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Exploring the Effect of School Authority Support on the Intention to Utilize Virtual Learning Environment from Teachers' Perspectives

Mazzlida Mat Deli[1]*, Hapini Awang[2], NurSuhaili Mansor[3], Shehu Malami Sarkin Tudu[4]

[1*]UKM-Graduate School of Business, UniversitiKebangsaan Malaysia
[2,3]Institute for Advanced and Smart Digital Opportunities, School of Computing, Universiti Utara Malaysia
[4]Department of Computer Science, Sokoto State University, Nigeria

Abstract: The Virtual Learning Environment (VLE) can potentially transform various educational activities, including online classes, tests, and teaching and learning. VLE typically uses web 2.0 technology to provide blended learning and remote learning. Due to its ability to foster dynamic learning and remove geographical and temporal constraints, VLE technology in education is seen as a potential innovation by its users, who are frequently parents, students, and teachers. Although the number of VLE applications is growing rapidly, the roles school authority support and instructors' intention to use remain a mystery. Therefore, the primary objective of this study is to understand and analyzethe school authority support and instructor's continuous intention to use the VLE. On this goal, we administereda survey to 70 teachers. The survey received 45 responses that met our criteria for analysis. The qualitative findings demonstrate that teachers believed that school authority support is vital in promoting the good quality of the information in VLE and teachers' continuous intention to use it. Thus, several strategies were suggested, including training, overcoming hindrances, promoting usage and providing support to teachers. Most qualitative respondents (58%) also agreed that SYQ should not be a predictor for ITU of VLE. Accordingly, they believed that other factors like technological resistance and hindrances are more influential in determining VLE continuous usage.

Keywords: school authority support, virtual learning, intention to use, VLE Success, E-Learning, ICT in Education

1. Introduction

Since information and communication technology (ICT) has been incorporated into education, the globe is experiencing significant changes in teaching and learning methods (Ghavifekr et al., 2014). As a result, many countries have quickly enhanced their ICT policies, support mechanisms, and infrastructure provisions (Hinostroza et al., 2018). This has led to the effective adoption of educational ICT projects in several contemporary countries, including Australia, the United States of America (US), the United Kingdom (UK), and Japan (Khan et al., 2015). Nevertheless, the gap between industrialized and developing countries has gotten wider due to this phenomenon. Most developing nations are still working to maintain ICT use, particularly among teachers (Cheok et al., 2017; Ibieta et al., 2017). Initiatives to incorporate ICT in education in specific nations run a high chance of failing without good planning and evaluation. In many educational environments, such as higher education institutions,virtual learning environments are e-learning technology used in schools (Mueller & Strohmeier, 2011). It is an online resource emphasizing various educational activities, including online classes, tests, and teaching and learning (Abdelhag & Osman, 2014; Jain, 2015). VLE typically uses Web 2.0 technology to provide blended and remote learning (Abdelhag& Osman, 2014). Due to its ability to foster

