

Research article

The Learners' Characteristics towards Achieving Learning Performance in Blended Learning

Mohd Mustafa bin Izahar*, Tirza Zubeidah Zachariah, Asha Nair d/o Subagan, and Dhurgeswari d/o Elangkeswaran

Universiti Selangor

ORCID

Mohd Mustafa bin Izahar: <https://orcid.org/0000-0002-9884-2876>

Abstract.

Blended learning is a combination of traditional face-to-face classroom situation and online situation. In this paper, the study focuses on the characters of UNISEL students towards achieving learning performances in blended learning. A questionnaire is directed to 103 respondents to answer. There are 3 sections in the questionnaire related to blended learning. Each section is followed by 5 questions. Hence, it shows that different students' have different opinions towards blended learning despite their age, gender, course and faculty. This finding shows that some students prefer to use blended learning. However, there are some who think that blended learning is not suitable for them. Learners' characteristics and interaction towards learning performance is the major outcome of this research. In conclusion, learners characteristics towards achieving the learning performance in blended learning is crucial in order to find a solution and the remaining problem that has not been figured out is a focus point for the future researchers.

Keywords: blended learning, learners' characteristics, learning performance

Corresponding Author: Mohd Mustafa bin Izahar; email: mustafa@unisel.edu.my

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1. Introduction

In the developing modern era, technology has been evolved in teaching and learning environment and the education system has been modernized. Blended learning has been designed to create an uncomplicated way for teaching and learning process. There are times when the educators might not be able to make it to the classroom to conduct the lesson, but are still free to conduct although they are in other place at the moment. According to Osgathorpe & Graham (as cited in Qiang [1]), blended learning is an amalgamation of face to face but in a distanced way of message delivery so that both online and face to face procedure can be maximized. The combination of face-to-face classroom learning and online learning up to 30% to 80% is contemplated as blended learning [2]; a wedge of continuity between online class and the setting of face

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to face [3]. The Internet is the main source for group discussions and group chats where teaching and learning still happens, but the only difference is that everyone joins it from different location.

Learners' characteristics are essential in blended learning as one of the factors that contributes to achieve learning performance. Learners' interpretation and attitude towards blended learning can determine their capability to achieve greater heights of success. Delialioglu and Yildirim (as cited in Zhang & Zhu [4]) states that there is dissimilarity between a blended classroom and traditional classroom in a student's attainment, satisfaction, knowledge retentiveness and attitude. Interaction mode among learners is also considered as a vital issue. Embi (as cited in Adams et al. [5]) argues that communication is the LMS components used in all Malaysian higher education institution along with productivity, content development, administration and course delivery. This matter should be observed in depth as it may give a negative impact towards learning performance. Consequently, learners might find it difficult to merge in blended learning environment. Educators must consider the issue mentioned above while teaching using the technology in a traditional classroom as it affects the learners' achievement. At tertiary level, educators have embraced blended instruction since the new concept that would increase students' sequel and refine their learning occurrence [6]. The objectives formulated for the research are: 1) To identify the learners' characteristics in blended learning environment; 2) To investigate the learners' attitudes towards blended learning and; 3) To find out the interactional mode in blended learning.

2. Literature Review

Blended learning, known as a mixture of traditional teaching and learning classroom, utilizes internet- based automation, for instance, chat rooms, group meeting, audiocast and self- assessment tools [2]. The advanced information technology brings a rapid change to education system. Living in 21st century, one should be prepared to face the digital world. Blended learning is one of the easiest ways for educators to introduce internet- based technology in traditional classroom setting. Garrison and Kanuka (as cited in Wentao et al. [7]) indicated that online learning activities and physical learning activities are viewed as blended learning. It has further evolved into the incorporation of learning activities, lecturers and students. Learners can use this platform to experience learning through online based learning and physical learning. Hence, learners can connect with others through online network which makes lives easier and simpler. Teacher who acts as a facilitator in the classroom can use blended learning as an

opportunity to teach physically in the classroom and provide activities for the students at e-learning or any other internet -based technology. According to Sriarunasmee, Techataweewan and Mebusaya (as cited in Zhang & Zhu [4]) learners obtained higher scores in self-directed learning as well as the communication skills compared to normal traditional class learners. As stated by Gauci, Dantas, Williams, & Kemm (as cited in Serrano et al. [8]), the instructions provided in traditional classroom with slighter interaction with the learners' guide, are focused by keeping in memory rather than on the learners' apprehension, reasoning problem and analytical thinking. On the contrary, traditional classroom is teachers-based and less interaction occurs which causes students to not obtain good understanding about the lesson while learning. McCombs and Vakili (as cited in Wai & Seng [9]) further conclude that blended learning can lead the way to learner cantered approach. A learner cantered classroom can ease the learning process as the learners learn together and this creates an excellent learning. Hence, blended learning encourages self- paced learning as the learner can rely on textbooks or multimedia- based on their preferences of learning style.

