

Uncertainty Reduction of First-Year College Students in Virtual Class

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ABSTRACT

Many college students are now adjusting to the virtual environment, some as they start their studies for the first time. With this significant shift, students may feel anxious or uncertain about not having sufficient information about their classmates and lecturers. It may be a big problem for new students as their level of uncertainty may increase. It is their first experience of having a virtual class without face-to-face interaction before the semester starts. This study aimed to determine the delay in communication experienced by college students and their strategies to reduce this uncertainty. The theories and concepts used in this study are the theory of uncertainty reduction and the concept of virtual classes. This study uses a descriptive qualitative approach that uses interviews with ten students from six universities as the primary data. The results showed that informants experienced uncertainty in virtual lectures, and they used active, passive, and interactive strategies to reduce this uncertainty.

Keywords:

*Uncertainty reduction
Virtual class*



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INTRODUCTION

The Covid-19 pandemic has changed learning mode from face-to-face classroom interactions to virtual classrooms. It can cause discomfort and uncertainty among students, especially first-year students who have never physically met their fellow students and lecturers. The pandemic has required lecture participants to adapt to unprecedented challenges and the rapid transition from traditional face-to-face instruction to distance learning via virtual classrooms (Neuwirth, Jović, & Mukherji, 2020).

Internet use in Indonesia reaches 15.4 billion, with a percentage of 64% of internet users from the total population in Indonesia. It means that the internet is a part of everyday life. The average daily internet usage is approximately 7 hours 59 minutes. Since the pandemic, one of the current uses of the internet is in the teaching and learning process—virtual learning (We Are Social & Hootsuite, 2020).

A study was conducted in 2011 and stated that virtual learning only supports face-to-face learning. The concept of virtual learning was not developed to replace face-to-face learning. Combining face-to-face learning with virtual learning increases the quality of learning and increases the effectiveness and efficiency of education. Virtual learning was developed to support face-to-face learning. Virtual learning can be applied as the only learning process in distance education or combined with direct learning (Julaeha, 2011). Assisted by information technology, virtual classrooms in the learning process allow learners to be an active participant, produce and share knowledge or skills as well participate as much as possible and learn individually as well collaborate with other students., improving quality education and expertise (Ani, Hartanto, & Zulianto, 2015).

Assisted by information technology, virtual classrooms in the learning process enable students to become active participants, generate and share knowledge or skills, participate as much as possible, and learn individually and collaboratively with other students. Improve the quality of education and expertise (Ani, Hartanto, & Zulianto, 2015)

As interaction is one of the essential instruments in a learning process, virtual classrooms offer many opportunities for those. However, several studies result in students preferring face-to-face classroom interactions (Abbasi, Ayoob, Malik, & Memon, 2020; Trabinger, 2016). However, their study did not consider students' feelings of uncertainty and how they managed their strategies to cope with their situation.

Class of 2020 study in a virtual classroom, shifting from face-to-face learning to online learning in virtual classrooms. These students feel anxious or uncertain because they do not have sufficient information about their classmates and lecturers. It may be a big problem for new students as their level of uncertainty may increase as it is their first experience of having a virtual class without having face-to-face interaction before the semester starts as the Indonesian Directorate General of Higher Education issued a policy of online learning during the pandemic (Handini, 2020).

Uncertainty reduction theory initially describes face-to-face interpersonal communication of how interlocutors stage relationships. Later, uncertainty reduction theory is also implemented in computer-mediated communication. During the Covid-19 pandemic, people interact with each other using digital devices (Fathonurrohma et al., 2022). This interaction is not only informative but also informal setting, such as in the learning process through a virtual classroom.

This study aimed to determine the cognitive and behavioral uncertainty that the informants felt and what strategies they used. This research is expected to have an academic contribution, namely the development of interpersonal communication through uncertainty reduction theory to provide mapping strategies to reduce the uncertainty of new students in interacting in virtual classes.

THEORETICAL FRAMEWORK

This study uses uncertainty reduction theory, which was born in 1975 by Berger and Calabrese, who believe that when strangers first meet, the first increase their ability to predict in an attempt to extract feelings from their communication experience. Prediction can be defined as the ability to predict behavioral choices that may be chosen from the possible choices available to oneself or to a relationship partner. The explanation is used to interpret the meaning of past actions in a relationship. Prediction and explanation are the two initial concepts of the two main subprocesses of uncertainty reduction.