dynamic learning and remove geographical and temporal constraints, VLE technology in education is seen as a potential innovation by its users, who are frequently parents, students, and teachers (Nor Fadzleen et al., 2013; Uzunboylu et al., 2011). The literature has pointed out a few advantages of using VLE. First, it offers an easy learning experience by incorporating both conventional and virtual learning methods (Awang et al., 2020). For instance, unlike traditional classroom-based learning, quizzes and exams can be taken whenever and whenever. As a result, it provides both teachers and students flexibility while inspiring both groups. The VLE offers a better platform for parents to oversee their child's academic performance because it enables them to interact with teachers and keep track of school events (Rosemaliza et al., 2016). The VLE provides an excellent interaction platform between professors, parents, and students (Nor Fadzleen et al., 2013).This capability is undoubtedly one of the most intriguing features of a virtual learning environment (VLE) that can help strengthen intellectual composition and pedagogical practices by enabling discussion, collaboration, and resource sharing. The implementation of VLE technology in Malaysian schools was officially started with the use of Frog VLE in late 2012 (Norazilawati et al., 2013). Frog VLE's primary goal is to change Malaysia's educational system while closing the digital divide between urban and rural schools by linking them through an online learning community. In conjunction with Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025, the Frog VLE is anticipated to be used for at least 13 years (Cheok & Wong, 2014). However, despite the Ministry of Education (MOE) of Malaysia's ambitious plan to digitize education in Malaysia, the low level of VLE usage, particularly among teachers, has shockingly remained an unresolved issue (Bahagian Teknologi Pendidikan, 2017; Kementerian Kewangan Malaysia, 2014). As a result, MOE announced in June 2019 that the Frog VLE implementation would end and that Google Classroom would take its place as the country's official VLE platform (Kementerian Pendidikan Malaysia, 2019). Although the reasoning is unclear, it is conceivable that the decision was made due to numerous significant flaws in the Frog VLE installation that led to resistance, particularly among teachers (Cheok & Wong, 2016; Norazilawati et al., 2013; Thah, 2014).Recent data show that teachers generally intend to continue using Frog VLE (Awang, Zahurin, Yaakob, et al., 2018). Sadly, the study also made a worrying discovery, which indicated that low-intention users outnumber high-intention users by about a 2:1 margin (28.9% to 15.1%). This is likely due to several concerns, such as poor service and system quality, which discourage them from implementing it in teaching and learning routines (Cheok & Wong, 2016),in addition to the teachers' onerous burden (Awang, Zahurin, & Wan Rozaini, 2018).The VLE would be considered a failure despite the significant investments if teachers did not fully utilize it or did not yield the desired results (Ramayah et al., 2010). The prior evaluation studies should offer compelling evidence for MOE to decide whether to continue using the platform or stop (Hamilton & Chervany, 1981b, 1981a). In order to prevent an issue from becoming more complex and to minimize investment loss, it is permissible to stop using the Frog VLE.

Background

The core elements of student-centered cooperation, communication, creativity, positive values, and critical thinking are integral to the entire discipline of 21st-century learning. Surprisingly, VLE offers significant benefits over traditional classroom teaching methods to support these components (Al-Maroof & Al-Emran, 2018). As a platform for either distance, online, or blended learning, Google Classroom is a sort of VLE introduced in 2014 (Al-Maroof & Al-Emran, 2018; The University of Wales, 2015). Because it supports asynchronous pedagogy, which eliminates the requirement that teachers and students be physically present at the same time and location, this system's foundation is its ability to give users the flexible power to teach and learn without much consideration for typical obstacles like time, distance, and location. Due to the recent contract cancellation of the previous VLE platform, Frog VLE, Google Classroom has been implemented in Malaysia as compensation (Kementerian Pendidikan Malaysia, 2019).Comparatively speaking, both platforms offer similar capabilities, including assignment, communication, cooperation, and information distribution and are functionally identical. However, Google Classroom is a free web service that is simpler to use from the teacher's standpoint than the licensed Frog VLE, especially for Google app users (Beaumont, 2018). With the integration of other Google products like Google Drive, Gmail, YouTube, and many more, this VLE platform can provide an engaging and information-rich learning environment (Bondarenko et al., 2018). As familiar as it may sound, Google Classroom should offer Malaysian teachers a more practical and straightforward platform to use in order

