

A New Lens to Media Competence of Gender Divide in Digitalized Era

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Abstract

Living in the information explosion era, media competence has been indicated as a possible strategy for addressing the problems of misinformation and fake news. Thus, being media literate has become important in this modern world. However, the gender digital divide which is the unequal access to media use among men and women has been identified as one of the forms of the digital divide. Besides, there is a disparity in knowledge delivery happen in between tertiary education and school level. University students and people in industries receive a better comprehensive knowledge of media competence; while at the school level, the focus was more on information and language literacy. Considering higher education plays an important role in shaping an individual's mindset, this study identifies the media competence of Malaysian university students and gender differences among them based on the competence of accessing, analyzing, evaluating, and communicating. In order to measure the differences between male and female undergraduates on the media competencies, descriptive analysis, and t-tests were conducted separately for each of the research questions. There are 362 university students participated in this study. An online survey is an instrument for data collection. The results show that there are no significant differences in the ability to evaluate and analyze between male and female undergraduates. In contrast, gender disparity is shown in the ability to access and communicate competencies, where females achieved better scores compared to males. This finding has reflected the insufficient media competence practice in the education system although university students are considered heavy media users in society. The result of this study is expected to contribute to relevant organizations or institutions to take effective measures to reduce the gender gap in media competence.

Keywords: media competence, gender divide, university students

INTRODUCTION

The development of media has turned the world into ‘global village’ which everything can be done with the touch of a finger. More information and news are overwhelmingly streaming into people’s perception at every second. The advancement of media has left positive and negative impacts to adolescence (Kattakamon & Sirirat, 2020; Supratman & Wahyudin, 2017). Living in the information explosion era, media literacy has been indicated as a possible strategy in addressing the problems of misinformation and fake news.

Majority of Malaysian university students are at the medium level of media literacy, they able to access information quickly and easily, however, they are unable to make more accurate assessment to the information on the media due to proper training and knowledge in media literacy, as well as create media content (Balraj & Khoo, 2006; Shin & Zanuddin, 2019; Wang, 2015) . Besides, Malaysian students without proper training and knowledge might encounter the problem lacked the critical competency skills to sieve through the enormous information overloaded in the mass media and Internet (Balraj & Khoo, 2006). In addition, they watch television passively without critically analysing the messages, students are unable to quote any examples of inaccurate or biased representation of the culture or subject matter in the programme (Prasad & Balraj, 2013). In comparison to Malaysia, Singapore youth was identified lacking of confidence with rapidly changing technologies and they lack of media production skills which enable them to produce meaningful media content confidently (Lim & Theng, 2011). In fact, media literacy had significantly influence on students’ social character. Low media competence may lead to low social character and increase the rate of cybercrime, in contrast, individual with high media competence has strong self-control on Internet addiction (Tetep & Suparman, 2019; Yang & Wang, 2019). This is further supported by Baboo (2013) who proposed media literacy should be more widely acknowledged within school and home setting as there is limited attention of media literacy education has been paid in Malaysia primary or secondary school, comparing to other western countries such as Canada, United Kingdom and so on (Baboo, 2013).

Zooming into the gender divide in media competence, it’s showed the inequality access of media use among men and women, the media competence level of female students is higher than the males (Akti & Gürol, 2012). There is stereotype in which women are perceived as less capable of gaining digital skills, this is in contrast to the research finding of Liu and Sun (2012), and Yaman (2020) that the media competence level did not differ significantly according to the genders (Alasarar, 2017; Ashrafi-Rizi, Khorasgani, Zarmehr, & Kazempour, 2014; Liu & Sun, 2012; Yaman, 2020). Abdul-Hamid & Mustaffa (2007) urged there was a vital need to impose media competence among women in Malaysia since the level was considered moderate (Abdul-Hamid & Mustaffa, 2007). All the above-mentioned studies have shown the relationship between gender and media competence across the world. Yet, there are limited studies about gender divide on media competence among Malaysian university students.

