the parti- cipants tacitly agree to go along with an interpretation of job reality which we have crafted **(Herrington *et al.*, 2003)**

C. RESEARCH METHOD

This research adopts an interpretative framework (Al- Kumaim *et al.*, 2021; Xiao, 2018) to explore the role of mediation and perceived-benefit in making sense

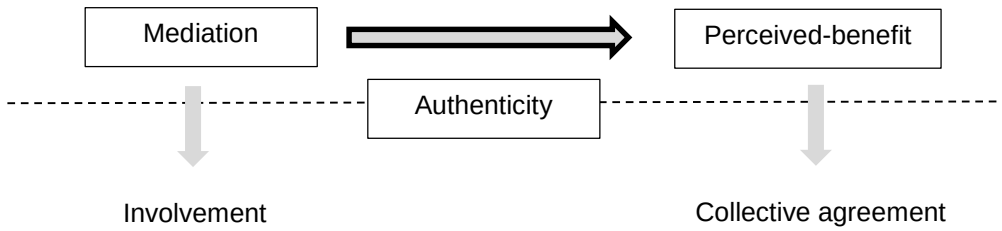
of authenticity in virtual interaction. Participants in this research comprise students enrolled in a Marketing Management course at a private-owned institution (i.e. University "X") in Palembang, Indonesia. Ten participants' narratives were analysed using content analysis. Emergent coding techniques (Blair, 2015) were employed to determine key concepts that support the exploration. The procedures for data analysis were applied as follows: (1) Data classification and organisation; (2) The development of framework for data rationalisation; and (3) Identification of significant concepts.

1. Findings and Discussion

Through the employment of content analysis, participants' narratives were analysed using emergent coding technique (Blair, 2015). Words or phrases (i.e. key concepts) related to involvement and perceived-benefit were categorised to guide an in-depth perspective on authenticity. The following Diagram-1 was developed to support the discussion:

Diagram-1

Conceptual framework: The Role of Mediation and Perceived-benefit in an Online Learning Environment



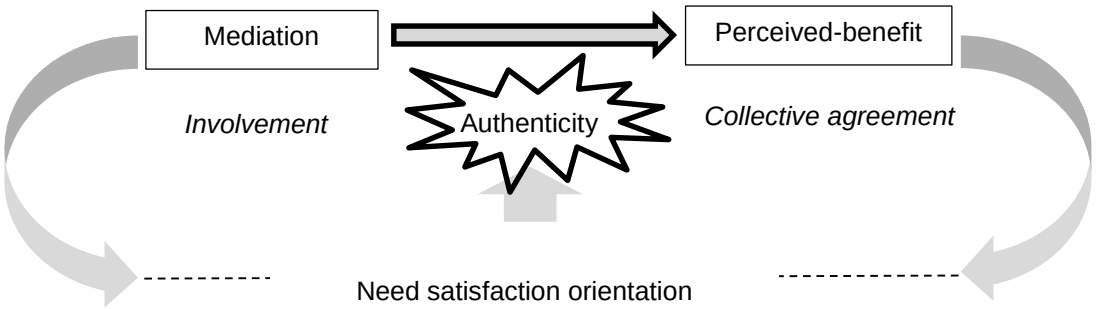
Mediation and perceived-benefit play important roles in the process of achieving authenticity. In the context of mediation, the participants' involvement is an act of their participation to contribute authenticity by making sense of benefit, i.e. the development of perceived-benefit. This involvement takes the form of their initiative in collaboration with technological tools. From this viewpoint, technological intervenetion is significant in providing an interactive virtual space.

Next, mediation takes part in the development of perceived-benefit. At this stage, perceived-benefit is developed through mediation, i.e. the participants' involvement in their own capacity to construct perceived-benefit. This is where all components in the learning environment reach the same perception of collectivism, i.e. the importance of all factors that need to be directed towards satisfying interest. Having categorised the emergent coding of ten participants' narratives, three concept-

tual models of mediation and perceivedbenefit connectedness are pro- posed (see Diagram-2, Diagram-3 and Diagram-4).

Diagram-2

Involvement and perceived-benefit: *Need satisfaction orientation*



In this conceptual model (Diagram-2), the manifestation of involvement leading to the development of perceived-benefit can be inferred as participants' contribution to authenticity through the deployment of all his/her resources. Within this model, the involvement motive was oriented to participants' efforts to satisfy their needs. This also indicates participants' involvement in the process of interpreting new values. Participants in this model can clearly list the practical benefits (Chen & Jang, 2010) obtained in the involvement process such as time management, self-discipline, and value of responsibility. Involvement is the active participation to 'make sense' of virtuality as beneficial.