to engage the students in exciting and enjoyable ways.Additionally, it is hoped that the teachers' prior exposure to the Frog VLE will make Google Classroom more acceptable to them. However, knowing the advantages and conversing with the technology would not ensure its success (Cheok et al., 2017). Google Classroom's usage should be the most accurate success measure for voluntary IS (Awang, Wan Rozaini, et al., 2018; Awang, Zahurin, Wan Rozaini, et al., 2018). Therefore, planning for a long-lasting deployment is crucial, especially at the school where Google Classroom will be used.Intention to use is the extent of teachers' intention to continue using the VLE platform, which will lead to its continuous usage. However, the complicated interrelationships between these components make it difficult to identify the ones that cause use intention (Mahmood& Jacquez, 2000). Despite this, it is still important to look at the authority of the school, teachers' intentions to use technology, and their attitudes toward these topics. As Marcinkiewicz (1994) so eloquently said, integrating computers into the educational system will never be feasible without resolving the conflict between school authorities and teachers' intentions to use computers. Studying teachers and the factors that led them to use computers will help us to encourage them to do so. To encourage and boost continuous intention to use, school authorities and education policymakers may benefit from researching the variables that predict intention to use. Instructors' continued usage of the VLE is essential to its implementation in teaching and learning. Numerous empirical researches have also been conducted to investigate the root causes of this issue. However, it is possible to find studies on school authority support for VLE usage. This shows that internal factor research is inadequate in the existing literature on VLE and that the abovementioned trend shows a pressing need for additional empirical studies.Although studies have shown that VLE has many benefits (van Raaij&Schepers, 2008; Herrador-Alcaide & Hernandez-Solis, 2016; Awang et al., 2018; Sanchez &Hueros, 2010; Alabdulkareem, 2015), there is an audit report which shows that the rate of using Frog VLE among teachers is still low with only 0.01% and 4.69%teachers who only use ICT less than an hour a week. According to an audit report, only 0.01% of teachers use the Frog VLE, and 4.69 percent use ICT for no more than an hour every week (MOF, 2014; Awang et al., 2018). However, this phenomenon can cause individuals to be unableto use these innovations, and they will gain from their utilization otherwise (Ewing& Milner, 2012). Therefore, the government cannot recoup its expenditures if teachers don't use the VLE platform consistently (Setterstrom, Pearson, & Orwig, 2012). Numerous IS intention-to-use studies have examined how VLE is implemented in various forms (Limayem,& Cheung, 2007; Polites & Karahanna, 2013; Venkatesh, Thong, & Xu, 2012). For instance, according to Ajzen (1991), establishing a connection between past and present behavior involving a specific innovation does not advance the theoretical knowledge of post-adoption study because it only illustrates the consistency of customers' usage patterns through time. In a different study, Limayem et al. (2007) disputed the indirect influence of individual habit on technology use via behavioral intention, saying there is "a lack of convincing rationale and a good theoretical framework."Awang et al. (2018) investigate how moderating the role of heavy workload deters teachers from intention to continue using Frog VLE. Findings indicate roughly more low-intention users (28.9%) than high-intention users (15.1%). This is undoubtedly a result of some problems, including subpar service and system qualities. Similarly, Cheok and Wong (2014) found that it relates to user satisfaction. In another study,Cheok and Wong (2016) reported that several teachers had complained about the subpar quality of the VLE, which indicates their discontent.

In the context of China, Li et al. (2021) partial least squares structural equation modeling (PLS-SEM) was used to evaluate the model. The goal was to understand learners' intent to continue studying in an online learning environment. The results show that while perceived value is a significant mediator for online learners' retention and directly affects their continuance intentions, service quality, course quality, and student-instructor interaction have indirect but positive effects on learners' intentions to continue learning online. However, interactions between students and with content do not affect in any way, either directly or indirectly, the intention of online learners to continue. Wang investigates the intention of university students to continue their online education during the pandemic. Partial least squares structural equation modeling confirmed the research hypotheses from 854 valid replies. The findings showed that the whole research framework explained continuing intention in substantial part. Following the COVID-19 epidemic, specific recommendations are made for higher education institutions on how to encourage online learning techniques.Some of this research on intention to use have concentrated on the psychological construct of behavior, which describes how much