2.1. The learners' perception towards blended learning environment

Erdem and Kibar (as cited in Altey & Altey [10]) examined the perception of students towards blended learning using Facebook practising quantitative and qualitative study. 40 Turkish English major undergraduates participated in the study without any background knowledge. The results proved that blended learning environment can be suitable for everyone, as the students demonstrate positive attitudes supporting the application of blended learning that inferred interaction and communication. Students' perceptions encourage the utilization of blended learning and vital learning strategies [4]. In a study by MacKeogh (as cited in Adams et al. [5]), 12% of students choose e-learning which is an online-based learning and 20% of the students select traditional classroom learning. Another research by Lopez-Perez et al. (as cited in Adams et al. [5]) concludes that University and College students select online learning as an addition to traditional classroom.

2.2. The effectiveness of interaction mode in blended learning

Liu (as cited in Altey & Altey [10]) conducted a study to investigate the benefits and consequences of an Academic English Writing Course in EFL context on blended learning

environment regarding; course outline, success of material and presentation, student participation, task submission and scoring, teacher reflection and student evaluation. Consequently, the interaction among students and between teachers and students has risen. Blended learning can develop learners' communication skills, and at the same time lighten the sense of insulation [11]. Besides, Paechter & Maier (as cited in Adams et al. [5]) mentioned in their study that Austrian choose face to face interaction. Naaj et al. (as cited in Kintu et al. [12]) determined that learners' satisfactions in blended learning are affected by technology and interactions among factors. Learners tend to acquire more knowledge when they correlate with their colleagues [13].

3. Methods

This research is a quantitative study where descriptive statistics are used to measure the learners' characteristics and interaction mode in blended learning. This study is conducted when the students are learning through online learning. It is an experiment on how the students' characters affect their learning performance in blended learning. The questionnaire has three parts with 5 questions for each part. For this study, 103 students from various courses answer the questionnaire. This study focuses on UNISEL students who study at Bestari Jaya Campus.

A questionnaire entitled 'The Learners' Characteristics towards Achieving Learning Performance in Blended Learning among UNISEL Students' is designed for two parts: the first part is to collect respondents' demographic information with a total of 5 questions on age, gender, intake, faculty and course. The second part is designed according to the three research questions and divided into 3 sections. The first section is learners' perceptions towards blended learning, the second section is on the effect of learners' attitudes towards learning performance in blended learning, and the third section focuses on the effectiveness of the interaction mode in blended learning. There are 5 questions for each section. The questions are designed in a comprehensible way to make sure that all the respondents have the same knowledge despite different courses. The questionnaire utilizes Likert Scale descriptions: strongly agree, agree, neutral, disagree and strongly disagree.

An online survey was created to gather data as the government announced a strict Movement Control Order (MCO) during Covid-19 pandemic. Google Document was used to design the questionnaire regarding the research. The survey was distributed through WhatsApp to all the respondents. The aim of the survey conducted has been explained in detail at the beginning of the questionnaire. The survey gathered respondents'

personal information for analysing purpose. The average time taken by the respondents to answer the questionnaire was approximately 3 to 5 minutes. A non-parametric approach used to collect code and analyse the data.

4. Results

The results shown below are based on the research questions of the present study.

RQ1

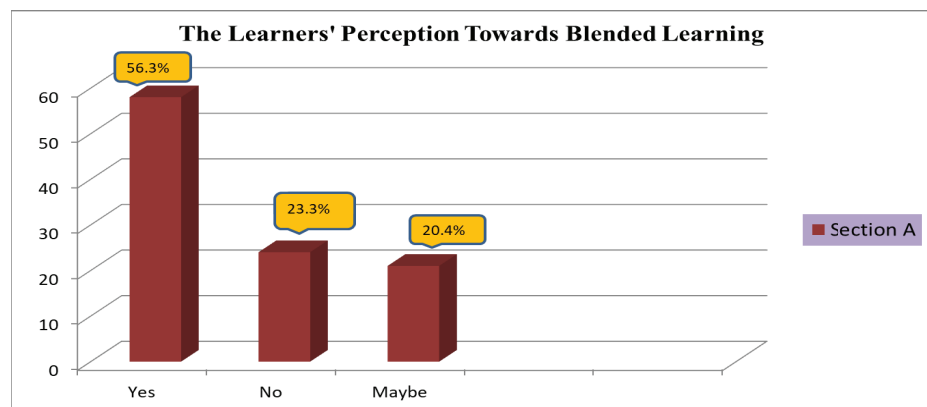


Figure 1

Out of 103 respondents, the highest number of respondents which are 58 respondents (56.3%) voted that they are aware of blended learning. However, 21 respondents (20.4%) voted maybe and 24 respondents (23.3%) voted no with the above.

