Investigating Mediational Process in Online Foreign Language Learning

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Abstract
Faced with Covid-19 pandemic, the higher learning institutions across the planet continue to conduct classes for students via online learning. Educators impart knowledge using the latest technology at their disposition. These educators have to ensure that the online classes are engaging will lead to new understanding. Online classes can be stressful for some students and less motivating for others. It is crucial to identify the ideal online learning setting for foreign language learning as it can encourage students to actively participate in class. This quantitative research is conducted to investigate meditational process in online foreign language learning classes. The instrument used is a survey adapted from Arbaugh, Cleveland-Innes, Diaz, Ice, Richardson & Swan (2008).   The survey consists of 34 items, is given to 163 bachelor degree students taking French as a third language in a public university in Malaysia.. The data is collected online via the Google Form and it is then analyzed using SPSS. The analysis from the data collected shows that teaching presence has the highest sum of mean, followed by cognitive presence and social presence. For teacher presence, the findings reveal that the instructors communicate the course design and its organization to the students clearly. In addition, the study shows that the instructors facilitate the learning process and give feedback to the students in a timely manner. For cognitive presence, the findings reveal that students could integrate new information to answer questions, use learning activities to construct explanations and use reflections and discussions to understand fundamental concepts in online classes.   As for social presence, it is discovered through this study that it has the lowest sum of mean, especially regarding group cohesion. Therefore a future research

focusing on how to improve group cohesion would be interesting and beneficial for the betterment of online foreign language learning classes.

Keywords: Online Learning, Foreign Language, Online Presence, Mediational Process, French Language

Introduction
Background of Study
According to Moeller and Catalano (2015), a foreign language is a language that people learn in the classroom and not spoken outside of the classroom, in the society where it was taught. People normally learn a foreign language for various reasons, such as professional purposes, international communication, enjoyment or challenge and also family reasons (Lewis, 1999).

In the current globalized world, many nations recognize the value of foreign language learning. For example, Malaysia has admitted that the abilities and skills in the third language can help the nation to be more competitive in the international scene (Zubairi & Sarudin, 2009).

Before the Covid-19 pandemic, language teaching was always on face-to-face interaction. However, language is taught online now. According to Ismail et al (2021), learning languages online is a new norm. This was supported by Sukimin et al (2021) who added that online learning is a new trend.

Statement of Problem and Objectives
Classroom setting is crucial in foreign language learning as it encourages students to participate in using the language. When the Covid-19 pandemic hit the world in March 2020, classes were forced to shift from face-to-face to distance learning. Hence, it is important to identify the ideal online learning setting for foreign language learning. Lomicka (2020) stated that in order to maintain a sense of connectedness in online learning, it is crucial to develop the social presence among communities of language learners. This is supported by Harsch et al (2021), who highlighted the importance of enhancing social presence and establishing a sense of belonging to a learning community to ensure that students feel comfortable enough to participate in the class.

However, achieving the ideal online learning environment appears to be a challenge, especially when the whole education sector is forced to shift its setting unexpectedly and suddenly. Due to this, many problems arose from online learning. One of the problems often highlighted is the lack of interaction in online learning. A study by Navaz and Majeed (2021) found that despite students' speaking anxiety being lower in the online class, the interaction is lesser as students tend to respond only when they are called. Nartiningrum and Nugroho (2020) also stated that the main challenge in online learning is the lack of effective direct interaction between students and teachers or among students.

Hence, this study is done to explore the mediational process in online learning. This investigation is done to answer the following questions;

- How does teacher presence be considered as input in online learning?
- How does social presence be considered as a mediational process in online learning?
- How does cognitive presence be considered as output in online learning?

Literature Review

Theories on Online Learning

Compared to a physical classroom, online learning has several unique characteristics: the flexibility for learners to learn without any constraint of time or space, the course content supported by rich formats of multimedia and huge accessible data repository, and the various forms of educational interactions synchronously or asynchronously (Anderson, 2004). With the unique features of online learning, the implementation of successful online learning has been a concern in education. Garrison et al (2000) proposed a conceptual model - Community of Inquiry (CoI) to describe three vital elements in effective online learning. In the CoI model, successful online learning occurs within the community by considering the three key elements. The three key elements are cognitive presence, social presence, and teaching presence:

1. The cognitive presence refers to constructing meaning and developing critical thinking skills through sustained communication.
2. The social presence is related to the supportive environment for learners to express ideas and project personalities in the community.
3. The teaching presence is related to the design, facilitation and direction of social and cognitive processes in realizing learning outcomes.

In addition, according to Danchikov et al. (2021), the well-structured content of online classrooms, clear instructions given by instructors, well-chosen platforms, and well-trained educators are the key aspects to have successful online learning.

Theories on Foreign Language Learning

People used to state that only talented individuals could learn foreign language, but many studies proved that people can ameliorate their way of learning. The emphasis is on the learners. The learners have to be responsible for their own progression and the role of the instructor is to give a good guidance (Lewis, 1999). The instructor has to steer the learners to the correct path of language learning.

Desmons et al (2005), added that the instructor, when designing activities for the learners, should also take into consideration the situations of the learners, namely the learning objectives, the cultural background, the relationship between the mother tongue and the language they are learning and also the learner's personal history.

Past Studies in Online Presence

Numerous studies have been done to investigate the online presence or specifically mediational processes in online learning. Don et al (2022) investigate the influence of teacher presence, social presence and cognitive presence in online teaching. A questionnaire was given to 38 students of MARA University of Technology, Johor, Malaysia. The data obtained were analyzed with SPSS software. The findings showed that the instructor communicated clearly with students in online classes, and the learning activities helped students find solutions to problems faced. This study showed that online presence is essential to conduct online classes effectively.

Another study was carried out by Taib et al (2021) to investigate teacher presence as mediator in online learning. The respondents are 170 students who learned French as a foreign

language in public and private universities in Malaysia. The instrument used is a questionnaire. The findings of this research show the importance of teacher presence as mediator in online classes.

Past Studies on Learning Foreign Language Online
Many studies have been done to investigate the learning of foreign languages online. In fact, before the pandemic, technology has been used to assist the teaching and learning process. The pandemic has allowed researchers to conduct research on online learning as all institutions are forced to be online. The study by Sukimin et al (2021) on the influence of mediational processes in social learning during online language learning found that online learning influences classroom interaction and mediational process. Participants of this study consist of 111 diploma, bachelor degree and postgraduate students from a public university in Malaysia. The quantitative data was collected through a questionnaire with 29 items. The data showed that different education levels have different acceptance levels of online learning. They also found that learner-to-learner interaction helps to motivate learners in online learning. Peer support is viewed as vital, especially in preventing students from dropping out. As for learner-to-instructor interaction, they found that a teaching style that allows students involvement is preferred by the students. They also highlighted that it is important for students to get an overview of the content beforehand as this helps with their confidence. Lastly, positive feedback from the instructor positively affects students' learning motivation. Pham and Nguyen (2021) also looked at online learning and its influence on students' satisfaction, focusing on students' interactions with content, peers, and instructors, internet self-efficacy, and self-regulation. The data was collected from 681 Bachelor of Arts students at a Vietnamese University through an online survey. Findings from this study revealed that interactions with peers, instructors and contents, and self-regulation were significant predictors of student satisfaction. Students placed a strong value on learner-content interaction to improve their background knowledge. The learner-content interaction was found to contribute more to students' listening and reading skills than their speaking and writing skills.

