The Relationship between Age Groups and Perception of Online Learning

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ABSTRACT: The Coronavirus has disrupted teachings in many schools as they change from on-site learning to online learning. Although this has caused many difficulties, due to safety concerns of parents and multiple lockdown procedures, online learning is still being implemented. This led to a question of how students in different age groups perceive the benefits of online learning differently from each other. The main purpose of this study is to identify whether there is a relationship between age groups to establish direction for an opportunity to conduct future studies into the individual problems with online learning. To test this relationship, a google form was sent out as part of a cross-sectional study to online platforms, in which 253 participants from the age of 13 and above were randomly selected. To analyze the results, Statistical Product and Service Solution (SPSS) version 26 was used. The One-way ANOVA table was calculated, where it did not show any statistically significant difference between age groups in their perception of online learning (p=0.82).

KEYWORDS: Age groups, Attitude, Comparison, Online learning, Perception.

LITERATURE REVIEW

A study in India was conducted on the perception of online learning of a target population from different age groups, ranging from less than 20 to more than 40 (Pariwat Imsa-ard, 2020). It has found that, surprisingly, higher age groups are more open and accepting to online learning. More specifically, people in India liked how online studies offer advantages such as being able to set fixed study and leisure hours but disadvantages include the higher likelihood to procrastinate (Pariwat Imsa-ard, 2020).

A theory derived by Moore suggests that interaction is one of the most important factors of teaching and learning experience (Moore, 1989). Therefore, interaction while learning between the teachers and students should be applied to enhance student's perception and knowledge that comes out when learning online. This is supported by Tu's findings which claims that social interaction while learning is essential for successful learning as it promotes meaningful and productive lessons (Tu, 2002).

When looking at differences between onsite learning and online learning, satisfaction is one of the key differences between them. According to Zittle and Gunawardena, social interactions between lecturer and students contribute to their satisfaction (Tu, 2002). Therefore, because of how many online classes are not interactive, the overall level of satisfaction of students decreases significantly, leading to them having a bad perception of online learning.

INTRODUCTION

Coronavirus disease (COVID-19) is a highly infectious disease caused by the SARS-CoV-2 virus. The first official case was reported in Wuhan, China in December of 2019, and it has been spreading to many countries around the globe ever since (WHO, 2020). Thailand detected its first presence of COVID-19 in early January 2020 from a Chinese tourist, making it the first confirmed COVID-19 case outside of China (Cheung, 2020). After the initial spread of COVID-19 domestically, Thailand saw surge after surge of COVID-19 cases in the past 2 years of the pandemic. As of 27th February, 2022, the total number of COVID-19 cases and deaths were 2,869,616 and 22,891 respectively, with more than 20,000 new Covid cases daily for the past week (Bangkok Post, 2022). Not only did this affect society as a whole, but also affect many aspects of a nation such as the education sector (Burgess & Sievertsen, 2020).

Thailand, like many other countries, has suffered tremendously from the outbreak of the novel COVID-19 worldwide. Many countries have seen lifestyle changes to a more medically well-organized but paranoid society, which is called "New Normal". One such example of these changes is the implementation of more online classes for students of all ages worldwide to tackle the spread

of COVID-19. While online learning truly benefits the country in times of a pandemic, perceptions of students with different ages towards it are still divided with mixed attitudes (Imsa-ard, 2020).

In the light of widespread online learning implementations, this study aims at examining the relationship between participants of different age groups and their perceptions towards online learning. Despite the necessity of online classes, little attention has been given to students' perceptions of online learning and its relation to age groups. Hence, this study will compare between those two factors for better understanding of its relationship. It is hoped that this study will be beneficial for educators and researchers to understand the relationships and design classes accordingly to respond to different age groups' perceptions.

METHODOLOGY

A questionnaire containing 23 questions was designed to determine any statistical differences between different age groups and their perception of online learning. The questionnaire was distributed online to the participants through social media. The questionnaire was based on a study from Ramkhamhaeng University on online learning (Pariwat Imsa-ard, 2020). The participants of various age groups over the age of 13 were selected randomly. Our questionnaire contained a Likert scale from 1 to 5 (5 = prefers online learning) with 6 main topics, including (1) Perception towards the usefulness of online learning, (2) Perception towards instructors, (3) Perception towards availability and skills, (4) Perception towards eagerness to learn online, (5) Perception towards benefits from learning online and (6) Challenges from online learning. All the questions were checked by 3 experts and each question had a minimum Item-Objective Congruence (IOC) of at least 0.5 to ensure the internal reliability of the survey research (Rovinelli & Hambleton, 1977), Cronbach's alpha value was calculated and found to be 0.895. Our sample size consists of 253 participants, with 76 in the range of 13-15

RESEARCH QUESTIONS

In order to investigate the relationship between age groups and perceptions towards online learning, the following questions will be addressed.

1. Do different age groups affect perceptions towards online learning?
2. What is the relationship between age groups and perceptions towards online learning?

INSTRUMENTS

The following questions were sent out to participants to collect survey data.

Part 1: General Information
1. Please select your gender.
2. Please select your age.
3. Please select your educational level.
4. Please select your school program.