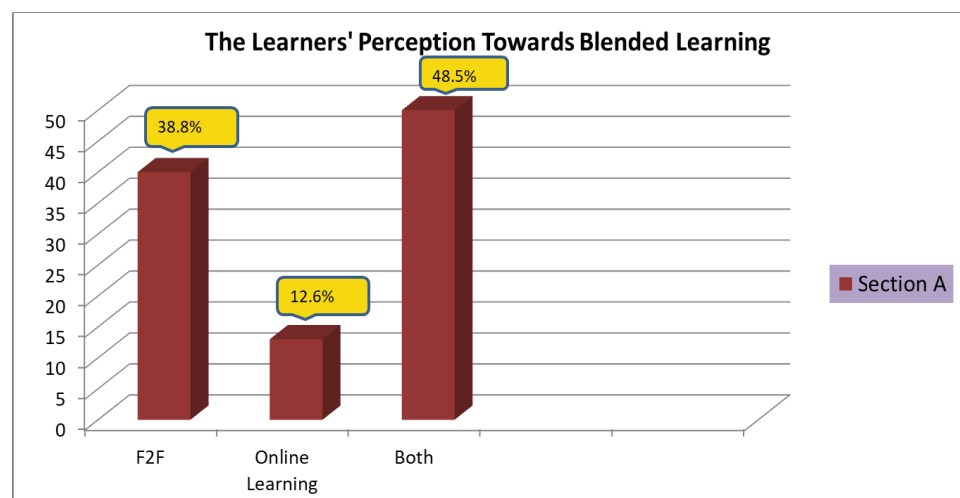


Figure 2

Out of 103 respondents, 40 respondent (38.8%) chose face-to-face learning. Whereas, 13 respondents (12.6%) chose online learning. Nevertheless, 50 respondents (48.5%) have chosen to learn through both face-to-face and online learning.

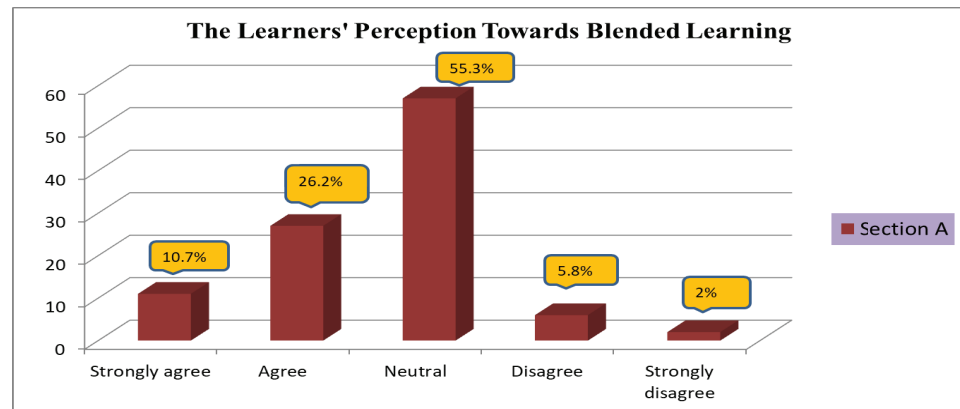


Figure 3

The data shows that, out of 103, 11 respondents (10.7%) strongly agree that blended learning is an easy way to learn from own pace. This motion is also agreed by 27 respondents (26.2%). 57 respondents (55.3%) are neutral with above. Other than that, 6 respondents (5.8%) stated disagree with the statement above and 2 respondents (2%) strongly disagree with above.

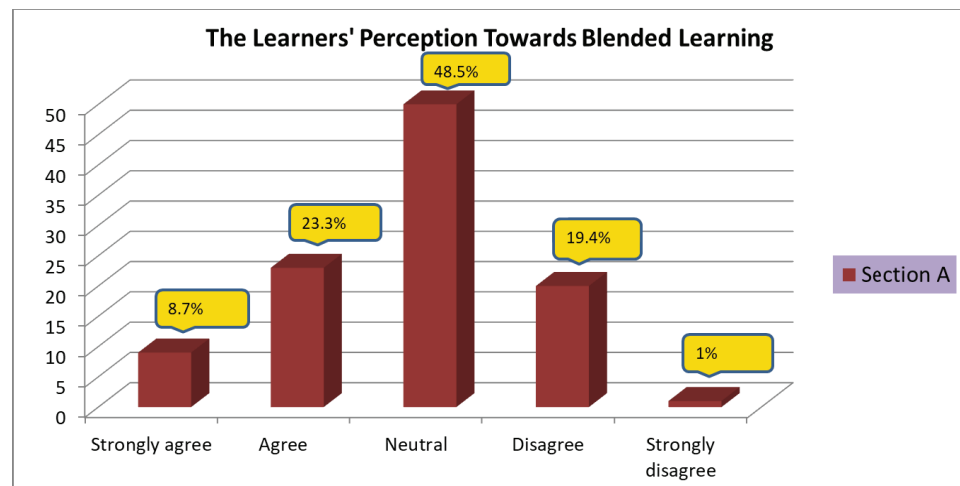


Figure 4

Based on the graph, 9 respondents (8.7%) strongly agree that blended learning is an effective way to learn compared to traditional learning. 23 respondents (22.3%) reported that they agree. Besides that, 50 respondents (48.5%) are neutral with the statement Moreover, 20 respondents (19.4%) disagree with it and there is 1 respondent (1%) strongly disagree.

