

Students' Differences on Perceptions, Beliefs and Attitudes toward the Online Learning

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ABSTRACT

The spread of online learning was intensified for educational purposes. It is intended to ease and bridge educational stumble, ultimately encountered by students. There were excessively rare study undertaking students' perception, belief and attitude on the online learning. Therefore, this study aimed at finding to explore students' perception, belief and attitude on the online learning also to observe the relation among those three variables. This participant of this study was 50 students in East Java. The study used Mann - Whitney U test to gauge the differences between male and female students among three variables. The finding proved that majorities of students have positive perception, belief and attitudes on the online learning. Those finding also unveiled that no statistically significant differences were found between male and female students toward those three variables. Recommendations were addressed for educational stakeholders and pedagogical aspects.

Keywords: *Students' Attitude, Students' Belief, Students' Perception, The Online Learning*

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INTRODUCTION

The online learning, today, is as a demand in the educational fields including English language teaching. It completely is intended to accomplish learning outcome and naturally parts of integrating in live (Billah, 2015; Davies & West, 2014). The use of online learning commonly utilized for learning. Hence, it affect students' perception, belief and attitudes. Perception is as the process of mind to draw surrounding by involving awareness of sensory information (Feldman, 2011; Qiong, 2017). Thus, it is response to receive positive or negative information. Positive responses refer to maintain, accepts and agree of particular information, meanwhile negative responses derive to rejection or disapproval of those information which are received (Ahmadi, 2010). Qiong (2017) asserted three steps of perception system namely selection, organization and interpretation. The selection is as environmental stimulus to turns into experiences. Organization derives the arrangements of those information into meaningful patterns. The interpretation is to proceed those information into particular meaning. Some previous research have ever been conducted to examine students' perception toward online learning (Ajid et al., 2018; Al Arif, 2019; Aloraini & Cardoso, 2018; Nofrika, 2019). Ajid et al. (2018) led the research to elaborate the use of WhatsApp with English skill. The findings asserted that the use of WhatsApp easily as social media for online English learning easily was accessed and facilitating among students and with the teachers to communicate in English anytime and anywhere. Feedback easily was sent via WhatsApp during the lesson. Al Arif (2019) examined the use of social media for English learning. The study employed exploratory study to gauge the social media for English learning. Sixty seven of undergraduate students were as participants. The data of the study were gained through questionnaire and semi structured interviewed. The results underlined that some social media application commonly used by students. They spent more their spare time to access those social media for entertaining rather than for learning English.

Yet, they commonly emerged positive perception toward the social media for English learning.

In the same vein perspectives, [Aloraini & Cardoso \(2018\)](#) observed online social media for learning by employing mix methods. The study recruited ninety nine students of EFL university students. All participants were categorized into two namely beginner and advance. The study finding confirmed that beginner and advance students have different perception of social media for online learning. However, they have same affective context as well as their choices in using social for learning. In addition, students tend to have varied choices of social media application in different English learning skills. Advance students tended to consider social media as their own private space rather than for learning. Quite similar students' perception finding was due to [Nofrika \(2019\)](#) who led the research to explore on students perception toward YouTube in their learning. The study used qualitative analysis. Four English students were collaborated in the study. The findings delineated that students develop their English competence through watching English video and song. Their linguistic features were positively increasing in terms of their grammar, pronunciation, and vocabulary. Meanwhile, their English speaking and listening skill also improved. In detail, the study also categorized YouTube content into three namely art and humanities content, vlogs, and social science content. Those perceptions of online learning were in the same vein with Sharma's study in 2018. The study explored students' perception of social media for EFL learning. The study exerted survey. Meanwhile, the participants were sixty EFL students. Questionnaires were distributed to gather the data. The results corroborated that students have positive perception toward the use of social media for their English learning. Students' perception on online learning via social media assisted them to be more confidents, less anxious, more motivated and willingness to interact among them.