people want to use the technology automatically as a result of learning (Lamaze, Hirt, & Cheung, 2007; Polites & Karahanna, 2013; Venkatesh, Thong, & Xu, 2012). The majority of the preceding study has focused on users' past individual usage patterns of certain IS developments and their intended purpose. For instance, the VLE would be considered a success despite the significant investments if teachers fully utilize it or if it yielded the desired results (Ramayah et al., 2010).We evaluate VLE's intention to use from the information systems (IS) ecosystem perspective and utilize the DeLone and McLean IS Success Model (D&M) of success as the theoretical foundation to close the abovementioned gap. An IS ecosystem is a subset of the IT landscape connected to one another in a particular use environment (Adomavicius& Gupta, 2008, p. 783)". IS innovations are often mutually dependent on interaction and usage (Swanson, 1994). This fits with success-based models. This study looks at how support from the school administration affects teachers' plans to utilize a VLE. Based on the preceding explanation, this study attempts to comprehend the assistance provided by the school administration in deciding the teachers' intention to use the VLE platform. Therefore, it is crucial to investigate how outside influences, such as support from the school administration, affect instructors' intentions to use the VLE platform. It is observed that the issue of VLE low usage has been consistently debated and discussed among previous researchers (Cheok et al., 2017; Ibieta et al., 2017; Rolando et al., 2013). Additionally, the empirical studies that investigate the contributing factors of this issue are also found in abundance (Cheok & Wong, 2016; Copriady, 2015; Kihoza et al., 2016; Solar et al., 2013; Surif et al., 2014). Nonetheless, a dearth of studies found on the role of school authority supports in determining the VLE continuous usage. This implies that the existing literature on VLE lies in insufficient research regarding the internal factor, while over-attention was given to the issue and its antecedents. It is noted that the topic of poor VLE usage has been repeatedly explored and disputed by earlier researchers (Cheok et al., 2017; Ibieta et al., 2017; Rolando et al., 2013).

Research questions

This study aims to understand the school authority support and teachers' intention to Use the Virtual Learning Environment in Malaysia. This section introduces two research questions to achieve this goal,each followed by a brief motivation.

RQ1: How could school authorities improve the information quality and intention to use VLE platforms?

Since most teachers are in rural areas, the teachers need to be motivated and encouraged by school authorities to embrace new technology in delivering teaching and learning. Hence, various school authority supportsare likely to influence teachers' intention to usethe VLE.

RQ2: What is the agreement on the prior quantitative finding of the study, the non-significant relationship between SYQ and ITU?

The VLE technology is changing rapidly, with new innovations and possibilities emerging daily in learning. Teachers are expected to accept it and intend to continue using it. To keep up with this rapid pace. Otherwise, they risk losing their relevance in the future educational system.

2. Research Methodology

Since the two research questions of this study are geared toward gathering teachers' opinions, we chose a survey as our research instrument. The remainder of this section describes the survey design, the participant selection criteria, pilot testing, data collection, and qualitative data analysis.

Survey

We designed the survey to keep it as short as possible while still gathering all relevant information. Our survey included questions to understand teachers' continued intention to use VLE. For the current paper, we only consider survey questions focusing on intention to use. Table 1 lists each survey question included in this paper, the research question that motivated its inclusion, and the answer choices provided.

Participant Selection

We successfully gathered 45 Out of 70 distributed open-ended questionnaires to ensure valid results. We identified this respondent based on the following four criteria:

Sampling

This study has collected qualitative data using an open-ended survey. Seventy questionnaire sets were distributed to the randomly selected respondents who were taken place in the prior quantitative phase.

Data Collection

After several considerations, including executing the Movement Control Order (MCO) during the COVID-19 endemic, this study collected qualitative data using an online open-ended survey. It is a fact that teachers' workload has dramatically increased throughout teaching and learning from home. Thus, only two open-ended and one dichotomous question were asked to encourage their participation by not taking too much of their valuable time. The gathered data were analyzed manually using thematic analysis.

Qualitative Data Analysis Process

For the open-ended questions, we followed a systematic qualitative data analysis process. First, two authors independently extracted the general themes from the 45 responses to each question. Using those themes, the authors had discussion sessions to develop an agreed-upon coding scheme for each question. Using this coding scheme, another author reviewed the remaining answers to determine any additional codes that need to be added. Hence, qualitative data collection and analysis were performed in the forthcoming sub-sections. Our study has made two shocking discoveries during phase one, which are (i) the relationship between SYQ and ITU is not significant, and (ii) SAS only moderates the relationship between IQ and ITU. Thus, the second phase explored the reasons behind these odd findings. The qualitative data collection was done from March 2021 until July 2021. Out of 70 distributed open-ended questionnaires, this study has successfully gathered 45 responses.