The finding of this study is expected to bring up the alertness of media competence to higher education through examining the level of competence among Malaysia's university students. In addition, to raise awareness about the gender equality among the university students. The study intends to answer the below research questions:

1. Research Question 1:
What is the media competence of Malaysia's university students?
2. Research Question 2:
Are there any gender difference affects media literacy of Malaysian university students based on access competencies, analyse competencies, evaluate competencies and communicate competencies?

LITERATURE REVIEWS

Media Competence

Media Competence is a set of integrated skills which enable users to actively access, analyse, interpret and question media messages (Ciurel, 2016) which should not be seen as a purely cognitive, rational affair; it also involves emotional response, enjoyment and cultural appreciation (Buckingham, 2005).

The competence refers to an individual's ability while conveying information to the public (Tetep & Suparman, 2019). It involves emotional response, enjoyment and cultural appreciation that embraces with several skills, including competence of access, analyse, interpret and question to media messages (Buckingham, 2005; Ciurel, 2016). The competence can be applied on traditional and new media channels (Literat, 2014).

Various scholars (Akçayoglu, 2019; Aufderheide & Rapoport, 1993; Bachmair & Bazalgette, 2007; Christ, 1996; Hobbs, 2011; Livingstone, 2003, 2004; Potter, 2004b; Tornero & Varis, 2010) have classified competencies into access, analyse, evaluate, and communicate. The description of the abilities as followed:

Access/Use

Access involves discovering and using appropriate media tools (Hobbs, 2010), reaching and sharing the targeted information via media tools (Hobbs, 2011), and comprehending and understanding to the meanings of media contents (Thoman & Jolls, 2003).

Analyse

The ability of analyse refers to separating message into meaningful elements (Potter, 2004b; Thoman & Jolls, 2003) In fact, individual uses artistic, literacy, social, political, and economic concepts to critically examine the structure, content, design, form, and sequence of information (Thoman & Jolls, 2003).

Evaluate

Evaluation refers to judging the value of an element which the judgement is made by comparing the element to some criterion (Potter, 2004b). It is the central focus of media literacy education (Hobbs, 2010; Schmidt, 2013).

Communicate

The ability of communication involve the skills of creating media messages and sharing them with others (Christ, 1996; Schmidt, 2013).

Media Competence and Gender

There are different views in the relationship of media competence and gender. A study on Norwegian children aged from seven to 12 years old found out that boy will access to new media more than girl (Brandtzaeg, 2005). Research finding from Aesaert and Braak (2015) provides different view that female primary school student performed better ICT skills than boys (Aesaert & Braak, 2015). However, research on student's self- perceptions about media literacy showed that there is no significant difference was found in perceived competence level based on gender or age among Turkish students (Akçayoglu, 2019). Both female and male students seemed to have relatively high media competence level in the result that enable them aware to media bias effect, in further, to develop an immune system towards information flood in digitalize environment (Akçayoglu, 2019; Babad, Peer, & Hobbs, 2012). Their result is consistent to the research finding of Balaban-Sali (2012) and Shin and Zanuddin (2019) in Malaysia context.

Moreover, another study also demonstrated that comparison between gender and the rate of media literacy showed no significant differences among Iranian university college (Ashrafi-Rizi et al., 2014). A research in China shows that there is no gender divide of digital media literacy among primary students (Zhang & Zhu, 2016). Liang (2011) also proposed that respondents are generally exposed to the same media environment in terms of accessibility and the significance of digital divide can be ruled out. Study in Serbia discloses that the members of Serbian academic community are sensitive in regards to gender in all components of media competence. Men achieved better results with significant differences in six components namely, performance and stimulation, negotiation, appropriation, play, collective intelligence, distributed cognition (Jasmina Arsenijević & Andevski, 2016). This result also fit to the study of Literat (2014) that there is significant difference in media competence regarding gender, indeed, men achieved better results in Play and Perspective and women in Transmedia Navigation. Moreover, Taylor & Dalal (2017) further indicated that female college students appeared to be more discerning than male college students in evaluating internet sources. The study also demonstrated that male students are more confident in the credibility and accuracy of the results returned by search engine (Taylor & Dalal, 2017).