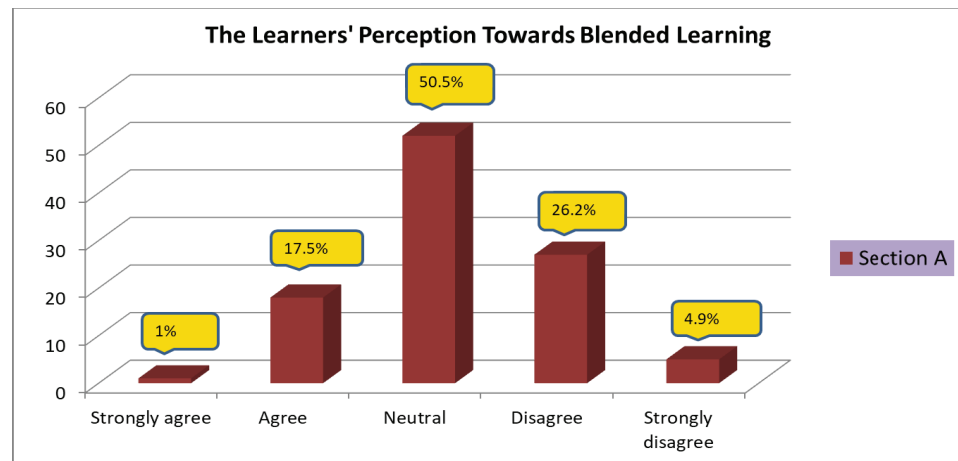


Figure 5

Out of 103 respondents, 1 respondent (1%) has strongly agree with blended learning is suitable to be used by all learners. This motion has been agreed by 18 respondents (17.5%). 52 respondents (50.5%) have voted neutral. Other than that, 27 respondents (26.2%) disagree with the above matter and 5 respondents (4.9%) strongly disagree with it.

(RQ2)

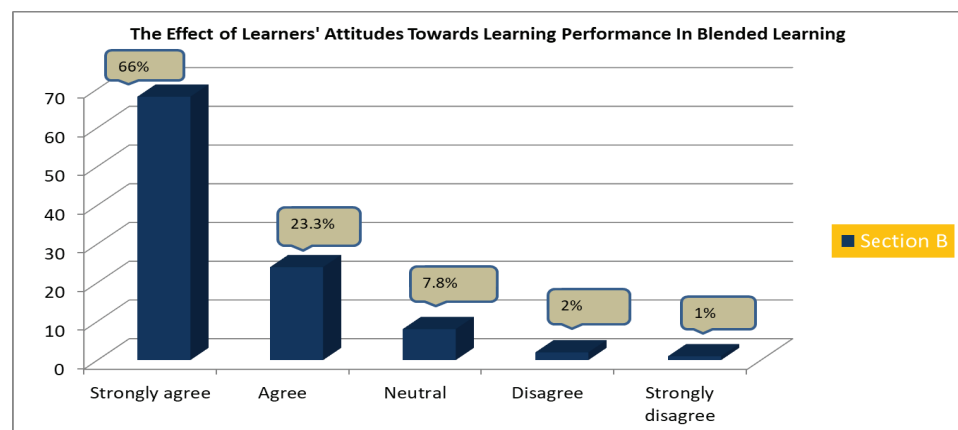


Figure 6

Figure 11 presented that, 68 respondents (66%) strongly agree that self-disciplinary is very crucial in order to achieve learning goals through blended learning. This motion is agreed by 24 respondents (23.3%). Besides that, 8 respondents (7.8%) are neutral with the matter above. However, 2 respondents (2%) disagree and 1 respondent (1%) strongly disagrees.

Based on Figure 1 the majority who are 63 respondents (61.2%) voted strongly agree to the statement that, motivation level to learn through blended learning benefits their learning performance. This is agreed by 27 respondents (26.2%). In addition, 8

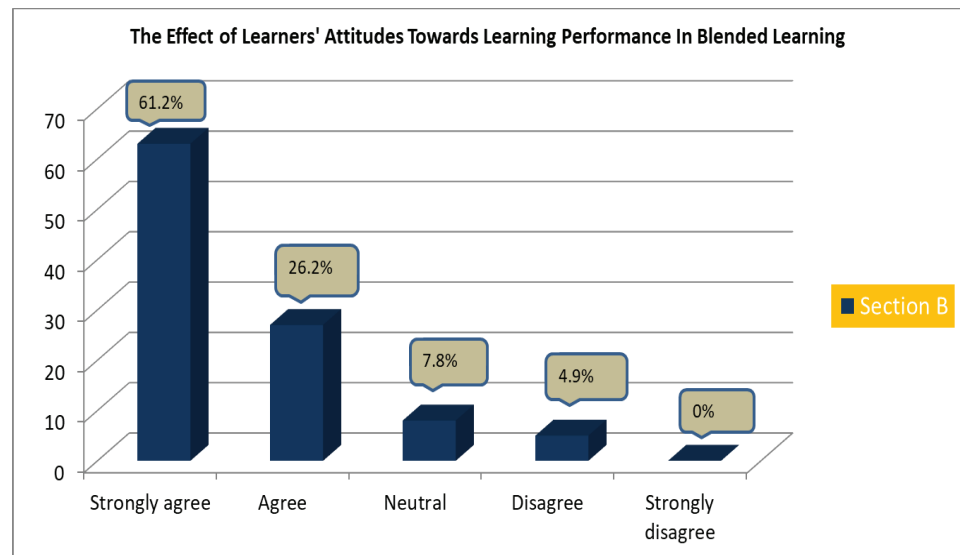


Figure 7

respondents (7.8%) are neutral with the matter above. 5 respondents (4.9%) disagree with it. Lastly, no respondent (0%) strongly disagree.