3. Results

The following subsections describe our survey results by answering the two research questions introduced. To help clarify the results, we also include excerpts from the qualitative responses to the open-ended questions. In a qualitative analysis, each open-ended response could match multiple codes. Therefore, the sum of the percentages can be greater than 100%.

RQ1: The Influence of School Authority Supports towards Information Quality and Intention to Use VLE Platforms?

The first question explored how school authorities could improve the information quality and intention to use VLE platforms. This supports the preceding quantitative analysis, which indicated that SAS moderates the relationship between IQ and ITU. From the thematic analysis, it is found that three respondents gave unrelated feedback and, thus, have been discarded from the analysis. Aside from that, the other 42 responses produced at least five themes. Most respondents agreed that school authority could influence the information quality and the intention to use VLE platforms, which supports the earlier quantitative discovery. Some of them (n=17, 37.7%) claimed that VLE platforms are beneficial for information dissemination from the school authority to teachers and students. These are some of their remarks:

"Pentadbirmestilahtahubilaperlunyamaklumatdisampaikanmelalui Google Classroom." (QR22)

(The school authority needs to know when to use Google Classroom [VLE]).

"Yang jelas, perkongsian input baharudapatdiperolehimelaluiaplikasi google classroom. Teknikdankaedahpembelajarandapatdibincangkandanmelakarsolusi demi keberkesanansesebuahpenyampaianpdpr." (QR8)

(What is visible [using VLE], new information sharing can be done [by school authority] through the Google Classroom application. Learning [teaching] techniques and methods can be discussed, and solutions can be suggested for the effectiveness of teaching and learning).

Next, 14 (31.1%) respondents stated that school authorities should promote VLE and encourage continuous usage among teachers. Several strategies were suggested, including (i) reminding teachers to constantly use VLE platforms, (ii) always using them for information sharing with teachers and students, and (iii) providing online training through VLE. These are some of their remarks.

"Pentadbirperlulebihkerapmenggunakannyauntukmenyampaikanmaklumat." (QR1)

(School authorities must use it [VLE] regularly to deliver information).

"Pentadbirperlumenggalakkan GC [Google Classroom] sebagaisatubudaya." (QR43)

"The school authorities should promote the usage of GC [Google Classroom] as a [school] culture."

Furthermore, 11 (24.4%) respondents believed that the support given by school authorities could influence the quality of the information provided in the VLE platform and strengthen teachers' continuous intention to use it, as seen in the following statements.

"Pihaksekolahtelahmelantik guru yang berkepakarandalanbidangteknologimaklumatuntukmemastikankeberkesananpenggunaannya." (QR31)

(The school has appointed teachers who specialize in the field of information technology to ensure its [VLE] effective use).

"Melaluibimbinganhasilpemantauan." (QR36)

(Through the coaching based on observation outcomes).

The thematic analysis also reveals that 5 (11.1%) respondents claimed that school authorities must overcome the hindrances of VLE implementation. This ensures that the platforms' sustainable usage can be achieved. These are some of their responses.

"Pentadbirsangatmenyokongcumakekangan internet untukmasukdalamtalian Google Classroom yang menjadimasalah." (QR24)

(School authorities are very supportive, but limited internet access to log on to Google Classroom becomes a problem).

"Muridtiadaperanti." (QR13)

([Some] students do not have gadgets).

Finally, some respondents (n=4, 8.8%) assumed that the provision of training by school authorities to teachers could shape their perceptions of information quality and VLE continuous usage, as understood by the following notes.