Conceptual Framework
Learning online can be stressful for some learners, and less motivating for others. According to Sukimin et.al (2021), learning motivation increases when instructors play their role. This study (figure 1) is rooted from Bandura's (1986) mediational process and online presence by (Arbaugh et al., 2008).

In the online foreign language class, input is given by the instructor. This also gives the learners a sense of teacher's presence. The interactional activities planned by the teacher allow learners to interact with their peers online, thereby giving the learners social presence in the online class. The online discussions helped the learners present the product of learning in terms of output. The learning process gave the learners cognitive presence.
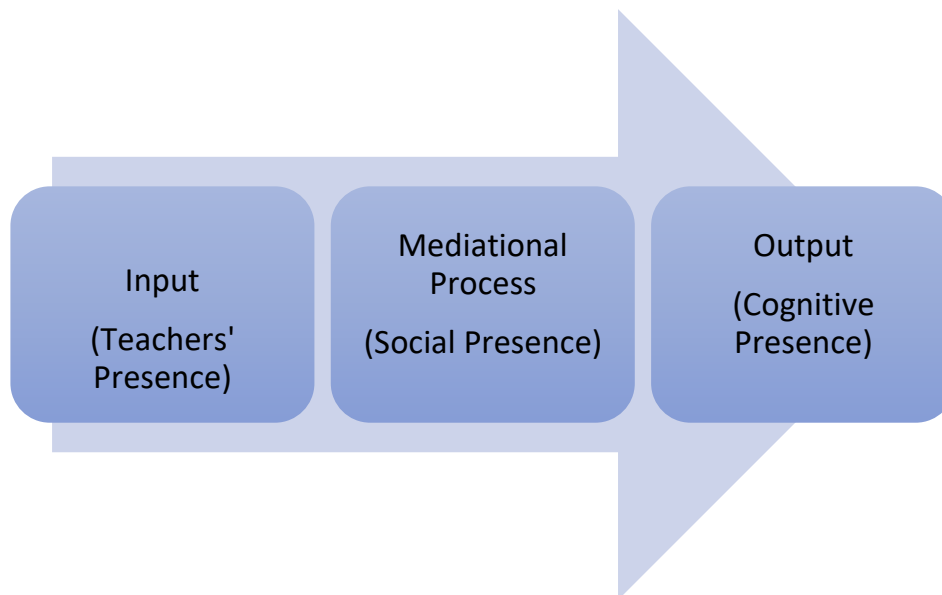
Figure 1-Concpetual Framework of the Study-
Mediational Process in Online Foreign language Learning

Methodology

This quantitative research is done to investigate meditational process in online foreign language classes. The instrument used is a survey adapted from Arbaugh, Cleveland-Innes, Diaz, Ice, Richardson & Swan (2008). A total of 163 respondents were purposively chosen to answer the survey. The survey has 3 main sections. With reference to Table 1, section A has items on the demographic profile. Section B has 13 items on teacher presence. Section C has 9 items on social presence, and section D has 12 items on cognitive presence.

Table 1
Distribution of Items in the Instrument

SECTION		
B	Teacher Presence	13
C	Social Presence	9
D	Cognitive Presence	12
		34

Table 2
Reliability Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.975	34

Table 2 presents the reliability statistics for the instrument. SPSS analysis revealed a Cronbach alpha of .975, thus showing high internal reliability of the instrument used. Data is collected

online via the Google Form. Data is then analyzed using SPSS version 26. Analyzed data is presented in the form of percentages and mean scores to answer the 2 research questions.

Findings

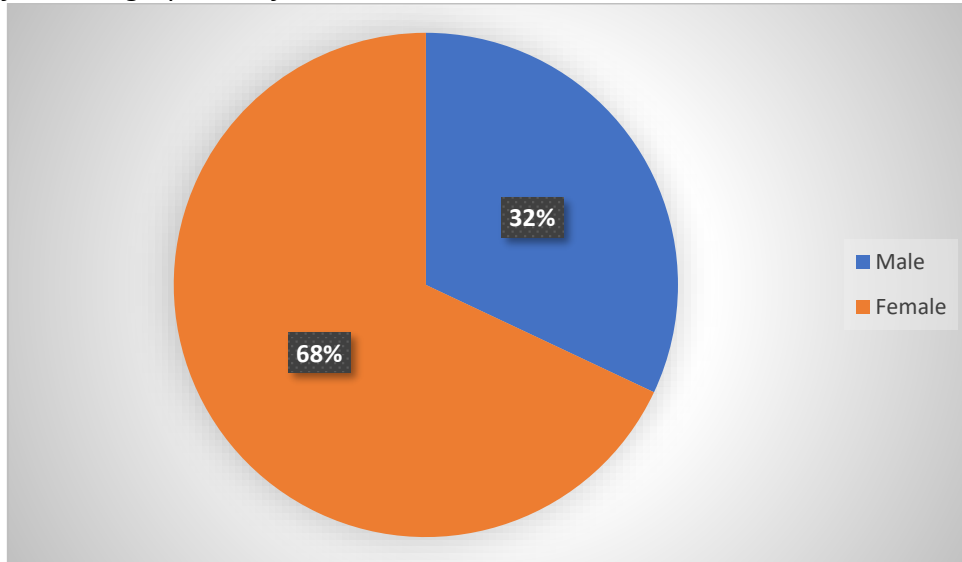*Findings for Demographic Profile*

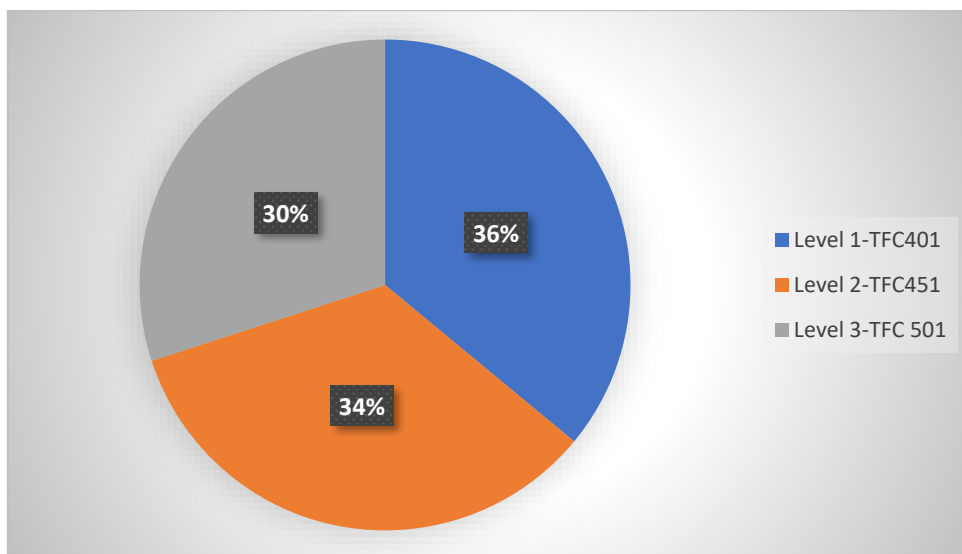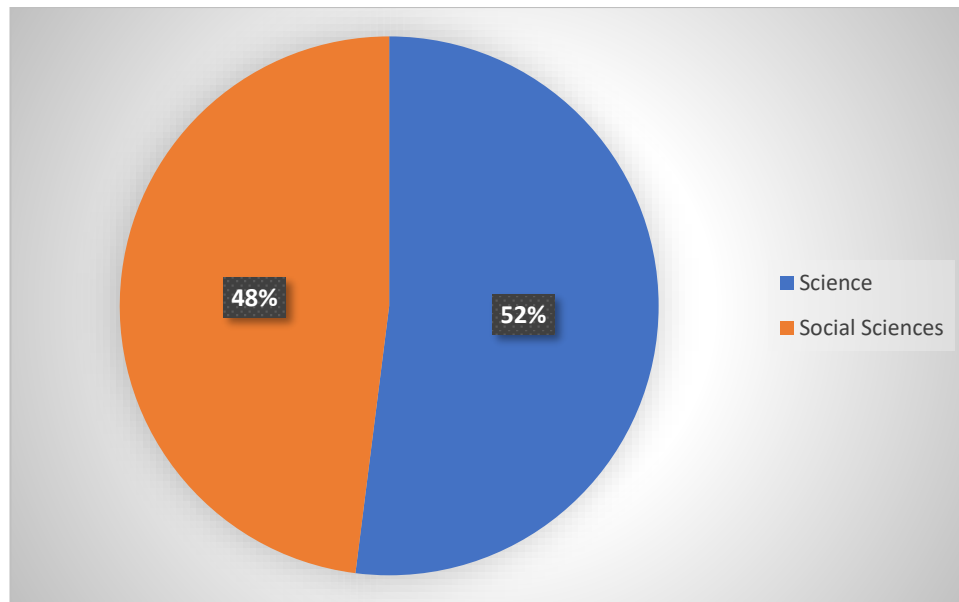Figure 2- Percentage for Gender