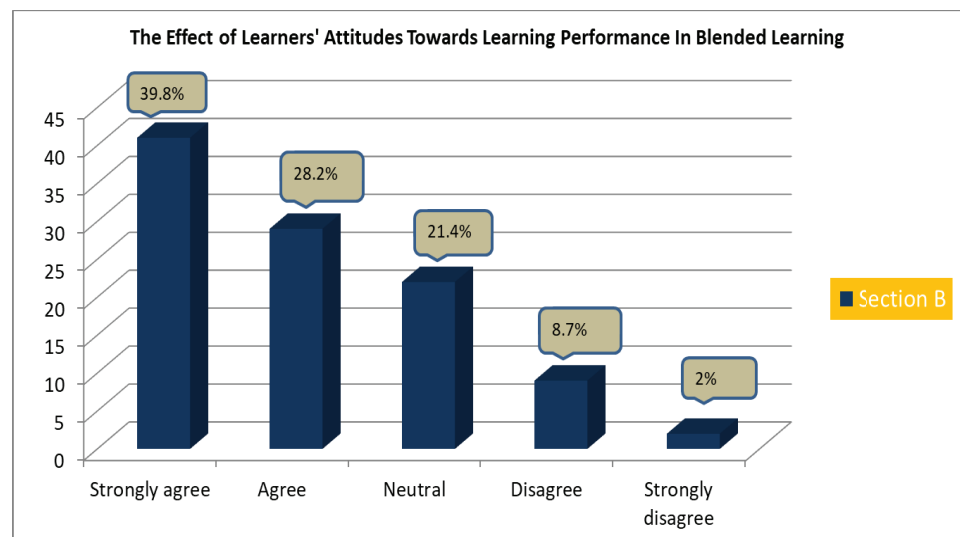


Figure 8

Out of 103 respondents, 41 respondents (39.8%) strongly agree that learning through blended learning can decrease students' active level. This motion is agreed by 29 respondents (28.2%). Moreover, 22 respondents (21.4%) chosen to be neutral. Moreover, 9 respondents (8.7%) disagree and 2 respondents (2%) strongly disagree about the statement.

According to Figure 14, 52 respondents (50.5%) stated strongly agree that it is crucial for students' to be cognitively prepared in order to learn through blended learning. This motion is agreed by 40 respondents (38.8%). However, 10 respondents (9.7%) are

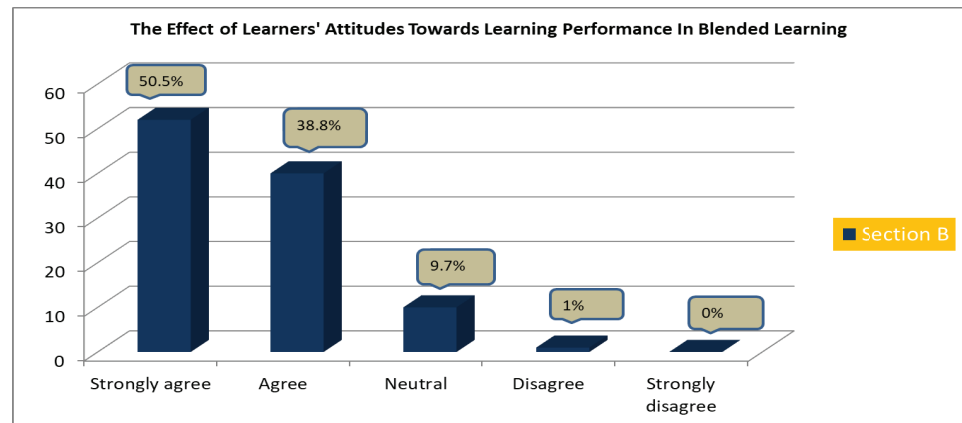


Figure 9

neutral with the matter. Then, 1 respondent (1%) disagrees with it and no respondent (0%) strongly disagree.

