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Experiential Learning through Role-Playing in the Digital Technology for Business Course

(Full Paper)

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ABSTRACT

The purpose of this paper is to investigate the use of role-playing in an introductory course. A study of how new pedagogical approaches affect students' learning is crucial due to the change of learning environments, the more disengaged students, and enrollment declines. A survey of 103 undergraduate students from two classes of the Digital Technology for Business course, who joined the role-playing activities in 2018 and 2019, were collected. The role-playing activities were conducted six rounds for each class, yielding 458 records for data analysis. Results from the nonparametric test equivalent to the dependent t-test indicate that experiential learning through role-playing activities improves students' perceived usefulness (understanding, problem-solving skills, creativity, and topic interests) and their engagement intention (role-playing engagement intention, class attendance intention, and class participation intention) in all aspects. The content analysis of the open-ended question also reveals key comments from students in terms of the received emotions/ feelings, benefits for audiences, general expectations, and expectations about role-playing. Lecturers could apply role-playing to enhance their classrooms and engage more students. The role-playing activities are fewer applied to technology-related courses. This work shows the effectiveness of role-playing and offers the guideline to implement role-playing in courses.

Keywords: Role-playing, IS education, experiential learning, active learning.

INTRODUCTION

There are growing concerns in the graduate and enrollment declines of students in Computer and Information Science/ Systems (CIS), including Computer Science (CS), Information Technology (IT), and Management Information Systems (MIS). The CIS communities are thus focused their efforts on response to those problems in various ways (Akbulut-Bailey, 2019; Becerra-Fernandez, Elam, & Clemmons, 2010; Buhl & Lehnert, 2012; Marshall, Cardon, & Godin, 2014; Rouibah, 2012). One of the common approaches to attract students is redesigning curricula (Frost & Pels, 2010; Marshall *et al.*, 2014). An introductory course, which is innovated and interesting, is also used as a recruiting strategy to get more students (Frost & Pels, 2010; Marshall *et al.*, 2014). To make an introductory course achieve the recruitment goal, the course has to engage, interest students, and make them enjoy learning, using the pedagogical design (Frost & Pels, 2010; Rouibah, 2012). Moreover, students are more demotivated and less engaged in their class nowadays (Alabbasi, 2017). In terms of MIS, helping students understand the integration of information systems into a business is another primary concern (Kerr, Troth, & Pickering, 2003). Redesigning curricula and learning experiences to increase participative, experiential, and learners-centered help to develop students' competencies (de Villiers & Botes, 2014). Self-directed learning, incorporating new technologies and tools, is also suggested to transform the MIS courses (Kenny, Lyons, & Lynn, 2017).

The Millennials have been found to enjoy teamwork and collaboration in learning (Alabbasi, 2017). Promoting students' cooperative and teamwork, encouraging active learning, and providing students opportunities to learn in different ways are part of learning-centered classes (de Villiers & Botes, 2014). Active learning has become increasingly acknowledged to enhance higher education students' involvement, motivation, and responsibility (Westrup & Planander, 2013). Higher education has adapted non-traditional methods, practical approaches, and pedagogical tools to provide experiential learning (Karia, Bathula, & Abbott, 2015; Saptono, 2010). Experiential learning approaches have become more popular in business education (Barnabè, 2016; Piercy, 2013). It takes experiences as a basis for learning and gives the importance of students' being active in their learning (Alkan, 2016; Yan & Cheung, 2012). In experiential learning, a teacher's role has changed to the role of coach and students have considerable responsibility for their learning (Alkan, 2016; de Villiers & Botes, 2014). Role-playing is an activity simulating the behavior of a person who has a particular role in a specific situation (Sulaiman et al., 2017). It is one of the learning methods/ practical approaches in experiential learning and active learning (Alkan, 2016; Baglione, 2006; Barnabè, 2016; Crow & Nelson, 2015; Karia et al., 2015; Saptono, 2010; Yan & Cheung, 2012). It is appropriate for both graduate and undergraduate classes and both introductory and advanced classes (Baglione, 2006). It makes learning unstructured and informal, creating a pleasant experience for students (Adams & Mabusela, 2013). It is supported to be a frequently used active learning instructional strategy and a successful tool used in education (Crow & Nelson, 2015; Ponsa, Vilanova, & Amante, 2010; Svensson & Regnell, 2017).