Five participants are found to subscribe to this conceptual model. All five could specifically describe the benefits of the virtuality. *"At the beginning I was anxious because of the assignment but slowly I could find many positive things."* (Participant-AP). *"I am able to find solutions, and I don't need to go to the campus."* (Participant-EV). *"I learnt to be more disciplined."* (Participant-FC). The experience of benefit can also be emotional: *"In my personal view, online learning is more flexible and gives more time for completing the assignment. I feel happy and relaxed."* (Participant-HH), and *"Online learning was able to transform my life from nothing to something."* (Participant-NN). All five participants were able to identify their needs and could develop needs satisfaction orientation as part of their involvement and collective agreement in the interpretation of authenticity (Herrington *et al.*, 2003).

Diagram-3

Involvement and perceived-benefit: *Potential investment orientation*

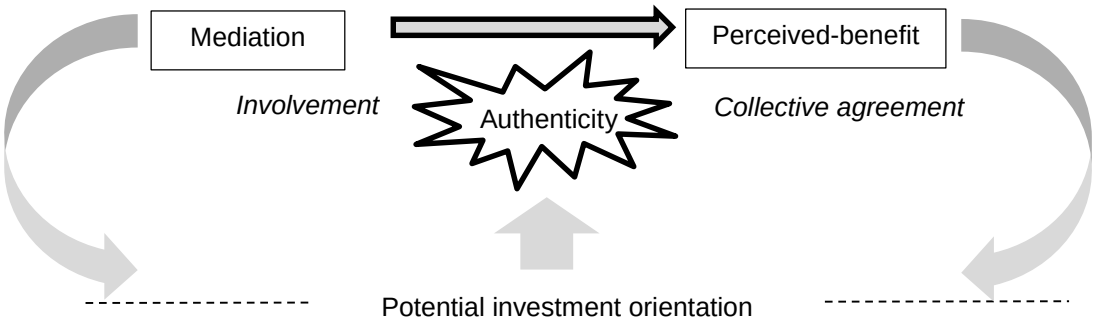


Diagram-3 describes a model in which participants critically look at their efforts and consider those efforts as investment. Narratives from participants who can be classified in this model indicate the production of sacrificial values. Participants specifically mention the valuable learning experience in which they have gone through difficulties. At the same time, they rationalise their decision to submit themselves to the online learning environment. This reflects participants' expression of pessimism (Salmon *et al.*, 2015) towards the system of virtuality, which fails to provide them with a direct benefit. What they are able to reveal is their continuous struggle to adapt to the new situation. Within this conceptual framework, the perceived-benefit is developed through the same perception of economic values, i.e. investment as the greater benefit.

The narratives of four participants correspond to this conceptual model (Diagram-3). The content of their narratives flows naturally in a certain pattern and has a strong message of unfavourability. *"Online lear- ning has many limitations. Many students are not satisfied with this method of learning as it requires stable Internet connection. I myself need to spend a lot of money to top-up my balance so that I can access the Internet."* (Participant-OK). *"Despite the flexibility, I think online learning has caused a lot of problems, mostly technical ones such as running out electricity. When I need to submit my assignment, it takes me time to upload because of poor Internet connection."* (Participant-AH).

"Online learning has so far challenged me. And, if there are no other solutions, I will be completely fed up." (Participant-VA). *"The teachers seem to pour out all assignments and ask the students to complete. No explanation was given, and we were just left confused."* (Participant-OC).

Within this conceptual model of involvement and

perceived-benefit, the participants encountered technical problems with assignments that were given by the teacher. Their involvement in the virtual learning interaction is an investment' to develop a pattern of learning experience, i.e. what Herrington *et al.* (2003) described as 'immersion', which should lead them to discover the meaning of authenticity. Participants' ability to describe difficulties in detail reveals their participation in defining authenticity (Barab *et al.*, 2000).