Uncertainty reduction theory (URT) was initially created to explain the communication process when two strangers interact. Charles Berger and Richard Calabrese (1975) observed that when we interact with strangers, we experience uncertainty because we do not know what to expect. Berger and Calabrese claim that we acquire information that rapidly reduces our uncertainty as the interaction progresses. However, there may be times when we are not too worried about finding out anything about the stranger because we never expected to see that person again or are not someone we want to be in a relationship with. Uncertainty reduction theory explains these behaviors when people interact with new people (Berger & Calabrese, 2006).

Several strategies might be applied to reduce uncertainty (Redmond, 2015): (a). Passive strategies involve observing other people without actually interacting with them. Research by Berger and colleagues demonstrates a preference for observing our uncertainty targets as they interact with others regardless of whether we overhear the conversation. (b). The active strategy does not involve direct interaction with the target but involves indirect strategic efforts to gather information, such as Googling or asking others about the target. Asking others to help provide information that may be more reliable. (c). Interaction strategies involve seeking information during a conversation by asking questions or seeking reciprocal self-disclosure.

The main principles in virtual learning are authority and collaboration. Students are responsible for determining the material, access to learning resources, the time, the media to be used, and the place and steps of learning taken to achieve learning objectives. Collaborative in a sense, to carry out these responsibilities, students are required to be able to interact with other students, teachers or tutors, and other available learning resources (Julacha, 2011).

A virtual class is a class created through the help of the internet. All learning activities are carried out online using the internet in this class. The learning process is carried out without requiring students to be present in the actual classroom. Through virtual classes, students can participate in learning where each is connected to the internet, for example, at home, in the office, in internet cafes, or at schools and colleges. Learning content materials can be done in virtual classes, including questions and answers, discussions, communication, video streaming, monitoring of learning activities, learning outcomes tests, and presentation of test results (Ani et al., 2015).

Virtual classrooms facilitate learning just like physical classrooms. In virtual classes, students can also interact with other students, students with educators, and students with learning content that has been provided by educators, in this case, teachers and lecturers. Virtual classes are virtual but can function just as well as physical classes. Virtual classes are often called online learning (online courses) because all learning activities are online. A virtual classroom is a teaching and learning environment created in the software obtained through Internet access services. Virtual classes allow a learning process in the classroom to be shared with other classes in different places limited by distance. Virtual classes offer better opportunities to collaborate, access information, display more exciting visualizations, and encourage related

parties to be more productive and understand information or knowledge faster.

The use of virtual classrooms (VCs) in the Vocational Education and Training sector is becoming increasingly popular due to the ability of learners from any location to access online education in real-time with a teacher and to participate in an environment that simulates face-to-face classes. Trabinger (2016) suggests that learners perform task switching while participating in VC sessions, negatively affecting the teaching and learning process. Therefore, it is essential to ensure teachers provide support to design, develop, and deliver sessions that encourage maximum attention and reduce students' opportunities to switch tasks. The study also found that, although there is no exact formula for the level of structure and autonomy needed to reduce the potential for learners to experience transactional distance, high levels of structure and low levels of autonomy worked best for VC sessions to sustain attention. From students. A further finding is that the nine types of dialogic interactions that occur in VC between teacher, learner, content, and interface must all be considered and facilitated for session success (Trabinger, 2016).

A previous study in 2019 found that the teacher-student relationship for a practical learning experience is the main thing—the role of teacher self-disclosure and social presence in online education. The online survey was conducted from a sample of 262 undergraduate students with online classroom experience. The findings indicated that students' perceptions of teacher self-disclosure increased students' feelings of social presence about their teachers. Then, social presence, in turn, leads to the satisfaction of the teacher-student relationship, increasing perceived knowledge. Significantly, the relationship between teacher self-disclosure and teacher-student relationship satisfaction is mediated by the social presence (Song, Kim, & Park, 2019).

Disclosure of personal information is done more often online than offline communication. However, this assumption is debated theoretically and empirically. This systematic review examines existing research comparing online and offline self-disclosure to ascertain evidence for the current online communication theory. Studies comparing online and offline disclosures in dyadic interactions were included for review. Contrary to expectations, disclosure was not consistently found to be greater in the online context. Factors such as the relationship between communicators, specific modes of communication, and the context of the interaction seem to moderate the level of disclosure. Concerning online communication theory, there is support for each of these theories. It is argued that the overlapping predictions of each theory and the current state of empirical research highlight the need for an overarching theory of communication that can explain disclosure in online and offline interactions. (Keep, Melanie & Bin, Yu Sun & Campbell, 2012).