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Although role-playing has been applied in various disciplines, it is under-utilized in the classroom Regnell, 2017)(Alkan, 2016; Baglione, 2006). Besides, there are limited reports of the experiences of using experiential approaches and role-playing in business education and there is little research empirically evaluating its effectiveness (de Villiers & Botes, 2014; Piercy, 2013; Svensson & Regnell, 2017). There is a potential for experiential learning in other business subjects such as MIS to increase the overall quality of business degree programs as well (Karia *et al.*, 2015). Therefore, the purpose of this study is to evaluate the perceived usefulness and engagement intention of an introductory MIS course: digital technology for business taught in an undergraduate business program at a university in Thailand. This work addresses the following research questions: 1. Do the perceived usefulness of role-playing and students' engagement intention increase after being exposed to peer-led role-playing? 2. What are the opinions of students (as audiences) towards the role-playing activities in the class?

LITERATURE REVIEW

Kerr et al. (2003) applied a role-playing approach to present information systems cases with 32 university freshmen. Results revealed that students considered the role-play approach superior to the traditional case-study discussions. Saptono (2010) conducted a classroom action research using role-playing in accounting education study program. Findings showed the increase in students' enjoyment level and test scores in the role-playing class, compared to the control class. Adams and Mabusela (2013) explored how role-playing could be adapted in university settings to let students practice and apply knowledge about Learners with Special Educational Needs (LSEN). Findings presented both advantages and disadvantages of role-playing activity such as pleasant and the value of using it. Westrup and Planander (2013) discussed how and why roleplaying facilitate students in understanding complex leadership situations. Findings indicated that role-playing supported students by portraying them to understand a human resource management issue from diverse perspectives, generating a collective understanding of a situation. Crow and Nelson (2015) utilized a mixed-method to examine the use of role-playing in an undergraduate course to prepare students to be public school coaches and physical education teachers. Results pointed out that students exhibited skill in the solutions, gained more confidence after participating in the role-playing, and overwhelmingly preferred role-playing over traditional lecture methods. Shen, Nicholson, and Nicholason (2015) employed a group role-playing exercise to engage students in the Enterprise Resource Planning (ERP) course. Findings supported students' positive perceptions of the group role-playing exercise and the improvement of students' knowledge of key business processes and ERP system's roles. Sulaiman et al. (2017) explored the effectiveness of role-playing in teaching Arabic. Findings revealed that, in students' opinions, their speaking ability and confidence were enhanced by role-playing. Svensson and Regnell (2017) applied role-playing to requirement engineering education. Results showed a significant difference in students' performance (grade) between those getting higher and lower role-playing project scores. Fominykh, Leong, and Cartwright (2018) investigated experiential learning and role-playing employed in an immersive virtual environment for a professional counseling distance course. Results emphasized the value of experiential learning and role-playing as a potential teaching method for a distance course from the participants' view.

RESEARCH HYPOTHESES

Perceived Usefulness

Understanding

Experiential learning is found to deeply enhance students' comprehension of knowledge (Alkan, 2016). Experiential learning as a classroom activity leads to a better understanding of the subject content (Adams & Mabusela, 2013). Students report that experiential learning boosts the understanding of the subject area and offers an intensive to learn more than traditional lectures (Piercy, 2013). Role-playing provides various advantages for learners and educators (Adams & Mabusela, 2013). It is reported to be positive for students' learning (Shen *et al.*, 2015; Westrup & Planander, 2013). A case study role-playing technique is recommended to be used to facilitate learning and improve understanding in real environments (Baglione, 2006). Role-playing could improve students' understanding of abstract concepts (Svensson & Regnell, 2017). It could help students to comprehend the information systems use in business and enhance their learning and understanding of the course (Kerr *et al.*, 2003). The implementation of role-playing in an accounting class significantly increases students' test scores, compared to the control class (Saptono, 2010). Role-playing enables more reflective views and a chance to foster deep understanding (Westrup & Planander, 2013). Most of the participants in the study of Adams and Mabusela (2013) indicate that role-playing activity yields a better understanding of the course content and more comprehending on how to deal with LSEN. A group role-playing exercise is an effective method to help students understand cross-functional business processes (Shen *et al.*, 2015).