Part 2: Perception towards the usefulness of online learning
1. Online learning saves expenses.
2. Online learning enables easier time management.
3. Online learning promotes private time.
4. Online learning promotes accessibility to education.
5. Online learning encourages interaction between teachers and students.
6. Online learning supports unity in classes.

Part 3: Perception towards the instructors
1. Instructors could adapt to online learning easily.
2. Instructors could plan and organize learning materials effectively.
3. Instructors could clearly deliver lessons.
4. Instructors could sustain students' interests in online learning.
5. Instructors could help students when needed and provide useful feedback.

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Part 4: Perception towards availabilities and skills
1. I have the ability to use technological devices for online learning.
2. I have good devices that can access online learning.
3. I have sufficient internet connections to sustain online learning.
4. I did not face any problems during online learning.

Part 5: Perception towards eagerness to learn online
1. I prefer learning online to onsite.
2. Online learning is more effective than onsite learning.
3. I agree that adaptation of online learning should be done.

Part 6: Perception towards benefits from learning online
1. I gained more knowledge from learning online.
2. I think learning online can help boost my overall skills.
3. I think I could achieve higher marks from online learning in assessments.

Part 7: Challenges faced from online learning
1. I do not face technical issues, such as disconnection, during online learning.
2. I was easily distracted while attending online learning.
3. I felt demotivated by online learning.

RESULTS AND DISCUSSION

Table 1:- General information about participants (n=253).

Participants' demographic information		Frequency	Percentage (%)
Gender	Male	63	24.9
	Female	179	70.8
	Others	11	4.3
Age	13-15	76	30
	16-18	116	45.8
	19-22	34	13.4
	More than 22	27	10.7
Education level	Junior High School	75	29.6
	Senior High School	121	47.8
	Bachelor's Degree	48	19
	Master's Degree	7	2.8
	Doctor's Degree	2	0.8
School Program	Thai Program	166	65.6
	English Program	52	20.6
	International Program	19	7.5
	Others	16	6.3

Table 1 portrays the general information of our participants. The majority of them are females (70.8%), followed b y males (24.9%) and other genders (4.3%). Participants were mainly from the 16-18 age group (45.8%), followed by 13-15 (30%) and the rest from ages over (24.1%). Additionally, most of the participants were mostly studying in Senior high school (47.8%). Lastly, the majority studies in a Thai program (65.6%), followed by an English program (20.6%).

Table 2:- Descriptive Statistics (Mean and Standard Deviation)

Age	Mean	Standard Deviation	N
13 - 15	2.98	0.510	76
16 - 18	3.08	0.645	116
19 - 22	3.20	0.657	34
Over 22	3.31	0.799	27
Total	3.09	0.633	253

Table 2 illustrates the mean and standard deviation of different age groups from 253 participants. Participants aged between 13 to 15 (n=76) mean score was the lowest at 2.98 with a standard deviation of 0.510. This was followed by participants aged between 16 to 18 (n=116) with a mean score of 3.08 and standard deviation of 0.645. Participants between the age of 19 to 22 (n=34) had the second-highest mean of 3.31 and a standard deviation of 0.799. The highest mean and standard deviation, 3.31 and 0.799 respectively, belonged to participants with ages above 22. Overall, the mean of 3.09 represents a neutral perception towards online learning for all age groups (n=253) with a standard deviation of 0.633.

Table 3:- One-Way ANOVA Table

	N	Mean	Std. Deviation	F	Sig.
13 - 15	76	2.98	0.510	2.262	0.082
16 - 18	116	3.08	0.645		
19 - 22	34	3.20	0.657		
Others	27	3.31	0.799		
Total	253	3.09	0.633		

Table 3 shows that there is no significant difference between age groups on the perception of online learning. One-Way ANOVA test reveals that there is no statistical significance difference between the two variables with the p-value higher than 0.05, for the three conditions [$F(2, 249) = 2.262$, $p = 0.082$].

A study by (Pariwat Imsa-ard in 2020) which examined Thai university students' perceptions towards the abrupt transition to 'forced' online learning in the COVID-19 situation showed that there is no significant difference between different age groups among Thai participants. Despite having mixed attitudes, all groups examined in the study have negative perceptions towards online learning overall, with no direct correlation to each participant's demographics. The results correspond to our study which shows that age of participants is not a contributing factor to different attitudes towards online learning.

Our results show that there is no statistically significant difference between age groups and perception of online learning. This could be due to the small sample size in some age groups collected by the questionnaire, with only 27 participants aged over 22. Although the sample size for participants aged over 22 is smaller than other groups, they are neutral with a mean of 3.31. Although the mean is slightly higher, it is hard to conclude that older participants prefer online learning more than younger participants.

CONCLUSION

This research focused on the relationship between age groups and perception of online learning during the Coronavirus pandemic which is based on the hypothesis that age groups are related to the perception of online learning. After the questionnaire had been sent out, and the quantitative data were statistically analysed by SPSS, the results showed that there was no significant difference between age groups and perception of online learning. The data that we have found provide evidence that there is no significant difference in the perception of online learning in Thai students. In the future, we would like to study other factors that would affect the perception of online learning. For example, future research on different views of each gender on online learning could also be interesting.

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