Figure 3-Percentage for French level

Figure 4- Percentage for Discipline

From figure 2, it was found that 32% are male and 68% are female. Of the 163 respondents who completed the questionnaire (refer to figure 3), 36% of respondents are learning French level 1 (TFC401), 34% are learning French level 2 (TFC451), and 30% are learning French level 3 (TFCF501). It was also found that 52% are from the science discipline, and 48% are from the social sciences discipline (refer to figure 4).

Findings for RQ1
This section answers research question 1: How does teacher presence be considered as input in online learning? In the context of this study, teaching presence helped to (a) communicate design and organization, (b) pave the way for facilitation and (c) give direct instruction.
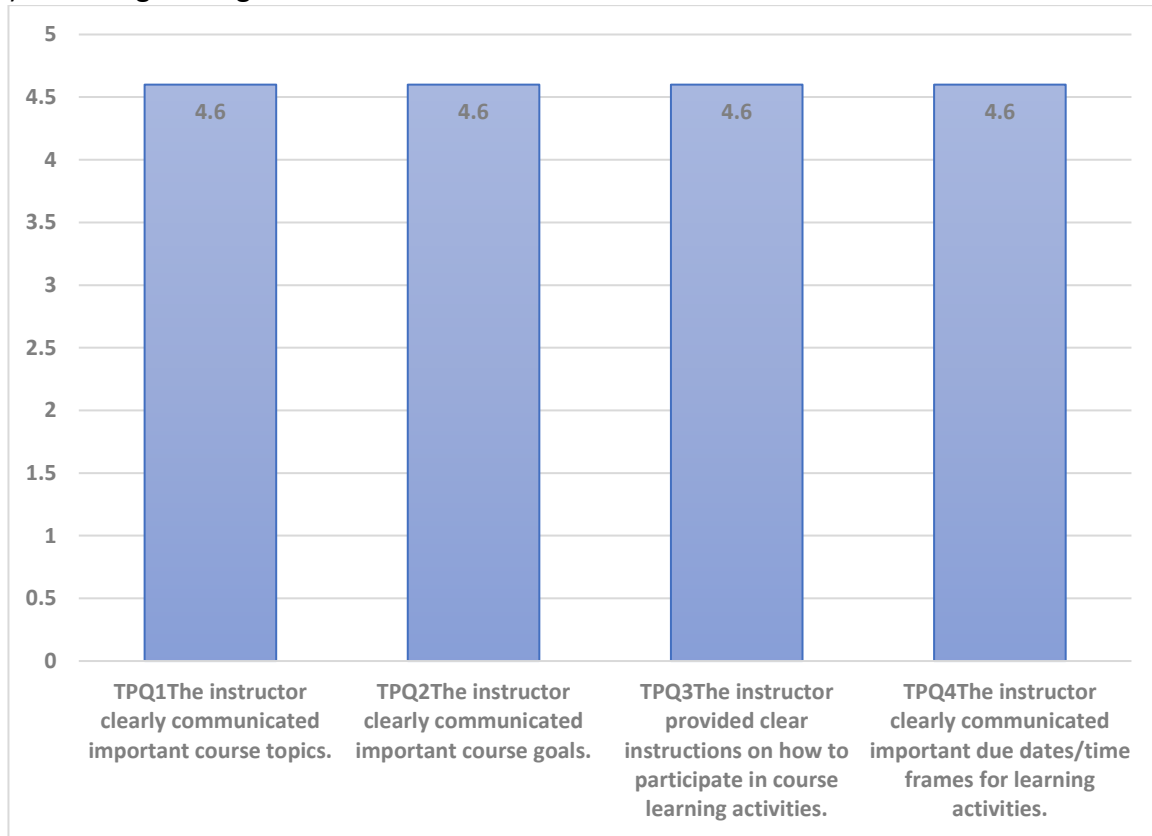
(a)   Design & Organization

Figure 5-Mean for Design & Organization

Figure 5 presents the mean score for design and organization. Based on all 5 items, the mean scores ranged are 4.6. The data indicated that on average, the respondents strongly agreed that getting to know design and organization gave them a sense of belonging to learn the language. The data indicated that on average, the respondents agreed that design and organization by the instructor are clearly communicated, such as course topics and course goals make the respondents actively participate in course learning activities.
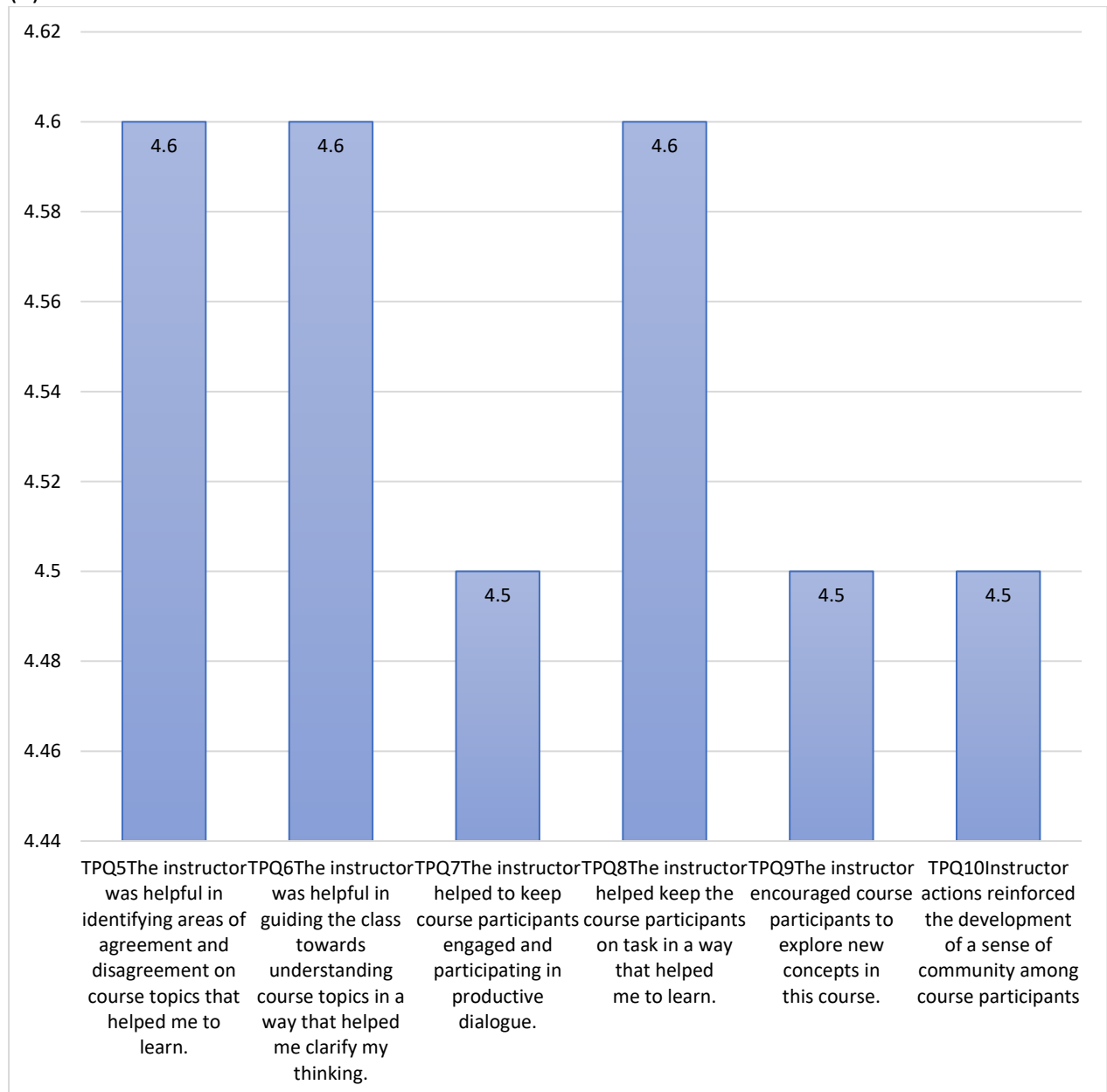
(b)   facilitation