METHODOLOGY

Quantitative research method is implemented in this study, whereas survey is the research design. The research instrument is 5-Likert Scale online survey which ranged from 1 (strongly disagree) to 5 (strongly agree). There is total 27 items in the questionnaire, all the items are adopted and adapted from various researchers, including Hallaq (2016), Simons, Meeus & T'Sas (2017), Rodriguez-de-Dios, Igartua & Gonzalez-Vazquez (2016), and Celot (2015). There are 362 university students participated for data collection. Simple random sampling technique is applied for data collection. Data analysis includes the independent sample T-test, and descriptive analysis are applied in this study. Descriptive analysis is used to identify the media literacy among Malaysian university students; whereas independent t-test is implemented to examine the gender divide on the media literacy.

FINDINGS AND DISCUSSION

There were 362 respondents in total, made up by 181 males and 181 females involved in this study. Their age from 18 to 24 years old. Every respondent had one to three social media accounts. In contrast to the participants in Akcayoglu & Daggol (2019) study, most of the respondents had heard the term "media competence". The participants were found to consider media competence was related to people or mediated content in cyberworld. Obviously, emergence of technology is associated to the understanding of media competence. This is can be explained that technology is the path for current university students reach to information. Likewise, Deal, Flores-Koulish, & Sears (2010) indicated that some of the participants interpreted the term media competence and used it synonymously with technology utilization. In contrast to the research finding of Phillips, (2012), there is a confusion about media literacy for undergraduate students as they are unable to identify media competence overall. Meanwhile, Table 1 shows the mean score to the items such as "Ability to log in to several social media sites", "Comparison to reliability and security of different media", "Judgement of media quality", and "Creation to media content" owns the highest mean in respective competence; whereas, "Awareness of user agreements towards online content post", "Evaluation to other's media skill/competencies", "Determination to media creation's objectives" are the lowest mean score in respective competence.

By comparing to the highest and lowest mean score in table 1, it is identified the inadequate of knowledge for university students while dealing with information. In fact, knowledge structure is a foundation of media literacy, these include knowledge relates to media effects, content, and industries, real world and self. An individual would be aware to his or her decision while seeking and working with information if possessing a strong knowledge structure (Potter, 2004a). Thus, education of media literacy should be widely acknowledged within school and home setting in Malaysia society as it had significantly influence to students' social character (Baboo, 2013 ; Tetep & Suparman, 2019).

Table 1: Mean score and standard deviation for all items

	N	Minimum	Maximum	Mean	Std. Dev
Competence of Access					
Specify the scope and select methods during the search.	362	1.0	5.0	3.76	0.80
Access to information effectively	362	1.0	5.0	3.76	0.85
Access information correctly, safely and professionally.	362	1.0	5.0	3.61	0.85
Ability to log in to several social media sites	362	2.0	5.0	4.56	0.70
Ability of using different source of information and media devices	362	2.0	5.0	4.24	0.79
Competence of Analyse					
Identification to sources of information	362	1.0	5.0	3.66	0.88
Interpretation to media purpose	362	1.0	5.0	3.76	0.81
Interpretation to the technique that draws attention	362	1.0	5.0	3.59	0.93
Analyse to the influences of mediated content	362	1.0	5.0	3.61	0.87
Comparison to reliability and security of different media	362	1.0	5.0	3.82	0.86
Competence of Evaluate					
Judgement of media quality	362	1.0	5.0	3.77	0.81
Judgement of media value based on credibility of media contents, provider and modernity.	362	1.0	5.0	3.75	0.81
Judgement of suitability, legality and ethic of mediated content	362	1.0	5.0	3.76	0.85
Awareness of user agreements towards online content post	362	1.0	5.0	3.32	1.08
Evaluation to other's media skill/competencies.	362	1.0	5.0	3.25	1.00
Competence of Communication					
Participation to public debate through media	362	1.0	5.0	3.41	1.06
Determination to media creation's objectives	362	1.0	5.0	3.32	0.99
Planning, designing, developing, and create media messages to audience	362	1.0	5.0	3.42	1.02
Presentation and publish media messages through different channels ethically	362	1.0	5.0	3.65	0.85
Creation to media content	362	1.0	5.0	3.89	0.97

The Ability of Access

Table 2 showed the result of gender divide in media competence based on the ability of access. The items "regular log in to several social media sites", and "access to information correctly, safely and

professionally” selected to perform t-test as they are the highest mean score and the lowest mean score respectively in competence of access.