METHOD

The study used a descriptive qualitative approach. Qualitative researchers tend to collect data in the field in locations where participants experience the problem or problem being studied. They do not take individuals to the laboratory (a contrived situation), nor do they usually send instruments for individuals to complete. A crucial characteristic of qualitative research is close information gathered by talking directly to people and seeing them behave and act in their context. In the field, researchers conduct face-to-face interactions to obtain data according to their research objectives (Creswell, 2014).

The research subjects in this study were selected or predetermined informants or respondents. The selection of research subjects was carried out by purposive sampling, namely samples selected based on specific characteristics, qualities, and criteria. Through this purposive sampling technique, the sample is selected based on pre-existing knowledge about the elements that exist in individuals and the purpose of the research to be carried out. (Morissan, Wardhani, & Umarella, 2012).

The research subjects have the characteristics: (1) students of the 2020/2021 class (second-semester students) and (2) these students enter during an epidemic which causes them not to have the opportunity to meet face-to-face with lecturers and classmates on the campus where they study. Class of 2020 students starts their studies in a virtual classroom, shifting from face-to-face learning to online learning in virtual classrooms.

Based on the characteristics above, the subjects of this study were ten students from seven universities in Jakarta using a random sampling technique. Besides students, the lecturer also became an informant to understand how uncertainty forms and reduces uncertainty in the teaching class. The diversity of students from various campuses is expected to provide more detailed research results related to how they reduce the feeling of uncertainty/anxiety during activities in virtual classes.

RESULTS AND DISCUSSION

The pandemic has made everyone adapt to the virtual world, including education. First-year and first-semester students of the 2020/2021 Academic Year are experiencing rapid changes in their learning process through virtual classes. Britt in Adnan and Anwar (2020) argue that learning through virtual classes eliminates the face-to-face socialization aspect because students only interact digitally and may seldom meet in person to share opinions, knowledge, and information. It will cause a feeling of uncertainty in interpersonal communication among students.

Everyone will perceive uncertainty at the beginning of communication, both familiar and unfamiliar, and everyone who experiences uncertainty will try to reduce their uncertainty. Uncertainty reduction will occur when individuals have the motivation to reduce uncertainty based on three parameters--deviation, anticipated interaction, and control of sources.

The beginning of the interaction will determine the continuity of subsequent communication, and the presence of interest in the communication participants shows the similarity of nonverbal behavior that will create openness. It will stimulate the frequency of communication and ultimately positively impact reducing uncertainty.

Table 1 Forms of Uncertainty in Virtual Class

Forms of Uncertainty	Situation	Unfamiliarity Confusion
	Interaction	Shy Not confident Awkward Worried about having miscommunication

Uncertainty is our inability to predict certain people's behavior, thoughts, or feelings (Redmond, 2015). Furthermore, uncertainty does not only occur when an individual interacts with other individuals but also occurs in the events experienced by the individual. It happened in virtual classes (online classes/online classes) where the informants (new students from the 2020/2021 class) had never interacted face-to-face before. They are faced with two types of uncertainty that they experience in virtual classrooms, namely situations in virtual classrooms and other students.

This study found that the forms of uncertainty that the informants felt were as shown in the table above. The uncertainty forms were unfamiliarity and confusion in the informants' response to the situation they faced. The virtual class was implemented to respond to the outbreak of the Covid-19 pandemic, and the informants felt unfamiliar and confused because they did not have experience being in a virtual class. While in the second type, informants face uncertainty in the form of lack of confidence, awkwardness, and worry about miscommunication. Uncertainty in this second type of informants is faced with how they will interact with participants virtually where all of them have never had previous experience.

Table 2 Uncertainty Reduction in Virtual Class

Reducing Uncertainty	Observing students and lecturers through social media to find out who they are. Make contact either through chat platforms or social media.
	Initiating acquaintance and active both in a virtual classroom and private network. Getting acquainted with seniors to know the course and lecturer's communication style. Participating in campus internal student organizations. Trying to relax in virtual classes - find/change sitting position in front of laptop/computer, listen to music before class starts, drink coffee/tea.

Uncertainty reduction is a concept of understanding something, and it also means a process that means increasing an individual's ability to predict or explain it accurately (Redmond, 2015). In the uncertainty reduction theory, Berger and Gudykunst identify three social and environmental factors that increase people's motivation to reduce their uncertainty: deviation, the anticipation of future interactions, and control over resources (Knobloch, 2016). First, individuals are specifically encouraged to seek clarity when deviations occur in the form of a violation of expectations. Second, they tend to pursue uncertainty reduction when they expect to interact with other individuals in the future. Third, they want to know whether other individuals influence the distribution of rewards and costs.