Problem-Solving Skill

Experiential learning supports students to deeply analyze complex situations. It is an effective model to improve student-teachers scientific process skills (Alkan, 2016). Past studies also indicate that role-playing could broaden students' set of skills for future development such as skills in conflict resolution, decision-making skills (Adams & Mabusela, 2013; de Villiers & Botes, 2014; Svensson & Regnell, 2017; Westrup & Planander, 2013). Role-playing prepares students to create a deeper understanding, which could be applied to current or future decision-making (Fominykh *et al.*, 2018). Role-playing is a

methodological tool to lead students to an appreciation of issues and problems relating to engineering requirements in a real framework (Ponsa *et al.*, 2010). Students are more engaged in critical thinking during role-playing than lectures (Crow & Nelson, 2015). In role-playing, students are not passive observers, so they make decisions, solve problems, and react to the decision results actively (Crow & Nelson, 2015). Role-playing could make students realize the importance of understanding a problem from diverse perspectives. The involvement of students in role-playing exercise increases their thoughtfulness and ability to understand various interpretations and solutions to the problem (Westrup & Planander, 2013). Role-playing could help students develop and practice skills necessary for coping stressful, unfamiliar, complex, or controversial situations (Baglione, 2006).

Creativity

Experiential learning offers the greatest degree of creativity in the classroom (Lazar, 2014). It enhances the linkage of knowledge and creativity at a high level (Alkan, 2016). Role-playing significantly improves students' creativity in handling a crisis (Baglione, 2006). Role-playing is a successful tool to train creativity for undergraduate students (Crow & Nelson, 2015). The acting of role-playing could stimulate students' creativity (Westrup & Planander, 2013). Students could be forced to be creative by case role-playing (Baglione, 2006).

Topic Interests

Innovative pedagogical techniques have a strong association with student interests (Frost & Pels, 2010). Role-playing offers several advantages for both learners and educators including the increase of interest in the subject matter (Svensson & Regnell, 2017). Role-playing is one of the non-traditional methods that can gain more students' interest (Saptono, 2010). Students, both participants and observers, specify that role-playing makes the exercise more real and meaningful for them so making them think more about the issues. This advantage is also stronger for participants (Kerr *et al.*, 2003). Role-playing stimulates students' future interest in the subject (Westrup & Planander, 2013). The group role-playing exercise encourages students' interest to learn more about cross-functional business processes and the roles of an ERP system to support cross-functional business processes (Shen *et al.*, 2015).

Considering the above reasoning, the following hypotheses are proposed:

H1: There is a significant difference between the ratings of role-playing observers' perceived usefulness (a) understanding, b) problem-solving skills, c) creativity, and d) topic interests) before and after joining the role-playing activity in the classroom by peers.

Engagement Intention

Role-Playing Engagement Intention

The experiential learning approach provides active involvement for students in their learning process. The challenge of actually doing an activity significantly increases their motivation (Piercy, 2013). Role-playing is experience-based learning, which engages an individual to the intellect, feels, and sense. Students' acceptance of drama, appreciation of industry roles, empathy through drama, motivational/ enriching virtues of drama for students personally are benefits reflected by students experiencing educational drama (de Villiers & Botes, 2014). Role-playing provides a high degree of student involvement. The use of active learning techniques improves the chance of matching students with different learning styles. All students are normally actively participated in a role-play (Westrup & Planander, 2013). In a role-playing activity, students do not want to take a break to have more time for negotiation. Several past studies indicate that students enjoy role-playing and believe that teachers should use them in their learning (Svensson & Regnell, 2017). Students have a positive attitude towards the active participation required by role-playing (Westrup & Planander, 2013). Compared to traditional methods of teaching, students express more interest in role-playing (Crow & Nelson, 2015). Students want to be participants than observers in role-playing and comment that more research for each business case is needed before the exercise starts (Kerr *et al.*, 2003).