Students' beliefs on the online learning also impacts their lesson achievements. [Rubin \(1987\)](#) defined belief as parts of consciousness and sub-consciousness. Consciousness related to an advice of environment (e.g. parents, teachers, or learning experiences). Meanwhile, sub-consciousness is resulted from observation. Therefore each student tends to gain different belief on the same objects. [Lowie et al. \(2009\)](#) argued beliefs as the role of cognitive and metacognitive within the knowledge. Further, [Horwitz \(1987\)](#) argued that belief on language learning inventory covers a foreign language aptitude, the difficulty of language learning, the truth of language learning, learning as well as communication strategies, motivation and expectation. The previous researches have been already observed toward the students' beliefs on the online learning. Those were from ([Gherheş et al., 2021](#); [Güneş et al., 2015](#); [Pham et al., 2021](#); [Yusnilita, 2020](#)). [Güneş et al. \(2015\)](#) investigated the educational beliefs on the internet usage and self-regulated learning within. Universities students across departments, as participants, were recruited. The findings revealed that all indicators related each other. Educational internet self-efficacy belief as well as self-regulating learning skill composed effectively and properly on learning. Another finding, the internet-based knowledge construction and the internet-based knowledge evaluation linked with students' online academic help seeking. The internet as information, influences and role of epistemic belief were interpreted positively. Those findings also supported with [Gherheş et al. \(2021\)](#). They analyzed e-learning vs face to face learning. They recruited undergraduate students to fill questionnaire. The results showed that most of respondents have desire to return to school as well as involved in the online learning. Another results categorized of two parts, namely first years students (benefits of e-learning exclusively) and upper year students (benefits of both online as well as face to face learning). Some key information also address to be considered to solve educational changes process and solve information. [Pham et al. \(2021\)](#) also investigated of online learning based on the students' experiences and satisfactions. They used mix method to analyze the data. Undergraduate students were as respondents in their research. The findings revealed that the existence of correlations among learners' interaction with content, peers and instructors with students satisfaction. Some findings also noted that the online learning has been respected by students. Teachers also improved their online teaching pedagogy.

Another supporting the finding, [Yusnilita \(2020\)](#) examined impacts of online learning. The study used qualitative descriptive. The findings highlighted that majorities of students were interested in online learning. They also underlined that the online learning was easier than the conventional class. Students also noted or recorded the lesson materials. Majorities of them felt that the online learning assisted them in learning, cheaper in cost, easily to discuss among students, improved their learning quality, accommodate students easily during the learning and easily to send as well as receive feedback to teachers. Discussion is required to build social interaction of students ([Prasetyo, 2021a](#)).

Attitude gains one of pivotal role for online learning. [Fazio \(2007\)](#) defines attitudes as the collaboration process between a given object and a given summary evaluation on the object. In line with [Maya \(2015\)](#), she defines attitudes as responses positively or negatively on objects, situation or person. Students feeling also includes as their attitudes. [Zanden & Vander \(1984\)](#) divides attitudes into three components cognitive, affective, and behaviors. Some study have ever been investigated toward students attitude of online learning ([Ja'ashan, 2020](#); [Merrynda et al., 2022](#); [Rahmiati & Emaliana, 2019](#); [Zboun & Farrah, 2021](#)). [Ja'ashan \(2020\)](#) explored the challenges and prospects of university students on their e-learning. The study recruited 36 teaching staff and 261 EFL students. The data collected via questionnaires which deliberately stressed on three aspects. The study resulted that there were no significant differences between male and female EFL students during e-learning activities. Additionally it underlined that all aspects of teaching staff and students challenges could not presume on academic achievements. Further findings implied that academic, administrative and technical challenges were as the main challenges in the e-learning. Students also were aware of e-learning benefits and have positive attitudes toward e-learning. This quite similar with other research by [Merrynda et al. \(2022\)](#) who examined EFL students' internet-specific epistemic beliefs (ISEB) and self-regulated learning (OSEL). They recruited 140 undergraduate students in their study.