Diagram-4

Involvement and perceived-benefit: *Social significance orientation*

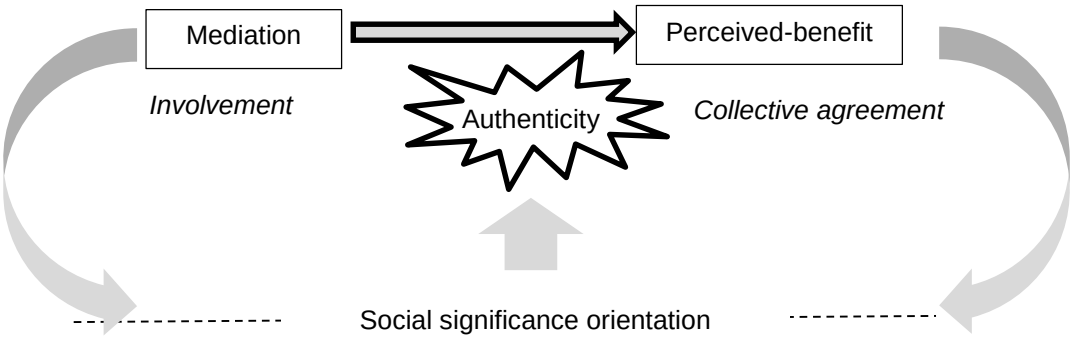


Diagram-4 shows a conceptual framework to describe participants' involvement in response to the social reference. It is an effort to make a possible comparison with external factors as a way that leads to authentic virtual interaction. In other words, at the individual level, mediation is manifested through participation in relation to social orientation, i.e. participants seeking social approval. On the other hand, perceived-benefit is developed through understanding of externality, i.e. how external factors need to be considered in making sense of an authentic virtual interaction. One participant was identified to describe this conceptual model of involvement and perceived-benefit. *"I have friends from another school who has the same experience and I would always ask my senior whenever I have problems."* (Participant-FB). Mediation that leads to the development of perceived-benefit can be described as participants' involvement (Barab *et al.*, 2000) to seek social approval. Authenticity could become well-defined when social approval is granted.

D. CONCLUSION

Making sense in an online learning environment requires a constant effort by all parties involved in virtual interaction to

achieve one main objective, i.e. authenticity. This context of authenticity is the rationalisation of essential values and their connection with expected ones in which complete acceptance would be manifested.

The notion of mediation in the interactivity of a virtual learning environment is active participation, i.e. the involvement of all parties contributing to the effectiveness of interactivity. Upon reaching a certain level of interactivity, involvement should lead to the development of perceived-benefit, which may be differently inter- preted by those involved in the process. This research reveals three kinds of orientation that have different understanding of the meaning of authenticity, namely: (1) Need's satisfaction orientation, (2) Potential investment orien- tation, and (3) Social significance orientation.

Further research might be needed, especially in the area of learning orientation. This would be relevant to obtain a better under- standing of the dynamic nature of consumers in the role of mediation and perceived-benefit.

REFERENCES

Al-Kumaim, N. H., Alhazmi, A. K., Mohammed, F., Gazem, N. A., Shabbir, M. S., & Fazea, Y. (2021). Exploring the impact of the covid-19 pandemic on university students' learning life: An integrated conceptual motivational model for sustainable and healthy online learning. *Sustainability (Switzerland)*, *13*(5), 1–21. https://doi.org/10.3390/su13052546

Barab, S. A., Squire, K. D., & Dueber, W. (2000). A co-evolutionary model for supporting the emergence of authenticity. *Educational Technology Research and Development*, *48*(2), 37–62. https://doi.org/10.1007/BF02313400

Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal of Methods and Measurement in the Social Sciences*, *6* (1), 14. https://doi.org/10.2458/v6i1.18772

Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, *26*(4), 741–752. https://doi.org/10.1016/j.chb.2010.01.011

Hall, a. (2007). *Learning and Sociocultural Theory: Exploring Modern Vygotskian Perspectives International Workshop Vygotsky Goes Online: Learning Design from a Sociocultural Perspective Vygotsky Goes Online: Learning Design*

from a Socio-cultural Perspective. *1*(1).

Herrington, J., Oliver, R., & Reeves, T. C. (2003). Patterns of engagement in authentic online learning environments. *Australasian Journal of Educational Technology*, *19*(1), 59–71. https://doi.org/10.14742/ajet.1701

Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. *Distance Education*, *29*(1), 89–106. https://doi.org/10.1080/01587910802004860

Salmon, G., Ross, B., Pechenkina, E., & Chase, A. M. (2015). The space for social media in structured online learning. *Research in Learning Technology*, *23* (March). https://doi.org/10.3402/rlt.v23.28507

Song, L., & Hill, J. R. (2007). A conceptual model for understanding self-directed learning in online environments. *Journal of Interactive Online Learning*, *6*(1), 27–42.

Tu, C.-H. (2002). The measurement of social presence in an online learning environment. *International Journal on E-Learning*, *1*(2), 34–45. https://doi.org/10.17471/2499-4324/421

Wang, C. H., Shannon, D. M., & Ross, M. E. (2013). Students' characterristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, *34*(3), 302–323. https://doi.org/10.1080/01587919.2013.835779

Xiao, L. (2018). Analyzing consumer online group buying motivations: An interpretive structural modeling approach. *Telematics and Informatics*, *35*(4),629–642. https://doi.org/10.1016/j.tele.2018.01.010