Class Attendance Intention

The experiential learning exercise provides an incentive to learn the subject area better than traditional lectures. Findings support that experience-based or experiential learning is superior to passive modes of learning, emphasizing the inclusion of workshop exercise in business education. In students' viewpoints, experiential learning in the business context enables their satisfaction, the value of business understanding, the value of diversity, learning performance, learning incentive, and group working (Piercy, 2013). Students think that role-playing enables them to become more involved in the case (Kerr *et al.*, 2003). Role-playing promotes better student-teacher interactions. Improving a better student-teacher relation lets exchanging ideas come naturally in a more relaxed environment for students (Svensson & Regnell, 2017).

Class Participation Intention

Experiential learning activities in the classroom could increase involvement (Adams & Mabusela, 2013). Experiential learning is a teaching strategy that ensures active participation and enhances more conceptual learning, compared to other passive techniques (Alkan, 2016). Experiential learning approaches allow students to participate in an activity or event. Such approaches help students to connect theoretical knowledge and their own experiences in a range of subjects. Students indicate

that exercise is a positive experience. It is a valuable opportunity for them to work as a group with students from different backgrounds (Piercy, 2013). Role-playing is an appropriate strategy to facilitate pre-service teachers' active participation in learning. The majority of students feel more engaged but do not volunteer to role-play in front of the class during role-playing, compared to traditional lecture styles (Crow & Nelson, 2015). Role-playing raises students' motivation and effort although the heavy workload is associated (Svensson & Regnell, 2017). It also stimulates students to take a more active role in activities, listen more actively, and pay more attention to the stage (Westrup & Planander, 2013).

Hence, the following hypotheses are developed:

H2: There is a significant difference between the ratings of role-playing observers' engagement intention (a) role-playing engagement intention, b) class-attendance intention, and c) class participation intention) before and after joining the role-playing activity in the classroom by peers.

RESEARCH METHOD

Active learning and student-centered pedagogy were strongly supported by the university. Data was collected from a purposive sample of undergraduate students undertaking the Digital Technology for Business course, an introductory MIS course, who took part in this study during the 2018–2019 academic years. Steps in the role-playing assignment were adapted from generic steps in the study of Shen et al. (2015), Lazar (2014) and Crow and Nelson (2015). First, the preparation phase, an instructor introduced the role-playing concept and examples and explained the details of the student-led role-playing assignment specified in the course syllabus. Then, all students were divided into six groups voluntarily. Each group was assigned to lead a role-play related to each course topic differently. Students were free to design their role-playing activities for audiences (students in other groups as observers) because role-playing could be simple or complex, spontaneous or planned, using a fictional or real-life scenario (Lazar, 2014; Svensson & Regnell, 2017; Westrup & Planander, 2013). All students were designed to involve as both role-players and audiences because the study of Kerr et al. (2003) emphasized that observers of role-playing were not enthusiastic as much as participants and the study of Kerr et al. (2003) specified that all students should participate in role-playing exercises. An instructor taught each topic according to the course outline. Second, the enactment phase, each group conducted role-playing after a teacher taught that topic. Role-playing was suggested by Adams and Mabusela (2013) to be used as a complement of traditional teaching formats not to replace them. The duration for each roleplaying was around 35-40 minutes. Five minutes for audiences to answer quick questions in Kahoot. An instructor was a facilitator in this phase, conforming to the suggestions of Svensson and Regnell (2017) and Alkan (2016). Last, the reflection phase, an instructor would let observers evaluate the performance of their peers and give feedback through an online questionnaire, taking around 5 minutes to complete. According to Crow and Nelson (2015), students were more likely to become and remain engaged in role-playing if they were directly assigned to observe and critique others rather than just watching it.