Hence, they collected the data using the ISEB and OSEL questionnaires, followed by interviews to provide a more comprehensive understanding of the results. The findings confirmed a significant positive correlation between ISEB and OSEL, with a correlation coefficient of .555 and a p -value of .000 ($p < .001$). This indicated that higher levels of OSEL were associated with higher levels of ISEB, and vice versa. The interview findings further suggested that ISEB and OSEL helped students overcome difficulties encountered during online learning. Another supporting finding was from [Rahmiati & Emaliana \(2019\)](#) who investigated online learning in the context of EFL students' epistemic belief. They recruited 100 students to join in their research. The focus of their research was to measure individual knowledge construction via cognitive exposure and acquisition within the online learning. The finding implied that the more sophisticated belief, the more learning strategies used in learning.

Little bit different results of perception toward the online learning, [Selpia and Kusmaryani et al. \(2019\)](#) investigated the technology which was exerted in teaching and learning. The study gathered 50 English teachers from junior and senior high school in one province in Indonesia. The data were presented into some points namely teachers' computer and the internet usage as well as focus group interviews to explore teachers' reasons whether they integrated or ignored the technology. The questionnaire distributed to teachers. The study revealed that some teachers have positive attitudes on technology, meanwhile some were not. The opposite perspectives, [Zboun & Farrah \(2021\)](#) gauged students' perspective of online learning. They employed quantitative methods by collecting data through questionnaire. The results highlighted that some challenges emerged during the online learning. Thus, the commonly preferred the conventional class. Students also asserted that the weaknesses of online class more than the conventional class (e.g., lack of internet connection, less interaction, weak motivation, lack of participation and weak of comprehension materials).

Due to the whole previous study, there were excessively rare undertaking the study to gauge students' perception, belief and attitude toward the online learning. Therefore in

filling the gap, this study aims at examine students' perception, belief, and attitude toward online learning, aims at observing male and female students differences toward those three variables, and exploring correlation and effects among those three variables. The following bellow is a research question to answer the gap are as follows: (1) Are there any differences between male and female students on their perceptions, beliefs, and attitudes for the online learning?

METHOD

This research engaged 50 students in East Java. It was consisted 28 male and 22 female. Hence, all participants were recruited via convenient sampling which allowed easily, conveniently, simple and relatively inexpensive recruitment (Tracy, 2013). The students' grades was consisted at 9th grades (44%), 8th grades (26%), and 7th grades (30%). They were all beginner learners. All of respondents have the same characteristic that, due to pandemic time, they equally learned via the online. Cresswell (2012) stated that the population was a group who has similar characteristics.

The questionnaire were distributed via online to make an easily access to all participants (Carbonaro & Bainbridge, 2000) and only appropriate for certain group (Ilieva et al., 2002). The researcher adapted Shin & Son (2007) indicators' items with modifications. The data were in Likert scale from 1 until 6 which derived from strongly disagree, disagree, slightly disagree, slightly agree, agree and strongly agree. The researcher avoided a neutral choice to eliminate bias answers.

Table 1. Items of Online Learning

Variable	Items	Items Code
Perception	I was motivated to learn English via online	P1
	I improved English skills via online.	P2
	Online learning forces me being autonomous learners	P3
	I improved my communication via online	P4
	Online learning improved my attention during the learning	P5
Belief	Online learning provided a varied learning environment.	B1
	Online learning assisted me to achieve my future learning goals	B2
	Online learning replaced textbooks.	B3
	Online learning provided many learning resources	B4
	Online learning was useful for English learning	B5
Attitude	I consistently used an online for my learning	A1
	I am competent to use online learning for my future learning	A2
	I needed more training to improve my pedagogical technology	A3
	I have to learn on how integrate the online ways with my learning	A4
	I used online-based materials as much as possible for my learning	A5

To explore students' perception, belief and attitudes toward the online learning in terms of differences between male and female student, correlation and effects, hence the researcher employed descriptive quantitative study, Nachar (2008) argued that Man - Whitney U test is non parametric test.

FINDINGS AND DISCUSSION

Findings

The results were categorized into three parts, according to those three research question above. The first part was to analyze students' perception, belief and attitudes toward the online learning. The second part was to gauge the differences between male and female students based on their perceptions, beliefs and attitudes toward the online learning. The third

part was to examine the correlation among students' perception, belief and their attitudes on their online learning.