"Sokonganpentadbirsangatpentingterutamanyadalammemberilatihankepada guru untuklebihkompetenmenggunakanaplikasi GC ini. Selainitu, pentadbirjugaperlumemberiruangmasayglebihkepada guru agar pengajaranmenggunakan GC dapatdimaksimumkan." (QR44)

(The support from school authorities is very important, especially in training teachers to be more competent in using this GC application. In addition, they also need to give more time to teachers so that teaching using GC can be maximized).

"Tidakdiadakanbengkelataulatihanuntukmelatih guru caramenggunakan Google Classroom dengansebaiknya, menyebabkanramai guru yang kurangmahirdantidakminatmenggunakanya." (QR5)

(There are no workshops or training to train teachers on using Google Classroom properly, causing many teachers to be less skilled and uninterested in using it).

Figure 1 illustrates the responses on how school authorities could strengthen the information quality and teachers' intention to use VLE platforms.

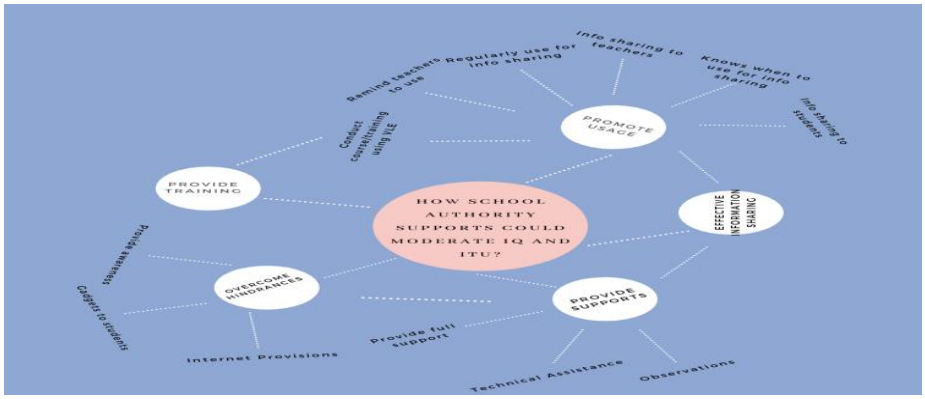

Figure 1.Responses on Open Ended Question1

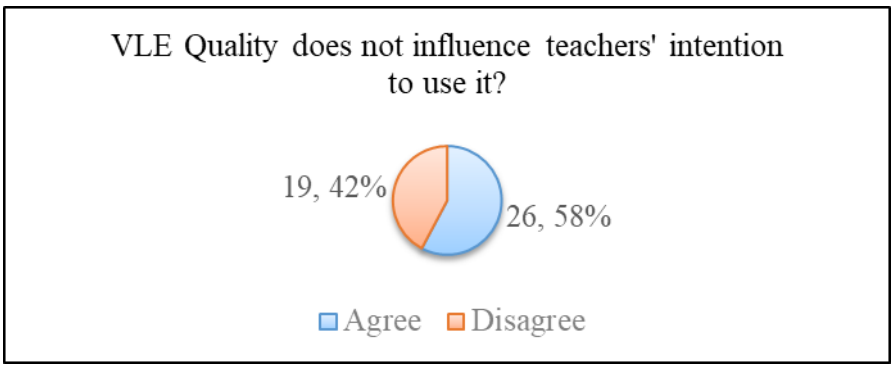

Figure 2. The Agreement on Hypothesis H2 Quantitative Finding

RQ2: The Quality of VLE Platforms is not a Predictor of Its Continuous Usage

The second open-ended question asked the respondents regarding their agreement on the quantitative finding of this study: the non-significant relationship between SYQ and ITU. Surprisingly, the majority (n=26, 57.8%) agreed, while others (n=19, 42.2%) disagreed with the statement, as shown in Figure 7. This relatively supports the finding on H2 hypothesis testing.