Figure 6- Mean for Facilitation

Figure 6 presents the mean score for facilitation. Based on all 6 items, the mean scores ranged from 4.5 to 4.6. The item with the highest mean score was found to be TPQ5, TPQ and TPQ8 (M=4.6). The data indicated that on average, the respondents strongly agreed that online facilitation helps them to develop a sense of collaboration in learning the language. On the other hand, the item with the lowest mean score was TPQ7, TPQ9 and TPQ10 (M=4.5). The data indicated that the respondents agreed that they felt comfortable agreeing with instructor reinforced the development of a sense of community and participants.
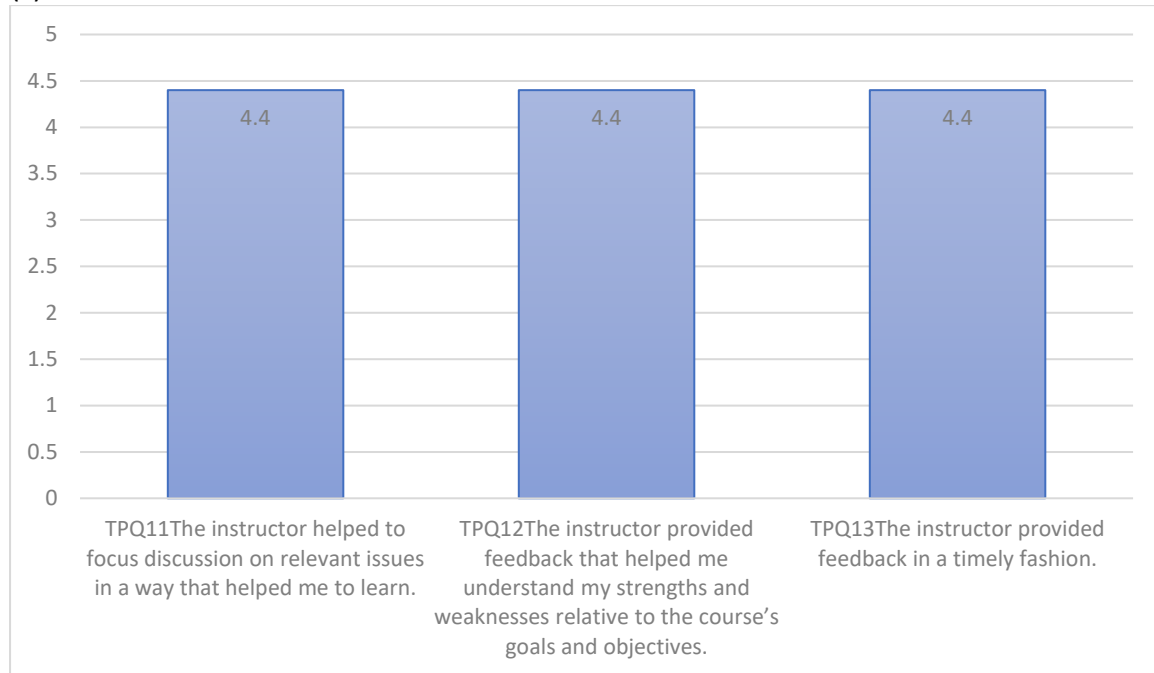
(c) Direct Instruction

Figure 7-Mean for Direct Instruction

From figure 7, it can be seen that most respondents reported that instructors provided ways to discuss, give feedback and help respondents to indicate the strength and weakness of the course's goals and objectives.

Findings for Research RQ2 -Social Presence

This section answers the second research question: How does social presence be considered as a mediational process in online learning? The findings are presented by looking at (a) Affective expression, (b) Open communication and (c) Group cohesion.
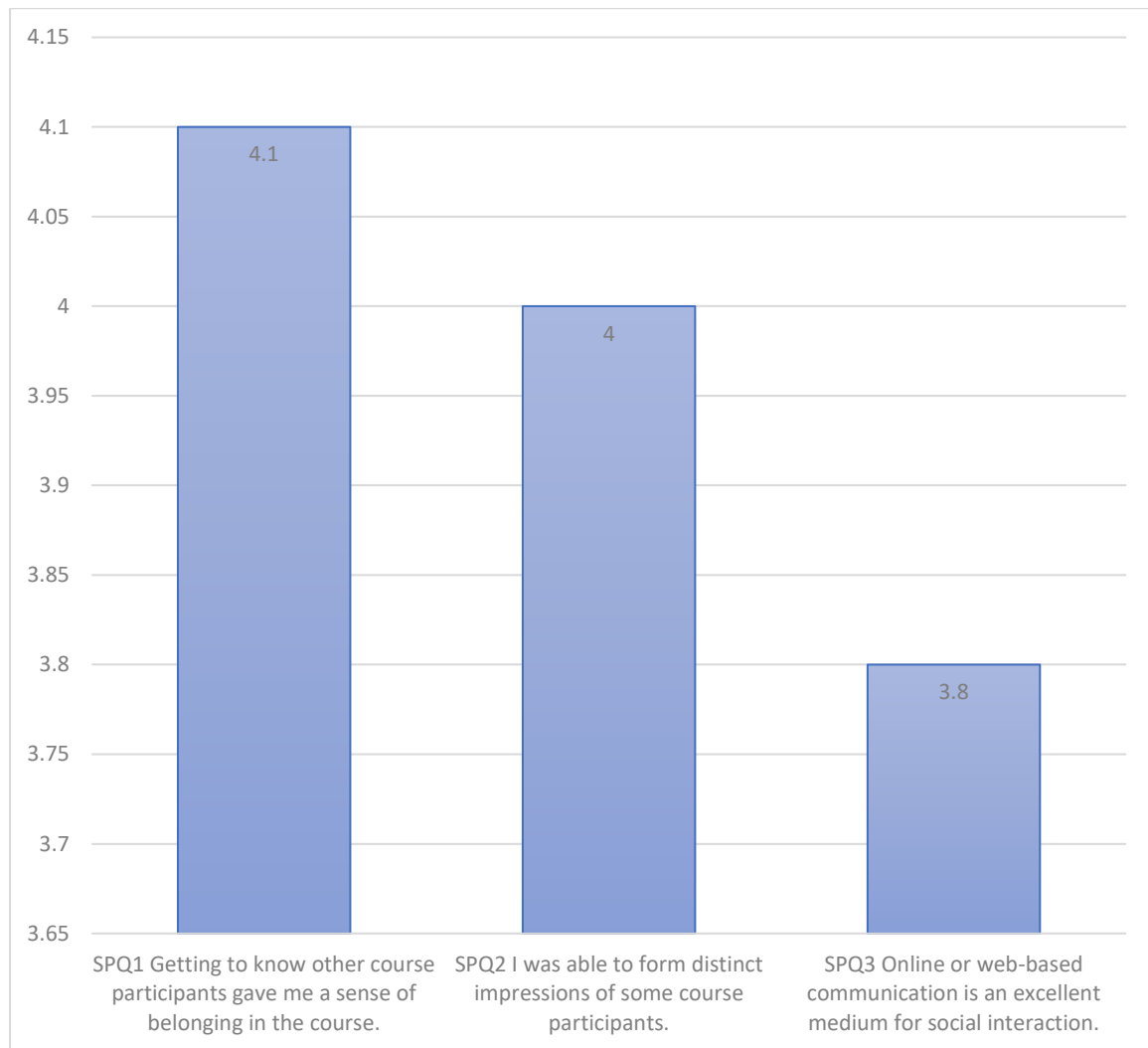
(a)   Affective Expression