Table 2: Result of T-test analysis of Gender Divide in Media Competence based on the Ability of Access

	Gender	Mean	Std. Dev	t	df	p-value	Mean Difference
Access to information correctly, safely and professionally	Female	3.63	0.87	-0.37	360	0.71	0.03
	Male	3.60	0.84	-0.37	359.61	0.71	0.03
Able to log in to several social media sites.	Female	4.69	0.59	3.76	360	0.00	0.27
	Male	4.42	0.77	3.76	337.66	0.00	0.27

The finding discloses that there was significant difference in “able to log in to several social media sites” between female (M= 4.69, SD=0.59) and male (M= 4.42, SD=0.77); $t(360) = 3.761$, $p=0.00$. However, there is no significant effect in “access to information correctly, safely and professionally” between female (M=3.630, SD=0.8699) and male (M=3.5697, SD=0.8418); $t(360) = -0.368$, $p=0.713$.

The finding of this study demonstrated an interesting result that university students regularly log in to several social media sites, however, Malaysian university students were lacking the skill of access information correctly, safely and professionally, which has further reflected the context in Malaysia. This is consistent to the finding of Pereira and Moura (2018), as young generation always obtain higher scores in accessing mass media it might create differences between what they think is the expected right answer and what they do in fact know (Pereira & Moura, 2018). Apart from that, female attained rather higher score than male in terms of the competence of access, which is in line to the finding of Aesaert and Braak (2015) that females are more aggressive than males in accessing mass media (Aesaert & Braak, 2015). Furthermore, the results had refuted previous Malaysian studies from Abdul-Hamid & Mustaffa (2007) that Malaysian female are inexperienced and lack of competency in high-level and more technical computer applications (Abdul-Hamid & Mustaffa, 2007). This could be indicated that female in Malaysia is more empowered by media technology and had advanced computer and Internet skills.

The Ability of Analyse

Table 3 showed the result of gender divide in media competence based on the ability of analyse. The items “comparison to reliability and security of different media” and “interpretation to the technique that draws attention” selected to perform t-test as they are the highest mean score and the lowest mean score respectively in competence of analyse.

Table 3: Independent T-test analysis for Gender Divide based on the Ability of Analyse

	Gender	Mean	Std. Dev	t	df	p-value	Mean Difference
Interpretation to the technique that draws attention	Female	3.60	0.92	0.23	360	0.82	0.02
	Male	3.58	0.94	0.23	359.83	0.82	0.02
Comparison to reliability and security of different media	Female	3.87	0.84	1.04	360	0.30	0.09
	Male	3.77	0.87	1.04	359.39	0.30	0.09

The results showed that there were no significant difference in “comparison to reliability and security of different media” between female (M=3.87, SD=0.84) and male (M=3.77, SD=0.87), $t(360) = 1.04$, $p=0.30$; and “interpretation to the technique that draws attention” which is female (M=3.60, SD=0.92) and male (M=3.58, SD=0.94), $t(360)=0.23$, $p=0.82$. University students were identified lack of the ability in analysing mediated content regardless of gender. This result is consistent to research finding of Ashrafi-Rizi et al. (2014) that university students are unable to select and use media purposeful (Ashrafi-Rizi et al., 2014). Ashley, Lyden, and Fasbinder (2013) further explain university students are unable to recognize promotional material although majority of them were able to identify the purpose of advertisement than video created for public relations, or by news organization (Ashley, Lyden, & Fasbinder, 2013). This may indicate that Malaysian university students were lack of environmental practices and educational training. It is caused by the neglect of media competence education either in Malaysian primary or secondary schools. Although the government had implemented critical thinking skills as elective subject for all university students in Malaysia, it is obviously insufficient for university students. Thus, ability of analyse is a common problem that happen among university students, it is irrelated to gender difference.

The Ability of Evaluate

Table 4 shows that the items “ability to evaluate another person’s skill/competencies” and “judgement of media quality through basic analysis” are selected to perform t-test as they are the highest mean score and the lowest mean score in the ability of evaluate.