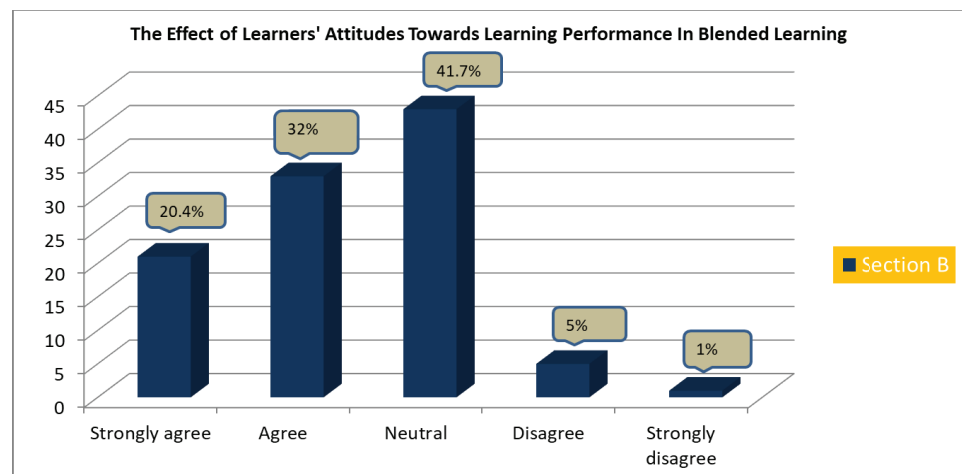


Figure 10

Out of 103 respondents, 21 respondents (20.4%) strongly agree that blended learning can lead students to create their own assumptions towards a task. This is agreed by 33 respondents (32%). Moreover, 43 respondents (41.7%) are neutral with the matter above. For this statement, 5 respondents (5%) disagree and only 1 respondent (1%) strongly disagreed.

(RQ3)

Out of 103 respondents, 22 respondents strongly agree that blended learning can increase learners' confidence level while interacting. This motion is also agreed by 33 respondents (32%). Besides that, 40 respondents (38.8%) are neutral. However, 7 respondents (6.8%) disagree and 1 respondent (1%) strongly disagree.

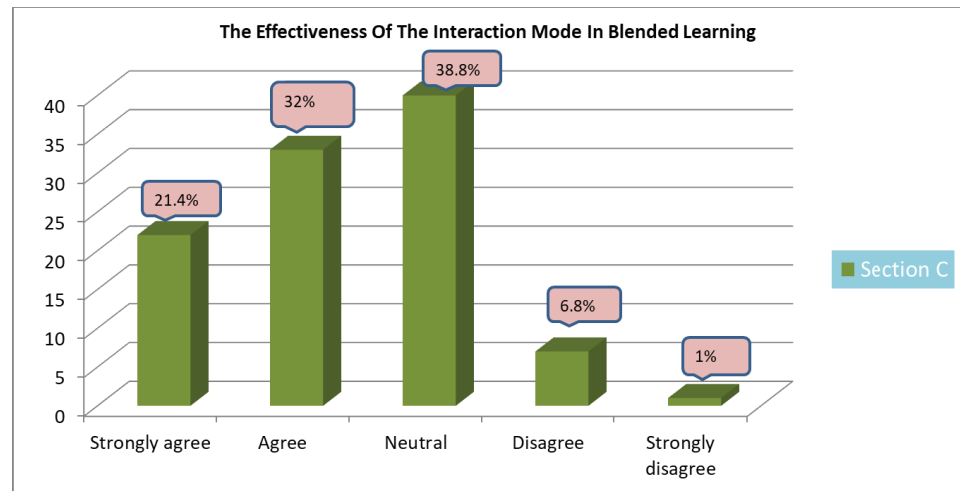


Figure 11

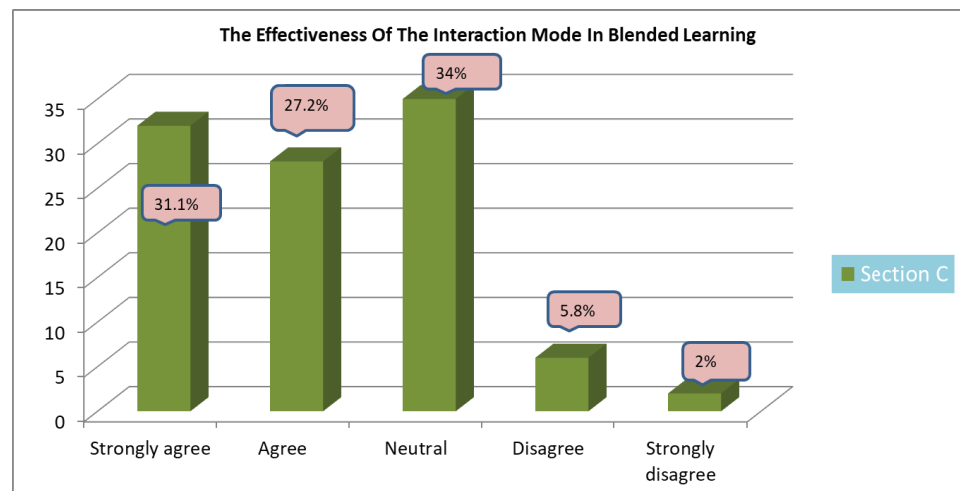


Figure 12

According to the data shown, 32 respondents (31%) strongly agree that blended learning encourage a good communication process among peers. This motion is agreed by 28 respondents (27.2%). However, 35 respondents (34%) voted neutral with the statement above. Furthermore, 6 respondents (5.8%) disagree. The minority who are 2 respondents (2%) stated strongly disagree.