Figure 8-mean for Affective expression

Figure 8 presents the mean score for Affective expression. Based on all 3 items, the mean scores ranged from 3.8 to 4.1. The item with the highest mean score was found to be item SPQ1 (M=4.1). The data indicated that on average, the respondents strongly agreed that getting to know other course participants gave them a sense of belonging. On the other hand, the item with the lowest mean score was found to be item SPQ3 (M=3.8). The data indicated that on average, the respondents agreed that online or web-based communication is an excellent medium for social interaction.
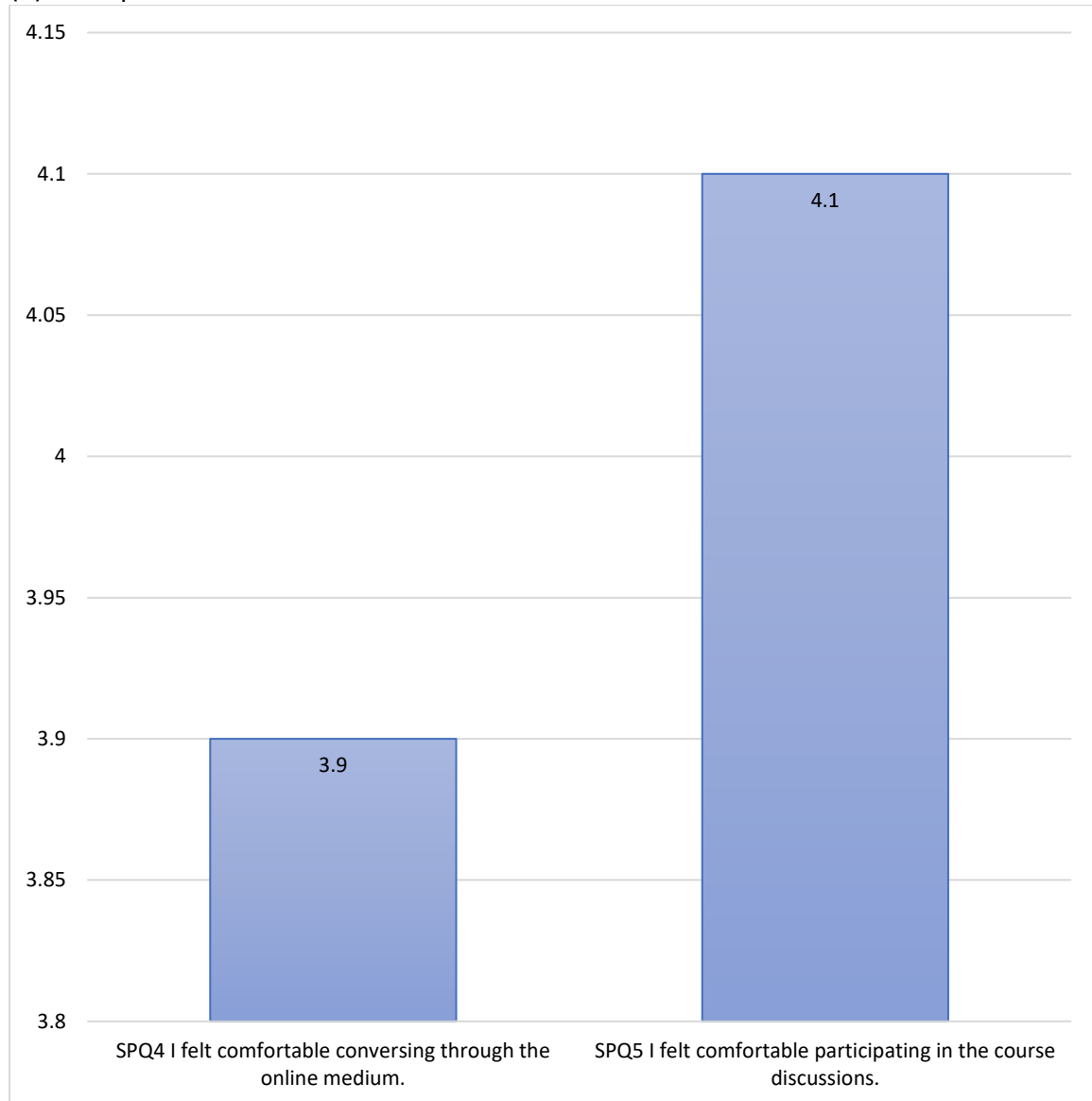
(b)   Open Communication