The experimental one-group retrospective pre-post research design was applied. The retrospective pre-post method was the assessment of learners' self-reported changes in their perceptions such as attitudes or behaviors. Both before and after information was gathered at the same time to minimize pretest sensitivity and the response shift bias (over or underestimation of their perception changes) (Sánchez-Mendiola, Morales-Castillo, Torruco-García, & Varela-Ruiz, 2015). One questionnaire was given to the students after each role-playing activity in the reflection phase for each subject topic. It included multiple-choice questions using a six-point Likert scale to solicit feedback from students (observers), for instance, after watching role-playing, what is your level of understanding of this topic (1-lowest, 6-highest)? There were 14 questions for pre- and post-tests for perceived usefulness (understanding, problem-solving skills, creativity, and topic interests) and engagement intention (role-playing engagement, class attendance intention, and class participation intention). One open-ended question was added at the end of each questionnaire to ask for comments, feedback, and additional suggestions for role-players to improve the overall satisfaction of audiences. All responses did not negatively affect students' scores, so they were free to show their true opinions. Demographics were not a part of the subject of investigation, so they were not collected. This study is a sub-project of the EXPERIENTIAL LEARNING project.

DATA ANALYSES

There were 103 undergraduate students from two sections of the Digital Technology for Business course, who participated in the role-playing activities in 2018 and 2019. Seventy-eight students were females, whereas twenty-five of them were males. Most of them were freshmen, only some of them (17 students) were sophomores. The six rounds of role-playing activities for each class generated 458 self-reported records for data analysis. Most groups normally reviewed the course content using PowerPoint presentations and/ or video clips together with role-playing. Students role-played course topics to represent not only persons, for instance, people in a traditional company vs. people in a company using IS/ IT, people in a manufacturing company who sold fruits, people in a company who sold notebook, and people who facing computer crime issues, but also things e.g. data elements in database and nodes in different network types. For some groups, they let observers join their role-playing activities or additional games introduced by the presented group. The paired-samples t-test was planned to be conducted to examine changes in their perceived usefulness and engagement intention from the close-ended questions. However, because the pre- and post-test scores of observers were not normally distributed, the nonparametric test equivalent to the dependent t-test (the Wilcoxon signed-rank test) was applied instead. Data from an open-ended question in the survey were processed using content analysis.

RESULTS AND DISCUSSION



Figure 1. The holistic view of students' comments

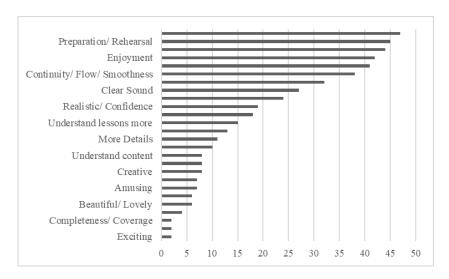


Figure 2. Key findings for role-playing show sorted by the number of occurrences

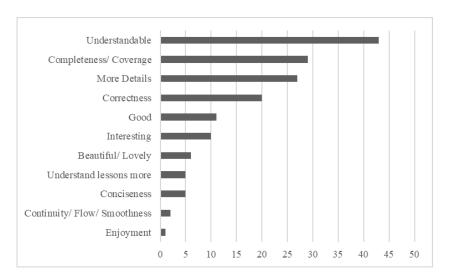


Figure 3. Key findings for content and slides sorted by the number of occurrences

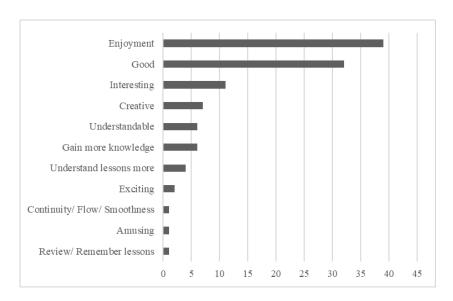


Figure 4. Key findings for overview of students' presentation sorted by the number of occurrences