Justifications of Agreement and Disagreement

To reinforce the preceding finding on the agreement of the non-significant role of SYQ in influencing ITU of VLE (H2), the last open-ended question requested the respondents to justify the agreement or disagreement. From those who agreed, four responses were discarded due to invalid answers. Twenty-two more responses were coded into three themes. First, several respondents (n=2, 9.1%) claimed that resistance towards ICT innovations, such as VLE, is the main reason teachers refused to use VLE platforms. This is mainly due to their negative attitude towards all technologies, and not just limited to VLE. Hence, this group of respondents agreed that the quality of VLE does not influence their intention to use it, as understood from the following statements:

"Kurangpenggunaan di kalangan guru keranatidaksuka." (QR2)

(Less usage among teachers because [they] don't like it).

"Ramai guru yang tidaksukaguna." (QR15)

(Many teachers don't like to use it).

Furthermore, many respondents (n=16, 72.7%) believed that other hindrances like ICT illiteracy and lack of cooperation from other parties (students, parents, etc.) have a stronger negative impact on VLE continuous usage. These are some of their explanations.

"Perkarainidisebabkanbebarapafaktorantaranya guru tidakmempunyaikemahiranuntukmengaplikasikanpengunaanya, ketidakcukupanperanti di sekolahmahupun di rumah, kelemahandarisericapaian internet yang rendahsamaada di sekolahataudirumah." (QR3)

(This is due to several factors, such as teachers not having the skills to use it, the inadequacy of devices at school or home, and the weakness of internet access either at school or home).

"Kurangkerjasamadarimurid." (QR22)

(Lack of cooperation from students).

Finally, a group of respondents (n=4, 18.2%) also alleged that VLE is a good platform. Hence, continuous usage should not be influenced by its quality. This further relates back to previously discussed factors like resistance towards ICT innovations and other hindrances. These are a few of their remarks.

"Kualitigoogle classroom [VLE] bukanpuncautamamempengaruhimotivasiatauminatseseorang guru untukmengajardanberinteraksi. Google classroom banyakmembantupdprdanberjayamenarikminatpelajar untuk belajar secara maya." (QR14)

(The quality of Google Classroom [VLE] is not the main factor influencing a teacher's motivation or interest to teach and interact. Google Classroom greatly helps [pdpr] and successfully attracts students to learn virtually).

"Gc [VLE] bagusdanmenarikutkdigunakan." (QR8)

(Gc [VLE] is good and interesting to be used).

Meanwhile, one response was removed from the datasheet for the respondent group that disagrees on the same question due to an invalid answer. From the other 18 valid responses, two main themes have been successfully extracted. First, several respondents (n=7, 38.9%) disagreed with the quantitative finding because they considered the quality of VLE decent. Although they disagreed, the justification is similar to those who agreed, as apprehended from the following responses.

"GC [VLE] keseluruhannyaamatbaiknamuninfrastruktur ICTL [sic] dansosioekonomikeluargamuridmenjadikekangan." (QR44)

(Overall, GC [VLE] is very good, but the ICTL [sic] infrastructure and the socio-economy of the students' families are constraints).

"Google Classroom [VLE] sangatberkualitidanbergunakepada guru danmuridsekiranyadapatdimanfaatkansetiapfungsinya. Namun, seperti yang sayanyatakandiatasmasalah internet di kawasansekolah kami menyulitkanperkaraitudaripadaberlaku." (QR36)

(Google Classroom [VLE] has high quality and is useful for teachers and students if they can take advantage of each function. However, as I mentioned above, the internet problem in our school area makes it difficult for that to happen).

Similarly, another group of respondents (n=11, 61.1%) in this category said that VLE benefits teachers and students, and its quality is important. Thus, they disagreed that the quality of VLE is not a predictor of its continuous usage. These are their remarks.

"Kualiti GC [VLE] pentingkeranasesuatuaplikasiperlumemenuhikehendakpengguna yang manainiakanmemudahkanpenggunaseterusnyaakanmempengaruhikeinginanuntukmenggunakannya." (QS45)

(The quality of GC [VLE] is important because the application needs to meet users' needs, which will facilitate the use and affect the intention to use it).

"Google classroom [VLE] mempunyaibanyakfungsidansumbermembantu guru2 [sic] menyediakan PDPR denganlebih mudah." (QR34)

(Google Classroom [VLE] has many functions and resources to help teachers prepare PDPR more easily).