Figure 9-mean for Open Communication

Figure 9 presents the mean score for Open communication. Based on all 2 items, the mean scores ranged from 3.9 to 4.1. The item with the highest mean score was found to be item SPQ5 (M=4.1). The data indicated that on average, the respondents strongly agreed that they felt comfortable participating in the course discussions. On the other hand, the item with the lowest mean score was found to be item SPQ4 (M=3.9). The data indicated that on average, the respondents agreed that they felt comfortable conversing through the online medium.
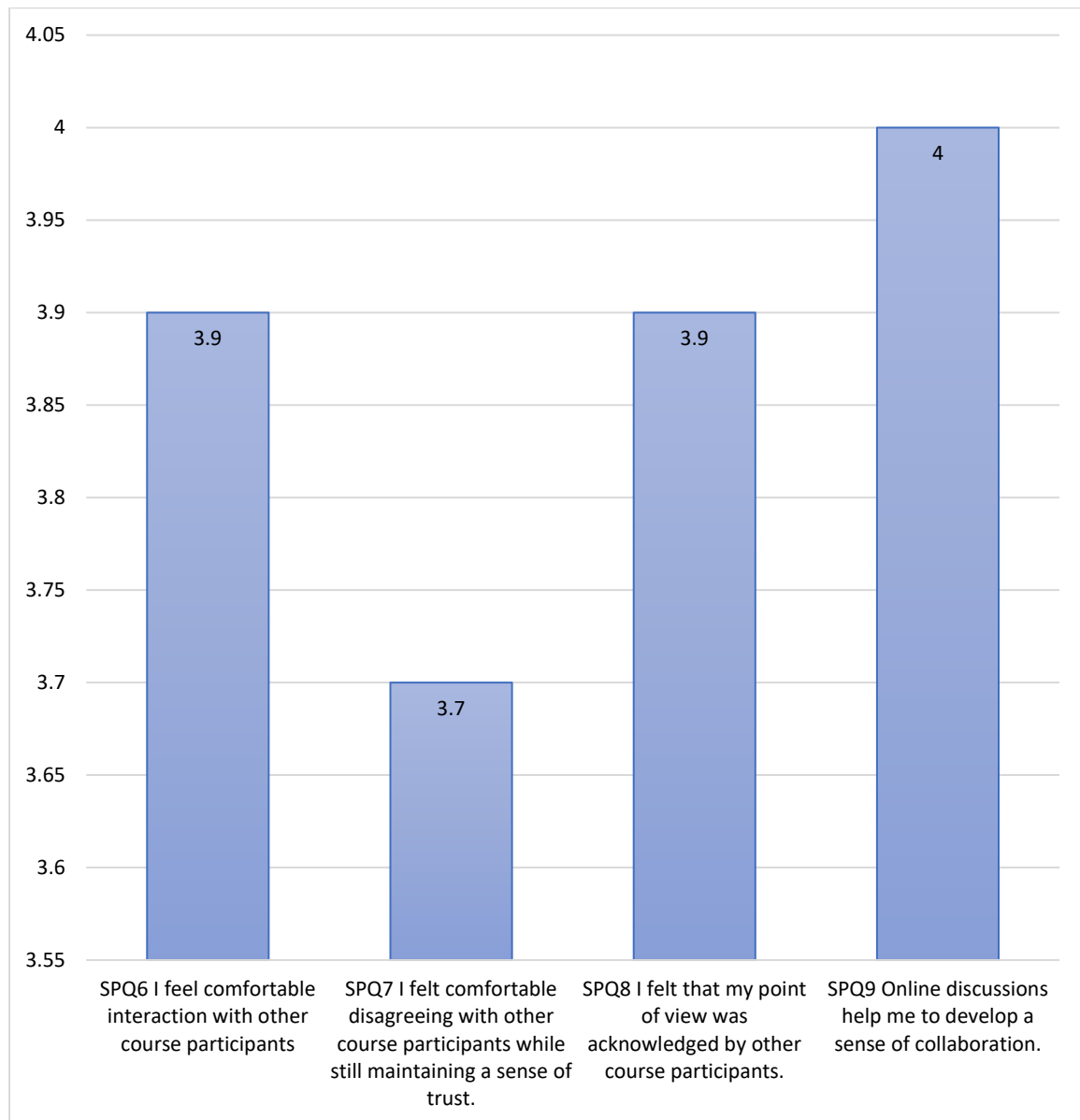
(c) Group Cohesion

Figure 10- Mean for Group Cohesion

Figure 10 presents the mean score for Group cohesion. Based on all 4 items, the mean scores ranged from 3.7 to 4. The item with the highest mean score was found to be item SPQ9 (M=4). The data indicated that on average, the respondents strongly agreed that online discussions help them to develop a sense of collaboration. On the other hand, the item with the lowest mean score was found to be item SPQ7 (M=3.7). The data indicated that on average, the respondents agreed that they felt comfortable disagreeing with other course participants while still maintaining a sense of trust.

Findings for Cognitive Presence

This section answers the third research question: How does cognitive presence be considered as output in online learning? The findings are presented by looking at (a) Triggering event, (b) Exploration, (c) Integration, and (d) Resolution.
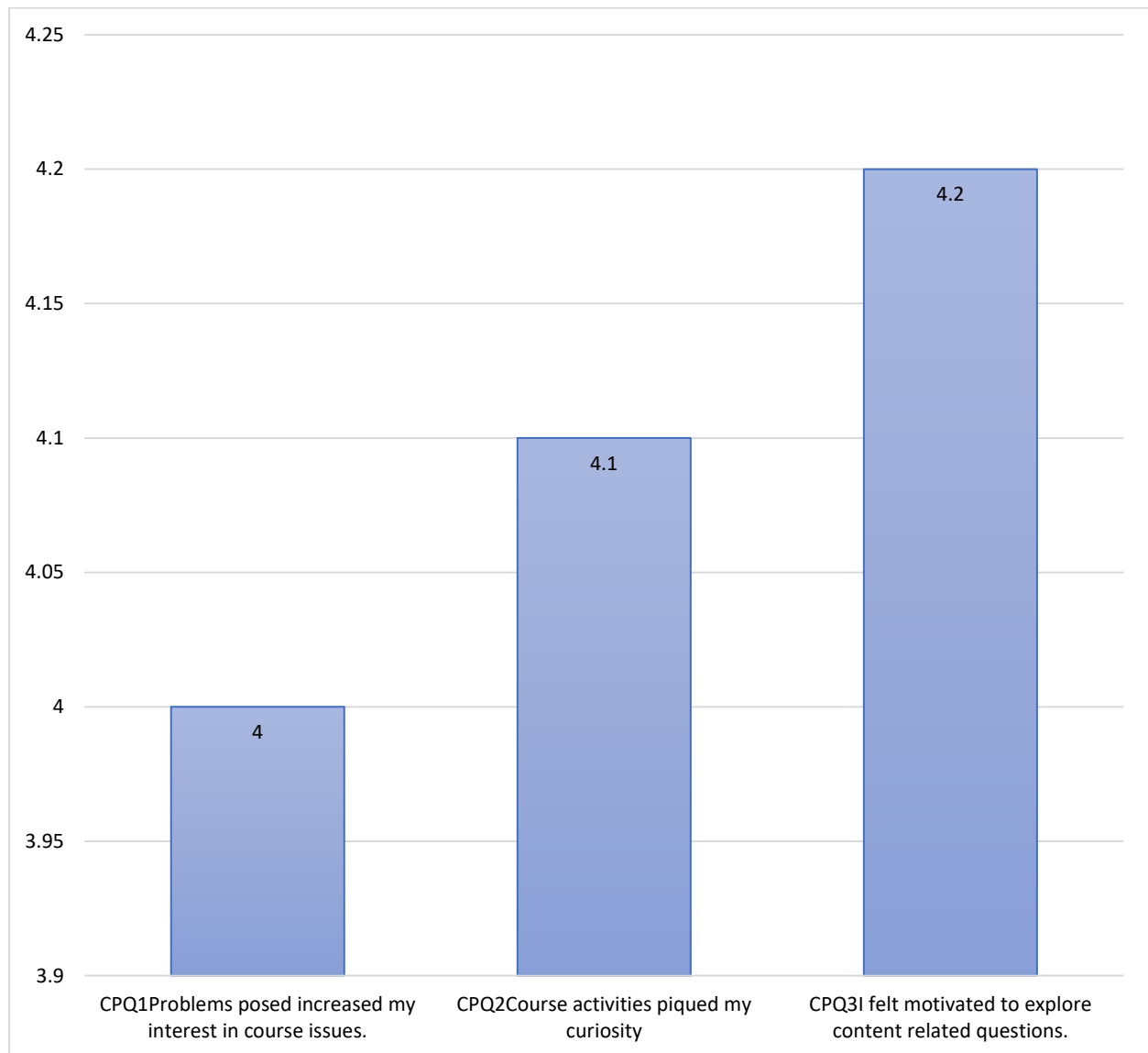
(a)   Triggering Event