Hypothesis Testing

A Wilcoxon Signed-Ranks Test indicated that post-test (understanding) scores, Mdn = 4.00, were statistically significantly higher than pre-test (understanding) scores, Mdn = 3.00, (Z = -13.777, p = 0.000). A Wilcoxon Signed-Ranks Test pointed that post-test (problem solving skill) scores, Mdn = 4.00, were statistically significantly greater than pre-test (problem solving skill) scores, Mdn = 3.00, (Z = -12.510, p = 0.000). A Wilcoxon signed rank test showed that there was a significant difference (Z = -12.943, p = 0.000) between post-test (creativity) scores, Mdn = 4.00, compared to pre-test (creativity) scores, Mdn = 4.00. A Wilcoxon signed rank test revealed that there was a significant difference (Z = -11.752, p = 0.000) between post-test (topic interests) scores, Mdn = 4.00, compared to pre-test (topic interests) scores, Mdn = 4.00.

A Wilcoxon signed-rank test showed that role-playing elicited a statistically significant change in role-playing engagement intention of individuals (Z = -10.731, p = 0.000). Median of post-test (role-playing engagement intention) scores and pre-test scores were 5.00 and 4.00 respectively. A Wilcoxon signed-rank test indicated that there was a significant difference (Z = -11.288, p = 0.000) between post-test (class attendance intention) scores compared to pre-test (class attendance intention) scores. The median for post-test (class attendance intention) scores was 5.00 compared to 4.00 for pre-test (class attendance intention) scores. A Wilcoxon signed-ranks test indicated that post-test (class participation intention) scores (Mdn = 5.00) was rated more than pre-test (class participation intention) scores (Mdn = 4.00), Z = -11.797, p = 0.000. Thus, there were enough evidence to support H1a - H1d and H2a - H2c.

Students' Comments on Experiential Learning through Roleplaying from an Open-Ended Question

Students' comments regarding student-led role-playing activities from an open-ended question were thematically analyzed using open coding and axial coding techniques. First, comments from each student were split into one or many sentences/ phases because one comment might contain several topics/ issues. Second, each comments were tagged such as positive/ negative/ neutral comments and comments relating to emotion, content, the show, and so on. Third, tagged comments were sorted according to issues. Forth, the frequencies of each issues were added. Fifth, issues were put into groups according to key comment types and the activity's components (the role-playing show, content/ slides/ materials, and overall presentation). Last, the results were reviewed and presented as shown in Figure 1 to Figure 4. The themes identified were explicated to show observers' received emotions/ feelings, benefits for them, general expectations, and specific expectations to the role-playing show by peers as shown in Figure 1, revealing both intellectual content and emotional content according to the suggestion of Crow and Nelson (2015). The most strongest sub-themes in received emotions/ feelings, benefits for them, general expectations, and specific expectations to the role-playing show by peers were enjoyment, more understanding in lessons, easy to understand/ understandable, and preparation/ rehearsal respectively.

Discussion

Students' self-assessment perceived usefulness scores before and after role-playing were different, as same as the study of Shen *et al.* (2015) and Kerr *et al.* (2003) showing the significant increase of knowledge/ understanding after students participating role-playing exercises, the study of Shen *et al.* (2015) specifying that role-playing could make learning tedious topics more enjoyable, and the study of (Adams & Mabusela, 2013) mentioning that role-playing allowed students an opportunity to understand the subject matter. The study of Baglione (2006) pointing out that active learning engendered understanding because it required interpretations through analysis, synthesis, and evaluation. Moreover, the study of (Alkan, 2016) emphasized that experiential learning not only improved students' interest in the topic but also encouraged them to better understand and effectively think and come to a conclusion. The engagement intention of students was increased after engaging role-playing, conform to the study of Piercy (2013) indicating that experiential learning allowed students to engage in an activity or event, the study of Westrup and Planander (2013) stated that role-playing normally stimulated social interactions and students took an active part in role-playing.