Out of 103 respondents, 12 respondents (11.7%) strongly agree that interaction in blended learning can help in self-reflection. This statement is agreed by 41 respondents (39.8%). However, 45 respondents (43.7%) are neutral with this. 5 respondents (4.9%) disagree and no respondent (0%) strongly disagrees.

The figure described that 30 respondents (29.1%) strongly agree that blended learning can help to create a good teamwork among the learners. This motion is agreed by 25 respondents (24.3%). Other than that, 37 respondents (35.9%) expressed that they

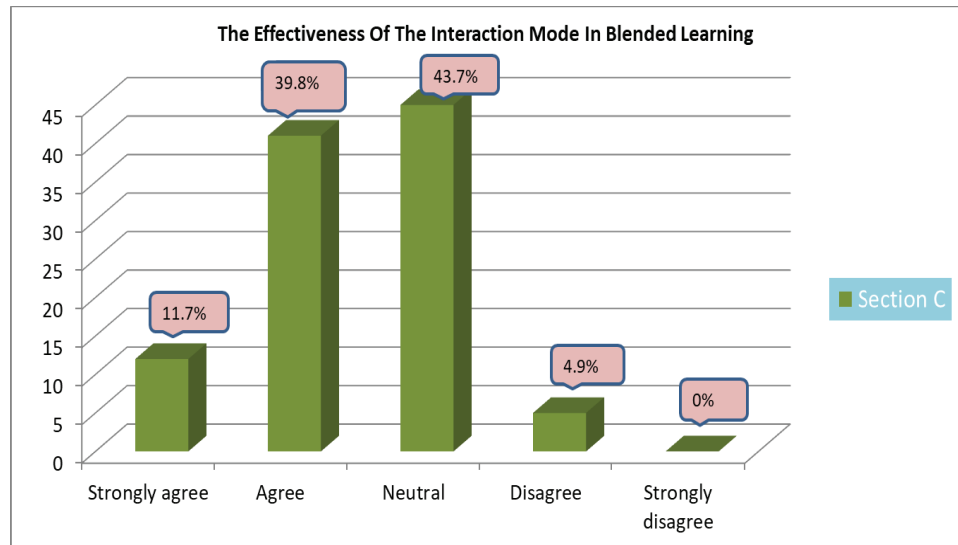


Figure 13

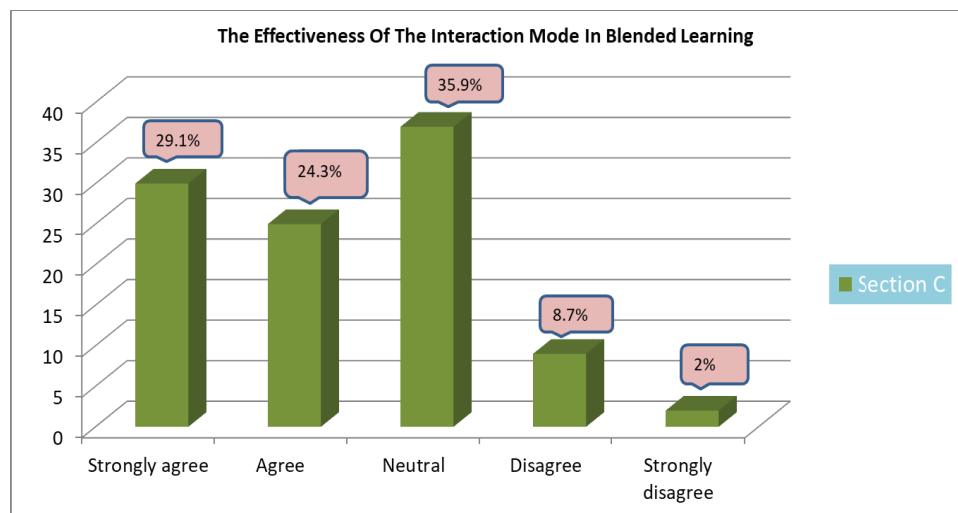


Figure 14

are neutral with the statement above. 9 respondents (8.7%) voted disagree while 2 respondents (2%) strongly disagree.

Out of 103 respondents, 8 respondents (7.8%) strongly agree that learners are able to share their ideas with others while learning in blended learning system. This motion is agreed by 51 respondents (49.5%). Then, 37 respondents (35.9%) reacted neutral with this. 5 respondents (4.8%) disagree and 2 respondents strongly disagree.