Figure 11- Mean for Triggering Event

Most respondents (figure 11) reported that they are motivated to explore content-related questions (4.2), and the course activities can stimulate their curiosity (4.1). Furthermore, it was found that problems posed increased their interest in course issues, with the lowest mean at 4.
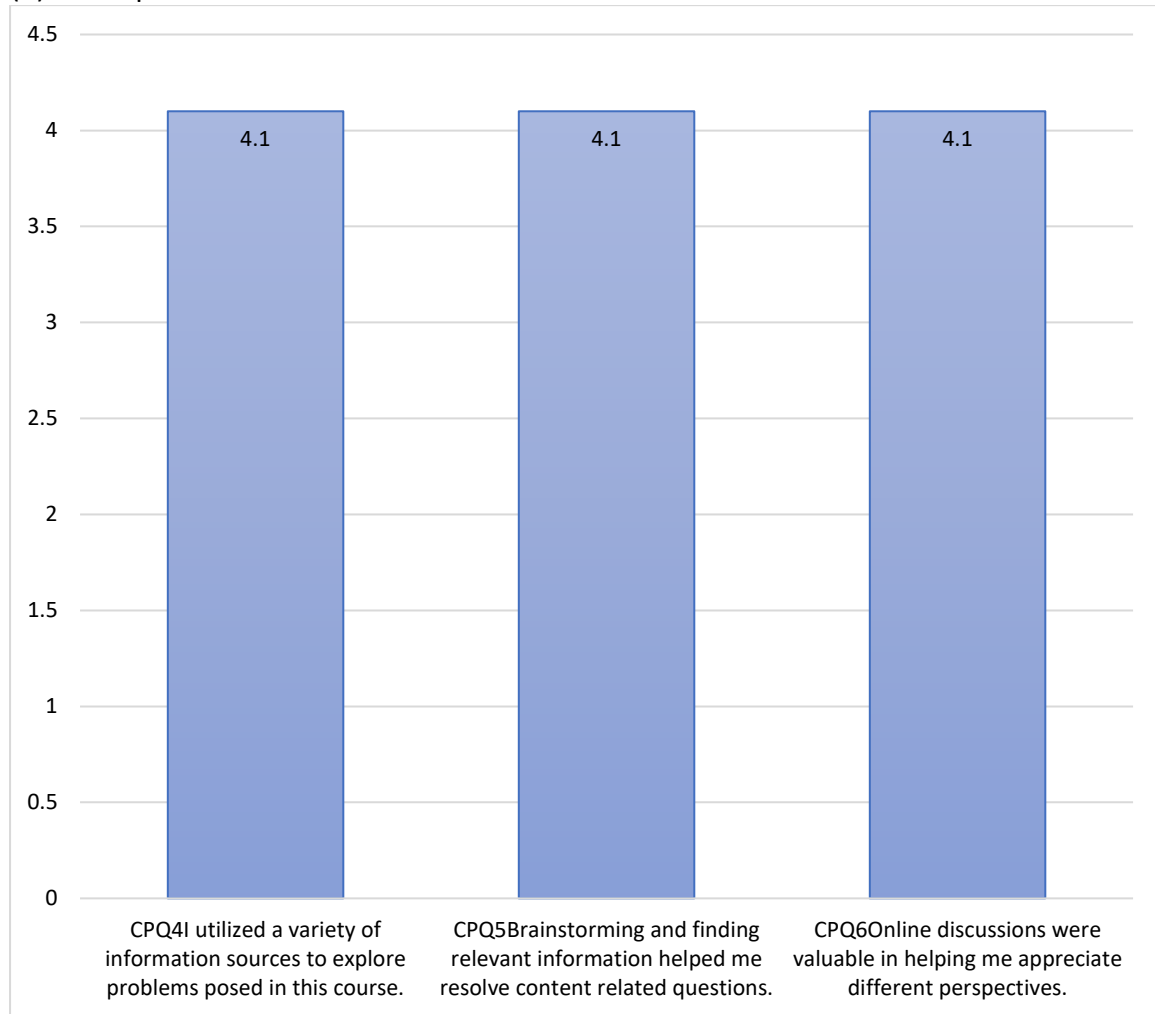
(b)   Exploration

Figure 12- Mean for Exploration

From figure 12, it can be concluded that learners use a variety of information sources to explore problems posed in the course, brainstorm and find relevant information to resolve content-related questions, and have online discussions to explore different perspectives. All the items recorded the same mean at 4.1.
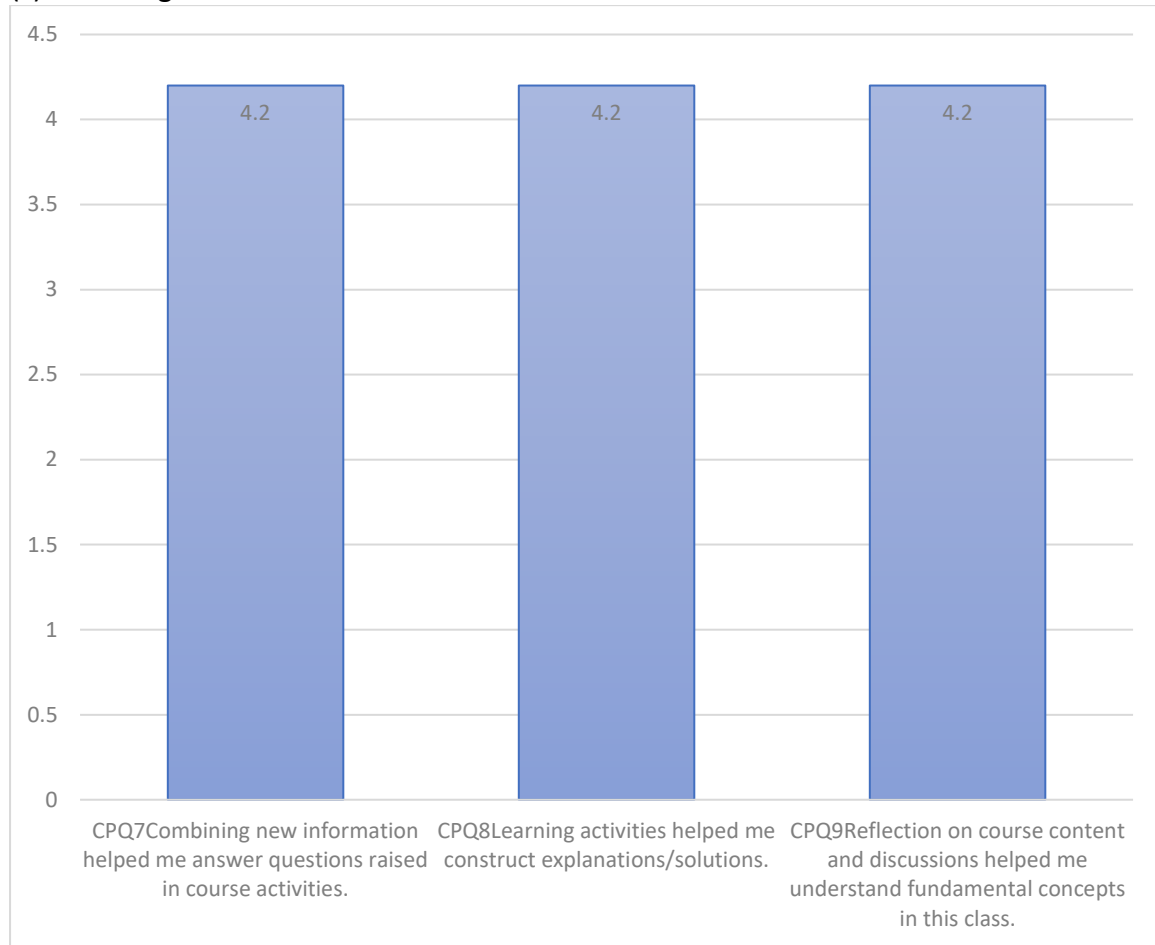
(c)   Integration