Communication is a tool to reduce uncertainty. If uncertainty can be reduced by communicating, then good interpersonal communication will be created, leading to good relationships for future communication. Uncertainty Reduction Theory by Berger & Bradac in 1982 uses a strategy of reducing uncertainty in interpersonal communication from other communication theories, namely information-seeking (Knobloch, 2016).

In this study, it was found that the reduction of uncertainty in the virtual classroom situation was carried out by always thinking positively and doing things that could make the informants feel relaxed before the lecture started, such as listening to music and drinking coffee or tea and during the lecture, the informant looked for/changed the sitting position/

a laptop that relaxes them.

While reducing uncertainty in the context of interactions with other individuals in virtual classes, informants use methods or strategies adapted from Berger and Bradac argue that there are three strategies for reducing uncertainty: passive strategies, active strategies, and interactive strategies that are useful for obtaining information. Definitely about the people who are the target of the interlocutor. Strategies are required to reduce uncertainty (Nugrahadi, 2019), and in this study, the strategy used to obtain factual information related to new people in this research is virtual lectures.

A passive strategy is a passive strategy in which the individual sees the target person but does not interact with him or her. In other words, this individual only observes and does not interact. The informants of this study carried out a passive strategy by observing how students and lecturers interacted in specific classes in a virtual class. In addition, they also make observations through the social media of the intended person in the hope that they will get a picture of the character of the intended person. Fox and Anderegg (2014) found that the respondents apply passive strategy by observing others' social media, such as looking through pictures, scrolling through timeline posts, repeatedly checking others' pages, and determining relationship status.

Active strategies are carried out by seeking information but not communicating with the target person directly, for example, asking other people about the intended person. Informants use this strategy by getting acquainted with seniors online and offline to get information about the courses and the character and communication style of the lecturers who support these courses. Informants also follow internal campus organizations to find an overview of the campus situation and how the teaching and learning process occurs. The active strategy does not require individuals to interact directly with the intended party but through intermediaries. A similar result was found by Putri (2021) that students apply active strategies through the internet and social media and ask for some information relating to virtual learning from their friends and cousins who have some experiences.

The last strategy is interactive, which interacts with the intended person. Most informants contacted the intended person in this study, both students and lecturers. This contact occurred either in a virtual class by asking directly or personally with the intended person through a chat platform or social media. Song, Kim, & Park (2019) social presence supports the relationship between teacher and students but also students to students.

Uncertainty reduction was carried out as a way to adapt and survive in the virtual classroom in the early days of the pandemic. In some of the interaction literature in online classes, participants are more able to express themselves (Keep, Melanie & Bin, Yu Sun & Campbell, 2012). The role of the lecturer can also make lecture participants feel comfortable (Song et al., 2019) to be active in virtual lectures, as did an informant from one of the lecturers at Universitas Mercu Buana who stated that she designed lectures so that students had the opportunity to explore material and interactions in the classroom. Virtual. It also refers to Trabinger's (2016) research which states that it is essential to ensure support is given to teachers to design, develop, and deliver sessions that encourage maximum attention. In addition, if the material for virtual classroom learning is well designed, the level of learning preferences and academic achievement will be achieved (Doring, Hodge, & Heo, 2014).

CONCLUSION

A virtual class is attended by first-year students of batch 2020/2021 due to the pandemic. The forms of uncertainty experienced by informants are situational in the form of anxiety and feelings of uncertainty because they feel unfamiliar in a virtual class where they have never met face-to-face before. During the interactions, the informants feel shy, awkward, insecure, and worried about having miscommunication. The passive strategy used by the informants is to observe interactions in virtual classes and through social media. The active strategy used is by asking other people who know information about the targeted individual, such as getting to know seniors and following internal campus organizations. Interactive strategies are carried out by direct contact with targeted individuals in virtual classes or through chat platforms and social media. In addition, the lecturer also ensures that students have the opportunity to explore the material and interact with their fellow students and lecturers. This study only focused on how the students as individuals experience the learning process through virtual class without lecturer and student face-to-face interaction. That all universities in Indonesia implemented such a mode of learning during the pandemic, and the limitation of the study was that this study did not describe the diversity of how universities may differ in implementing the teaching and learning process, and further study may highlight the effectiveness of learning in a virtual class.

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