Male and Female Students' Differences on Perceptions, Beliefs, and Attitudes Toward the Online Learning

Table 3 Students' Perception on the Online Learning

No	Items Code	Scale			Mean	SD	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
		4	5	6						
1	P1	13	8	19	4.58	1.44	307.50	713.50	-0.01	.99
2	P2	7	9	20	4.60	1.44	275.00	681.00	-0.67	.50
3	P3	11	9	14	4.24	1.50	254.00	660.00	-1.08	.28
4	P4	11	9	24	4.94	1.28	227.50	633.50	-1.68	.09
5	P5	8	8	18	4.36	1.60	253.00	659.00	-1.10	.26

Note: 4: Slightly Agree; 5: Agree; 6: Strongly Agree; SD: Standard Deviation.

The table 3 above depicts the result of students' perception on the online learning. To find out respondents agree or disagree on the items, it was through comparing the mean score with average score of choices at 3.50 (Vaghei et al., 2020). If the mean score was higher than (3.50), it was meant that the majorities of respondents agreed on the item. On the other hand, if the mean score was lower than (3.50), it was meant that the respondents disagreed on the item (Vaghei et al., 2020). The first items got the mean score at 4.58 which was higher than 3.50. It indicated that majorities of students agreed that online learning motivated them. The second items highlighted the mean score at 4.60. It was meant that majorities of students agreed that the online learning improved their English skills. The third item presented the mean score at 4.24 that was upper than 3.50. The fourth and fifth items also got the mean score at 4.94 and 4.36. Those were upper than 3.50. In short, students commonly agreed that the online learning improved their communication skill and their attention in learning. The next analysis is students' belief on the online learning. The assumption emerges if the score of significance two tailed was higher than .05, it is interpreted as no existences of differences between male and female students. If the significance two tailed is lower than .05, it is assumed that there is differences between male and female students.

The first item bold the finding Mann Whitney score 307.50 with significance two tailed .99. The second item proved in gaining the significance two tailed .501 with Man Whitney score 275.00. The third item collected the significance score was .28 with the Man Whitney score was 254.00. The third item was .09 for the significance of two tailed which was supported with Mann Whitney score 227.50. The last item confirmed that collected the significance two tailed score was .26 with Mann Whitney score 253.00. All of those significance score were higher than .05. Those highlighted the findings that no differences between male and female students on their perception toward the online learning. The table 7 seven below depicts the result of differences of male and female students on their belief toward the online learning.

Table 4. Students' Belief on the Online Learning

No	Items Code	Scale			Mean	SD	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
		4	5	6						
1	B1	12	7	19	4.44	1.60	270.00	676.00	-.77	.44
2	B2	11	4	22	4.60	1.45	223.00	629.00	-1.75	.08
3	B3	10	12	11	3.94	1.74	270.00	523.00	-.75	.44
4	B4	9	11	22	4.86	1.30	294.00	700.00	-.28	.77
5	B5	8	11	21	4.80	1.29	296.50	702.50	-.23	.81

Note: 4: Slightly Agree; 5: Agree; 6: Strongly Agree; SD: Standard Deviation

The table 4 shows the results of students' belief on the online learning. The highest mean score was the fourth item (4.86). It was about many resources in the online learning. The second mean rank was the fifth item (4.80) which was about the usefulness of online learning for English. The third rank was the second item (4.60). It was the online learning achievement

for future goals. The fourth rank mean score was the online learning which provided varied learning environment (4.44). The last rank was online learning replaced book (3.94). Overall items collected the mean scores upper than 3.50. Those corroborated that majorities of students agreed that the online learning has varied learning environment, achieved future goals, replaced book, provided many references and useful for English learning. The first item gathered the significance two tailed .44 with the Mann Whitney score 270.00. The second item was .08 for its significance two tailed. The third item gained .44 for its significance two tailed. Meanwhile the fourth and the fifth were .77 and .81. All of the scores were higher than .05. Those confirmed that there were no differences male and female students toward their belief in the online learning.