Table 4: Independent T-test analysis for Gender Divide based on the Ability of Evaluate

	Gender	Mean	Std. Dev	t	df	p-value	Mean Difference
Ability to evaluate another person's skill/competencies.	Female	3.20	1.02	-0.79	360	0.43	-0.08
	Male	3.29	0.98	-0.79	359.43	0.43	-0.08
Judgement of media quality through basic analysis.	Female	3.80	0.84	0.59	360	0.56	-0.05
	Male	3.74	0.87	0.59	358.52	0.56	-0.05

The results showed that there were no significant difference in “ability to evaluate another person’s skill/competencies” between female (M=3.20, SD=1.02), $t(360)=-0.79$, $p=0.43$, and “judgement of media quality through basic analysis” which is female (M=3.80, SD=0.84) and male (M=3.74, SD=0.87), $t(360)=0.59$, $p=0.56$. Consistent with this finding, Taylor & Dalal (2017) demonstrated that females were more likely to evaluate the quality of site and quality of the writing in cyberworld although university students were identified relatively weak in evaluate competencies regardless of gender. Therefore, university level educators are suggested to consider a special emphasis on the ability of evaluate in media competence among university students.

The Ability of Communicate

Table 5 shows that the items “to determine objectives for media creation” and “to create media content (e.g., write an article, create a photo or video documents, set up a blog etc)” are selected to perform t-test as they are the highest mean score and the lowest mean score in ability of communicate.

Table 5: Independent T-test analysis for Gender Divide based on the Ability of Communicate

	Gender	Mean	Std. Dev	t	df	p-value	Mean Difference
To determine objectives for media creation.	Female	3.17	1.02	-2.962	360	0.00	-0.30
	Male	3.47	0.93	-2.962	356.78	0.00	-0.30
To create media content (e.g. write an article, create a photo or video documents, set up a blog etc)	Female	4.01	0.99	2.28	360	0.02	0.23
	Male	3.77	0.94	2.28	359.5	0.02	0.23

The results in Table 5 discloses that there was a significant difference between media competence and gender divide based on the ability of communicate. Result from “to determine objectives for media creation” demonstrated that male (M=3.47, SD=0.93) has statistically scored higher than female (M=3.17, SD=1.02), $t(360) = -2.962$, $p=0.003$. Moreover, as shown in “to create media content (e.g. write an article, create a photo or video documents, set up a blog etc)”, female (M=4.01, SD=0.99) attained higher score than male (M=3.77, SD=0.94), $t(360)=2.28$, $p=0.002$. In regards to communicate

competence, female students tend to have better achievement than male students. This could indicate that females are more aggressive in creating media content and sharing information through media.

This result is in contrast to the study in Turkey context, which found out that males use social networks more for initiating communication whereas female do not use social media for communicating significantly (Meşe & Gökçe, 2019). Although majority of university students able to create media content, such as news article, photo or video but it could not guarantee they understand the objectives of content created. Lim and Theng (2012) further explained that lack of media production skills might affect to students' confidence while producing a meaningful content under rapid changing environment (Lim & Theng, 2012).

CONCLUSION

Media competence is not a new discussion anymore under digitalized environment, however, there is less attention has paid on gender disparity to the competence. Results of this study reveals that female university students attained higher level of media competence than male based on the ability of accessing and communicating, indeed, this has been subverted to the stereotype in which women are perceived as less capable of gaining digital skills (Alasarar, 2017). Apart from that, another finding depicts there is no significant difference of gender disparity to the ability of analysing and evaluating which may reflect to the insufficient of media literacy practice throughout Malaysia educational system, although university students are considered as heavy media users. From the other hand, the result also brings out the issue of ability of analyse is a common problem that occur in among university students, it is relevant to gender difference. Therefore, it is suggested to employ qualitative or experimental research for future study in order to find out more in-depth understanding about the factors and causes to media competence of gender divide in digitalized environment. By doing so, it helps relevant organization or institution to take effective measures to reduce the gender gap of media competence, furthermore, to recognise the needs from both gender and target their actions accordingly.

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