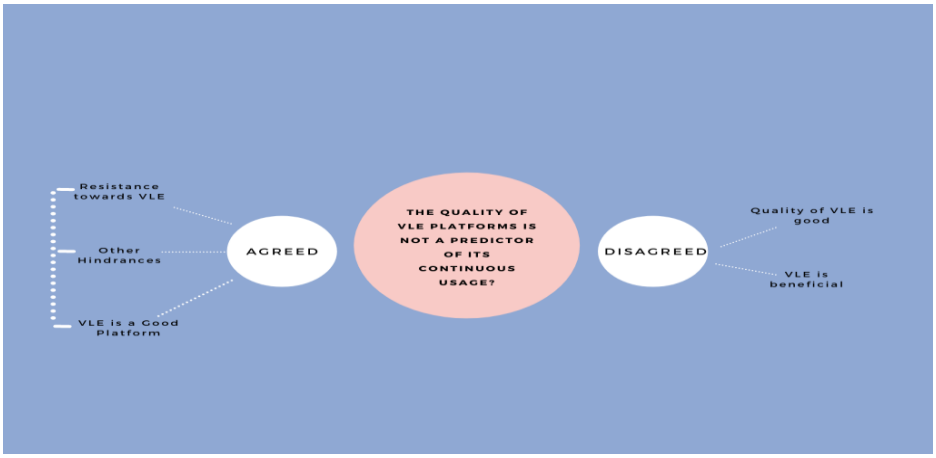

Figure 8 exemplifies the responses on the justifications of respondents' agreement and disagreement on quantitative finding (H2): There is no significant relationship between SYQ and ITU of VLE.

Qualitative Findings, Discussion and Recommendation

The discussion of the qualitative findings explains the overall interpretation and the meaning behind the thematic analysis results. It is important to consider the possible bias in these qualitative responses, especially when the data was collected using an open-ended survey. Nevertheless, it is the only workable option available due to the COVID-19 pandemic that has struck the country since mid-2020 until the present. Therefore, the result must be interpreted cautiously to reduce the effect of biases. First, knowing why SAS only moderates the relationship between IQ and ITU is interesting. The thematic analysis disclosed several interrelated themes, but they are all related to the strategies that school authorities could use to improve the quality of the information in VLE and how teachers' intention to use it sustainably could be enhanced. In general, all these themes proved that the role of SAS in moderating the relationship between IQ and ITU is legitimate. Despite the variations in their responses, all of them agreed that the IQ and ITU could be improved with the proper strategies of SAS. This would further lead to the continuous use of VLE platforms among teachers.Through qualitative investigation, it was found that most respondents agreed with this discovery. Apart from that, it is also revealed that those who disagreed also provided synonymous justifications. The teachers who agreed with this finding claimed that VLE quality is not an issue because it is good in many ways. Hence, they added several other challenges that might influence the intention to use VLE, including resistance to ICT innovations and other hindrances. Ironically, those who disagreed also provided the same justification. Another question now arises: why? The reason for this is unclear but may have something to do with the variation in their understanding of the question. This group of respondents might interpret differently, but they agreed that quality is not a concern, so it is still rational that SYQ did not predict ITU. In sum, it can be assumed that the quantitative finding is accurate and valid.

Threats to Validity

The primary threats to validity are related to sample selection. The respondents of our survey may not adequately represent all teachers. At the same time, our respondents come from different schools. Therefore, some of the opinions, especially the school support, may differ from those included in this study. However, the school authority support mentioned by our respondents covers a broad range, so school authority commitment in one school may be similar or different.

4. Conclusion

Generally, the findings in both stages of this study may help to understand the role of SAS in determining VLE continuous usage among teachers. Although qualitative investigation has successfully explained the reasons behind those unexpected findings. The findings have doubtless been much scrutinized. An immediately dependable conclusion from those findings is that the role of school authorities in shaping the successful implementation of VLE in schools is important.

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