Table 5. Students' Attitudes toward the Online Learning

No	Items Code	Scale 4	5	6	Mean	SD	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
1	A1	14	11	13	4.36	1.39	298.50	704.50	-.19	.84
2	A2	15	12	12	4.40	1.27	274.00	680.00	-.68	.49
3	A3	14	14	11	4.30	1.44	246.50	652.50	-1.23	.21
4	A4	9	14	16	4.56	1.41	251.00	657.00	-1.15	.25
5	A5	12	10	13	4.26	1.44	288.00	694.00	-.40	.68

Note: 4: Slightly Agree; 5: Agree; 6: Strongly Agree; SD: Standard Deviation

The table 5 presented the findings of students' attitude on the online learning. The first item's mean score was 4.36. The second item's mean score was 4.40. Meanwhile, the third item was 4.30. The highest mean score was 4.56. The lowest mean score was at the fifth item which was 4.26. All of items' scores were upper than 3.50. Those were interpreted that majorities of students consistently used an online for learning, were competent to use online learning for future learning, needed more training to improve pedagogical technology, learned on how integrate the online ways with the learning and used online-based materials as much as possible for learning. The first item was confirmed that its significance two tailed was .84. Meanwhile, the second item was .49 for the significance two tailed. The third, fourth and fifth items were .21, .25, and .68 for those significance two tailed. All of the results showed no differences between male and female students toward their attitudes on the online learning.

Discussion

The research question answered that the majorities of students have positive perception on the online learning. They commonly agreed that the online learning motivated them in learning of English, improved their English skills, forced them being autonomous, enhances their communication intensity, and more focused during the online learning. Those indicators have means' scores upper than 4. Meanwhile, [Vaghei et al. \(2020\)](#) stated if the mean score upper 3.50. It was meant that majorities of respondents agreed on those indicators. The first indicator or P1 gathered Mann Whitney value at 307.50 with significance two tailed at .99. It was predicted that there were no differences between male and female student on the motivation during the online learning. It is similar with the finding from [Özhan & Kocadere \(2020\)](#) who found that the online learning setting and game increased participants' motivation. Motivation in the online learning relates closely to students' participations ([Dörnyei, 2020](#); [Kyewski & Krämer, 2018](#)). Those were in the same vein with [De Barba et al. \(2016\)](#) who asserted that the online learning should serve and be coordinated among participant, motivation and lesson content to enhance students' attention within. The second item or P2 was about improving English skill via online learning. Majorities of students agreed that the online learning improved their English skills. It was discovered that the mean score was 4.60. Then, no differences occurred between male and female students on P2. It was revealed with significance two tailed was .50. This finding was supported by [Albogami \(2022\)](#). He observed English skills college students during the online learning. He found that the online learning enhances students' language skills. In the same vein with [Dewie et al. \(2021\)](#), they investigated

the online learning for language teachers' proficiency. The findings highlighted that they enhanced their language skills and components. In addition, participants also were motivated during the online course. Motivation plays crucial roles in e-learning (Prasetyo, 2021b).

P3 item revealed the results that most of students agreed the online learning could develop their autonomous learning as well as no differences between male and female students on it. It was proved by the mean score 4.24 and the assumption of two tailed .28. This was supported by Muhammad (2020). He corroborated that the online course enhances students being autonomous. Another finding also revealed similar results came from Sung et al. (2015). They underlined the point that the e-media assisted and increased students autonomous. Students commonly also agreed that the online course assisted them to communicate more intense within the lesson. It was shown that P4 underlined the result of the mean score at 4.94 which was supported the significance two tailed value at .09. Those meant that no differences emerged between male and female students for P4. It was quite similar with the findings which was revealed. They found that the lecturer – students in online communication affect students' self-confidence. The item code P5 pointed out the result that majorities of students agreed that the online learning improved their attentions. It was depicted the result of mean score at 4.36, supported with the significance two tailed .26. Those could be assumed that male and female students have no differences on the item code P5. This is quite similar with the finding from Tsai et al. (2016). They asserted the findings that learners with high comprehension level tended to gain higher visual attention during game plays. They also more efficient to employ reading strategy. Meanwhile the lower comprehension faced some difficulties.