The benefits for audiences were in line with the advantage of role-playing in connecting new experiences/ theoretical knowledge to previous knowledge and experience (Adams & Mabusela, 2013; Crow & Nelson, 2015; Piercy, 2013), students' retention of knowledge and skills (Alkan, 2016; Baglione, 2006; de Villiers & Botes, 2014; Westrup & Planander, 2013), improving students' knowledge level (Alkan, 2016; Karia *et al.*, 2015). The received emotions/ feelings from role-playing were consistent with students' enjoyment, exciting, fun, engaging, interesting, and motivating received from role-playing exercises (Adams & Mabusela, 2013; Fominykh *et al.*, 2018; Kerr *et al.*, 2003; Saptono, 2010; Shen *et al.*, 2015; Sulaiman *et al.*, 2017; Westrup & Planander, 2013). The expectations about role-playing harmonized with observers' needs to involve in the role-playing exercise because they felt excluded or restricted not being able to show their viewpoints (Kerr *et al.*, 2003).

CONCLUSION

This paper introduces a student-led role-playing activity that has been assigned to students in an introductory MIS course. The activity significantly improves students' perceived usefulness of role-playing in terms of understanding, problem-solving skills, creativity, and topic interests. It also significantly enhances students' engagement intention regarding role-playing engagement intention, class attendance intention, and class participation intention.

CONTRIBUTIONS AND IMPLICATIONS

For theoretical contributions, this study applies the constructs of an IS theory: Technology Acceptance Model (perceived usefulness and behavioral intention) to explore an application of experiential learning method (role-playing) in an MIS course, which has not previously been utilized in the literature. Perceived usefulness and behavioral intention are also explored in subaspects, which could be adopted in the future research.

For practical implications, this work provides teaching suggestions for educators who want to apply experiential learning through role-playing in their classes as follows. First, an instructor should identify learning objectives to students such as to increase students' activity engagement, class attendance, and class participation and state expected outcomes of role-playing such as improving their understanding and problem-solving skills. A teacher should mention fun, enjoyment, and interest received from role-playing and the benefits of role-playing in terms of lesson comprehension, knowledge gains, and retention of the course content to encourage students (both participants and observers) to actively join the classroom's activities. Second, an instructor should guide the role-player groups to generate the activity's environments that are enjoyable, good, interesting, creative, beautiful, fun, and exciting. Last, an instructor should suggest the role-player groups to use more time for role-playing part, be well prepared, make the show easy to understand, fun, exciting, and smooth, use clear and loud voices, let audiences to participate in the activity, act realistically, design Kahoot well, enable the understanding of course content for audiences, use proper speed to present, give more content details in the show, assign clear roles to actors, develop more creative and concise shows, understand their roles and content clearly, make amusing, cute, and exciting shows, give rewards to audiences occasionally, and present correct and coverage information to make their audiences gain more knowledge and content retention. In the presentation, which could be a part of the role-playing show, PowerPoint slides, videos, or content should be understandable, coverage, having fine details, correct, good, interesting, beautiful, concise, making audiences comprehend the subject more, well-organized, and fun. For the big picture, audiences expect fun, good, interesting, knowledgeable, understandable, increased comprehension, exciting, fun, lesson retention, and flow from roleplaying activities as a whole.

LIMITATIONS AND FUTURE RESEARCH

Limitations of this study are exploring students' experiences of role-playing, but not their performance (scores or grades), implementing role-playing without supporting different learning style preference i.e. auditory, visual, kinesthetic, tactile, and interactive (Yan & Cheung, 2012), and focusing on undergraduate-level management students. Future research should, therefore, link experiential learning activities with students' performance, conduct experiments using various methods that are suite for different learners, and explore the use of role-playing in other introductory courses, information technology-related courses and educational levels such as high school students.

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