5. Discussion

The study aims to explore learners' characteristics, specifically based on perception and attitudes towards achieving learning performance together with the effectiveness

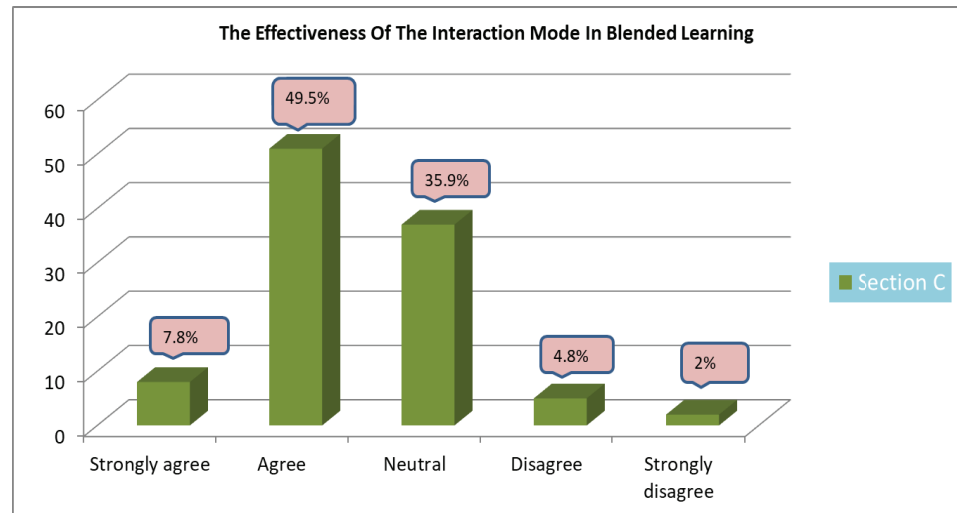


Figure 15

of interaction mode in blended learning. The results do not only show that learners' characteristics is crucial in blended learning to achieve learning performance, but also indicate that interaction among learners are being promoted through blended learning which tend to affect learning performance. The learning outcomes of the findings in this study reveal that learners' characteristics and interaction mode have a great impact towards learning performance.

Majority of the learners are aware of blended learning since they have been a part of the system. Another finding from the results agree that blended is more effective than traditional learning. Niekerk and Web (as cited in Zhang & Zhu [4]) indicated that students prefer blended learning and stated that learning in blended learning environment has developed students' learning. Furthermore, respondents admit that mental stability is important in facing blended learning. Another similar study by, Manwaring et al. (as cited in Adams et al. [5]) concluded that decreased level of students' emotional engagement related with both dynamic- learning activities when the activities turned out to be challenging.

It is proven that self- discipline is essential to achieve learning goals in blended learning. It could be inferred that the students need to control their behaviour and obey the rules to achieve their targeted learning goals in blended learning environment. Apart from that, learners agreed that motivation level benefits their learning performance in blended learning. Tayebinik and Puteh (as cited in Zhang & Zhu [4]) noted that students are encouraged to participate in online classes regularly when they learn in blended learning environment. Motivation can be given internally or externally for the learners to provide the best results in their learning performance. Generally, learners'

have to be cognitively prepared to learn through blended learning according to the findings. Students who are engaged cognitively can manage their own learning through organizing their work, observing and consistently evaluating their development on work [5]. The findings in the study is that learners preferred blended learning to be done in a different way in order for them to be focused as they agreed that blended learning does decrease their active level while learning through blended learning.

Interaction mode is correlated with learning performance among the other independent variables based on this study. The findings stated that majority of the students feel comfortable interacting with their peers in blended learning. According to Willging and Johnson (as cited in Kintu et al. [12]) online courses can be a failure or drop-out without learners' interaction. This research shows that interaction mode is essential to attain learning performance in blended learning. The lack of confidence in a student can be developed through interaction in blended learning as stated in findings. Blended learning also helps to improve speaking skills among students. In similar insights, Hou (as cited in Chunlin [11]) claimed that online learning can reduce learners' anxiety level as learners' speaking and listening abilities can be improved through blended learning. Blended learning helps in self-reflection and students are able to share ideas within their peers. Results of another study revealed that in order to support self-reflection, social interaction and networked learning among students should be incorporated in an effectual online learning as it should not only provide access to information [14]. Hence, in this study, it is proven that learning through blended learning is more meaningful with an active interaction mode. Smyth et al. (as cited in Qiang [1]) explained that as the students engage more with interactive activities in face-to-face learning, a strong learning community can be developed through close connection among peer.

6. Conclusion

This research has proven that the changes in the learners' characteristics towards blended learning is crucial to be studied and it is indeed worth finding out. The findings prove that students have different perceptions towards blended learning. Some seem to enjoy learning through blended learning and some contradict it. Some feel that blended learning is difficult to cope up with compared to classroom learning. Others think that blended learning is more effective compared to traditional learning. This study has also revealed how blended learning works and how students with different age, course and gender reacted to it.

7. Recommendation

Universities and colleges should be conscious of the learners' characteristics and interaction mode to obtain significant learning performance. Educators have to be diligent in order to provide the best education for the learners. The usage of technology should be implemented in teaching and learning process in 21st century. Blended learning can be conducted in different ways as learners face difficulties to focus in blended learning. Hence, more research can be done to initiate learners' characteristics in blended learning to achieve learning performance other than learners' perception and attitude. For instance, learners' preference towards traditional classroom and technology mediated classroom, learning styles, learners' capability in using technology tools and learners' proficiency level to adapt blended learning can be investigated. The research can be focused on rural high school students as most of the schools in rural areas are not well developed and deficient in technology during teaching and learning process. The research can also use survey which includes interview and recording sessions of the students.

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