On the belief of the online learning, mostly students agreed that the online learning provided a varied learning environment, assisted them to achieve the future learning goals, replaced book, provided many learning resources and was useful for English learning. B1 item code has the mean score at 4.44 with the significance two tailed .44. it was meant that students commonly agreed that the online learning provided a varied learning environment and have no existences of differences between male also female on it. This is in line with Gu (2022) who pointed out that the broadband internet at home impacts on the students' performance during the online lesson. The students with the larger residence area were better in their e-learning performance. Some additional broader perspective derived from Salta et al. (2021). They asserted that e-learning did not present physically at the same time. It was posted through the online meanwhile learners were in their own different places to interact and discuss each other such as by utilizing video call, share screen and live chat from others platforms. Most students agreed that the online learning helped them to achieve their future learning goals on B2. It was proven that they collected 4.60 for the mean score, additionally .08 for the significance two tailed which was interpreted nonexistence of differences between male and female for B2. That results was supported by Al-Saadi (2017). He reported that well conceptualization of online learning and well prepared instructors enhances students' success to achieve their goals. For B3, most students also agreed that the online could replace books. It has 3.94 for the mean score with .44 for the significance two tailed. Goyal (2012) also similarly highlighted that, in the future, the online learning could replace paper books. B4 resulted that majorities of students believed the online learning have many learning resources. It was shown by the mean score 4.86 and the significance two tailed .77. Finch & Jacobs (2012) pointed out that the online learning provides new opportunities to collaborate with experts and adjusts the content need. B5 proved that mostly students agreed the online learning useful for English learning. It gained the mean score 4.80 and the significance two tailed .81. It was in the same vein with Murtiningsih (2020). She reported that the online learning improved students' English skills.

Students' attitude toward the online learning also revealed the positive results in terms of consistently using the online for learning, competent to use online learning, needed more training to improve their abilities, learning to integrate the online with lesson, and using the online based material as much as possible for learning. A1 reported the findings that the mean score 4.36 with the significance two tailed .84. It was in line with Zboun & Farrah (2021). Students attended the online class will fully join quizzes and all online activities. A2 resulted

the finding of mean score 4.40 and .49 for the significance two tailed. Those meant that most students competent to use online learning and no differences of male and female students on it. That finding was in line with Ibrahim et al. (2021). They found that most students were competent to use technology in their e-learning. A3 reported that most students agreed to join training to improve their pedagogical technology. The technology and online learning training are required to students whom have low levels of technology and communication competence (Adams et al., 2018; Espino et al., 2021). A4 found the men score 4.56 with the significance of two tailed .25. It meant that most students agreed and no-differences on integrating the online with the learning. Students are required to foster up and enhance their learning via online. A5 underlined the result that mostly students agreed to use online materials based as much as possible. It was demonstrated by the mean score 4.26 and the significance two tailed .68. It was in line with Destari (2010). She reported that the internet based material is more effective than the paper materials. Prasetyo (2021b) also asserted that students tended to gain positive attitudes during e-learning.

CONCLUSIONS

The findings revealed that students generally had positive perceptions, beliefs, and attitudes toward online learning, with mean scores above 3.50 across all indicators. Students perceived online learning as beneficial for improving English skills, motivation, autonomy, communication, and attention. They also believed that online learning provided varied learning environments, supported future learning goals, offered diverse learning resources, and was useful for English learning. Furthermore, students demonstrated positive attitudes toward online learning, including consistent use, confidence in using online platforms, willingness to receive further training, integration with lesson materials, and utilization of online resources. However, no statistically significant differences were found between male and female students across the indicators of perception, belief, and attitude ($p > .05$). These findings suggest that students shared similar experiences and evaluations of online learning regardless of gender. Educational stakeholders are encouraged to innovate teaching and learning instruments to prevent boredom and improve learning outcomes. Educators should also integrate online learning into lesson plans and align it with teaching topics, strategies, and media.

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