Figure 13- mean for Integration

From figure 13, it can be seen that learners are able to combine new information to answer questions raised in course activities, construct explanations and solutions through learning activities, and understand fundamental concepts through reflection on course content and discussions. All the items recorded the same mean at 4.2.
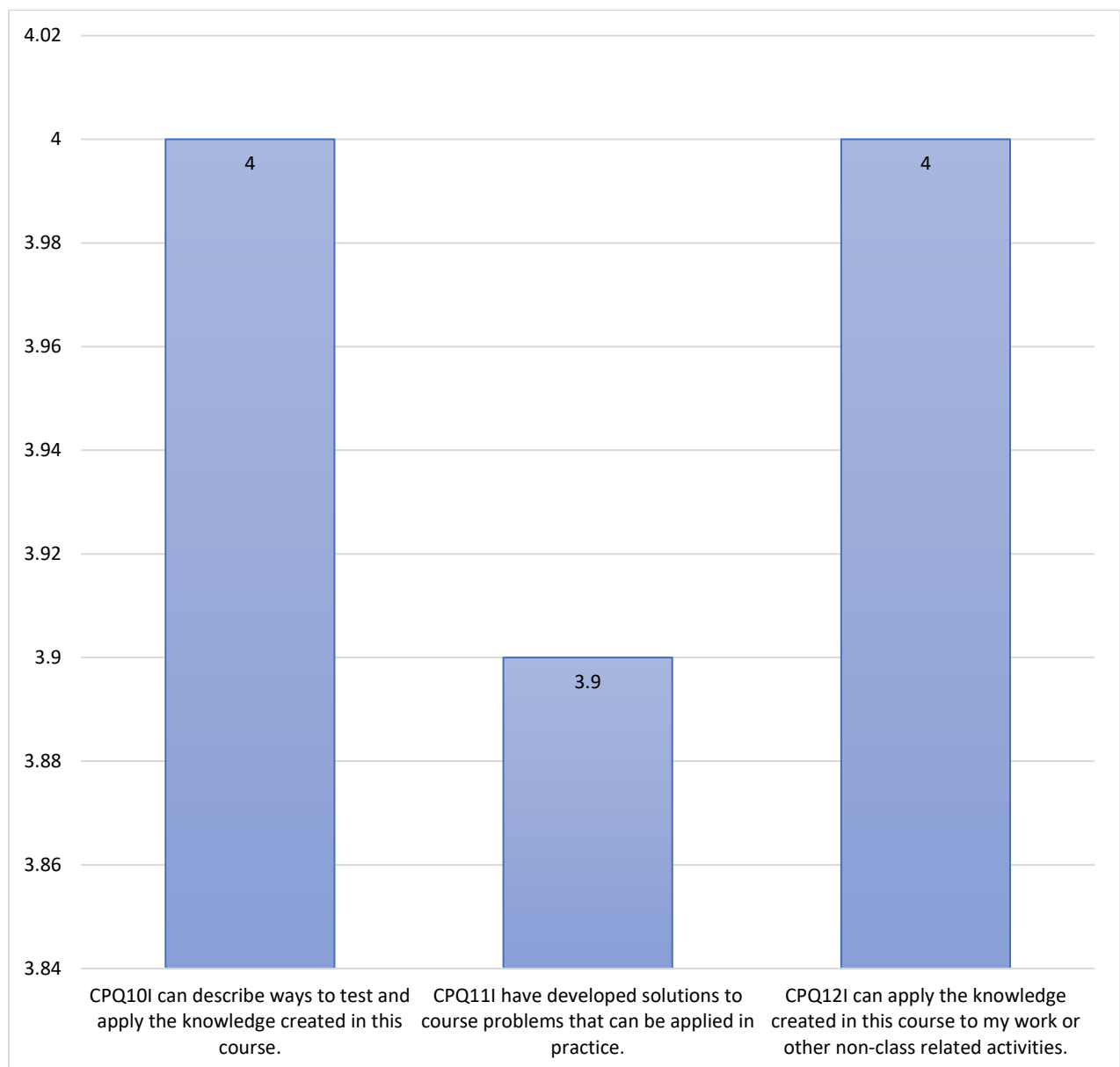
(d)   Resolution

Figure 14-mean for Resolution

Most respondents (figure 14) reported that they could describe ways to test, and apply the knowledge created in the course to their work or other non-class related activities (with a higher mean of 4). Besides that, it was found that the respondents have developed solutions to course problems that can be applied in practice, with the lowest mean at 3.9.

Conclusion
Summary of Findings and Discussion
Table 3
Total Mean for each category

TOTAL Teaching Presence	4.5
TOTAL Social Presence	3.9
TOTAL Cognitive Presence	4.1

The study is conducted to investigate the mediational process in online foreign language learning. The data from this study shows that teaching presence has the highest sum of mean followed by cognitive presence and social presence. The findings disclose the importance of teacher presence in online foreign language learning classes.

According to the analysis, the highest mean under teacher presence section is to communicate design and organization followed by facilitation and direct instruction. The findings show that the instructor communicates important course design and organization to the students clearly. A study by Danchikov et al (2021), states that clear instructions by instructors are one of the main aspects towards successful online learning. The findings also reveal that the instructors facilitate the learning process and gives feedback to the students in a timely manner. According to a study by Sukimin et al (2021), good feedback from the instructors can increase students' learning motivation hence influence students' performance.

For cognitive presence, the highest of mean is integration followed by exploration, triggering event and resolution. For integration, the study reveals that the students are able to combine new information to answer questions, able to understand the fundamental concepts in class through reflections and discussions and also able to construct explanations through learning activities. A study by Don et al (2022) shows that learning activities can help students find solutions to problems faced.

For social presence, the highest mean is open communication followed by affective expression and group cohesion. Concerning open communication, the findings reveal that students feel comfortable participating in the course discussions. But under group cohesion, this study shows that not all students feel comfortable disagreeing with other students while still maintaining a sense of trust.

To conclude, course design and organization under teacher presence section has the highest mean and group cohesion under social presence section has the lowest mean.

Pedagogical Implications and Suggestions for Future Research
The study affirmed that it is important to identify ideal online learning environment as it can motivate students to participate actively in online classes, thus influencing the degree of learning and outcome. Teacher presence is clearly needed during online classes. The input given by the teacher in the way of communication, facilitation and instruction are crucial to the students. According to a study by Taib et al (2021), teacher presence is required to optimize learning and thus provide cognitive presence. The study also stated that it is teacher's role to ensure students get utmost presence during online classes. Therefore, the importance of online presence should be taken into consideration and should not be neglected when designing and conducting online foreign language learning classes.

For future research, since social presence or more specifically group cohesion has the lowest mean in this study, it would be interesting to look at various types of learning activities that can help improve group cohesion among the students.

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