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The Evaluation of an Online Peer Support Group on the levels of Internal and External Self-Confidence among Undergraduate Students during Covid-19 Pandemic: A Bandura's Theory of Self-Efficacy Approach

Nurul Afiqah Kamal Ariffin, Siti Adibah Waisulqarnai, Nur Sakinah Habibah Ahmad Fisal, Sharifah Amirah Fikriyyah Syed Lohikmal Hakim, Intan Nur Athirah Azman, Siti Nur Fatehah Safarazi, Syafiqah Nadhrah Sharif, Mohd Izzati Rezuan Abdul Penyul and Pamilia Lourdunathan

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ABSTRACT

The Covid-19 pandemic had a great impact on individuals of all walks of life in the aspect of psychosocial functioning particularly those from a B40 background as well as students. The main objective of this study was to evaluate the effectiveness of a psycho socio-spiritual educational support group using the Bandura's Theory of Self-Efficacy approach on the levels of internal and external self-confidence among 4th-year undergraduate IIUM students during the Covid-19 pandemic. It also aims to identify the issues of self-confidence from the participants during Covid-19. Seven 4th-year IIUM undergraduate students have been interviewed to identify the self-confidence issues and 22 participants (N=22) from the age of 22 to 24 years old were recruited via purposive sampling method to participate in the online peer support group. The present study used a mixed-method, exploratory approach with a quasi-experimental one-group pre-test-post-test design and a qualitative design. Two questionnaires have been utilized, the internal and external self-confidence scale by Kelsey Evelyn Perkins, and in-depth interviews employed five open-ended questions. The Likert scales consisted of 12-items that required participants to rate from 1 "strongly disagree to 7 "strongly agree." Data were analysed qualitatively by thematic analysis and quantitatively using Paired Sample T-test computed in the 26.0 version of Statistical Package for the Social Sciences (SPSS) with a P-value <0.5 considered statistically significant. There was a statistically significant increase in Internal Self Confidence pre-test score (M=55.64, SD=9.459) to Post-test (M=69.55, SD=9.012), $t(21)=5.670$, $p<0.05$ (two-tailed). There was also an increment for External Self Confidence pre-test score, (M= 41.00, SD=10.156) and post-test (M=50.18, SD=13.800), $t(21)=3.217$, $p<0.05$ (two-tailed) after the implementation of the online peer support group among undergraduate students during the Covid-19 pandemic. According to the current research, peer support might be a helpful tool to improve self-confidence among undergraduate students and broaden its function as a coping mechanism to improve the quality of life and well-being. The findings of this research will also shed light on the use of Bandura's Theory of Self-Efficacy in the fostering of Internal and External Self-confidence.

Keywords: Covid-19, self-confidence, undergraduate students, peer support group,

INTRODUCTION

The outbreak of Corona-Virus in 2019 witnessed the world evolve drastically, forcing everyone to live in a “new norm”. The education system is also susceptible to coronavirus infection; thus, the current education system has fostered a new apparatus of learning methods to ensure that all students are still accessible to education. When students attune themselves to the new learning modality, the level of their self-confidence seems to be afflicted as the shift changes are always time-consuming to adapt and acclimate. Self-confidence is an essential psychological construct that an individual needs to have in their life, especially for students to make daily routines more facile and contribute to their connectedness with the outer world. Perceiving self-confidence as a substantial construct will determine their academic performance, resiliency, venturing opinions, and intermingling with the crowd (Ballane, 2019; Cutuk & Cutuk, 2020). Thus, our suggestion for intervention to address this issue was developing a peer support group. Few studies have mentioned the effectiveness of peer support groups in dealing with psychosocial issues. (Hardy et al. 2019; Cabassa et al, 2017; Byrom, 2018).

This study is needed the most as past research is focused on chronic diseases such as diabetes mellitus (Peimani et al., 2018; Ghasemi et al., 2021; Johnson, 2021) and depression and anxiety (Mahlke et al. 2018; Tomasino, 2017; Baumel et al. 2018; Field et al., 2013; Ding & Yao, 2020), but the overall effectiveness of peer support across 4th-year undergraduates and self-confidence has not been considered. The literature on the effectiveness of peer support for individuals with self-esteem is relatively broad, but studies on the effectiveness of peer support for self-confidence were lacking. Hence the present study can contribute to the dearth of research on the effectiveness of peer support groups on internal and external levels of self-confidence.

Self-confidence is a common problem among many people, including university students, while being one of the most important. A past study by Stankov et al. (2013) refers to self-confidence as a belief that an individual has to accomplish tasks and achieve their desired objective. It is a state of being sure of their success on a particular behaviour. According to Kennett and Keefer (2006), self-confidence in students is when they show great self-control, work hard in facing failure and achieve goals to get better grades. In an academic context, Komarraju and Nadler (2013) refer to academic self-confidence as a belief to perform well in school. Besides, in a study regarding self-confidence among postgraduate students, the researcher delineated self-confidence as “self-confidence refers to an individual’s ability to act effectively in a situation to overcome obstacles and to get things to go all right” (Kalita, 2021, as cited in Basavanna, 1975). Self-confidence can be theoretically defined as “people’s sense of competence and skill, their perceived capability to deal effectively with various situations” (Uglanova, 2014 as cited in Shrauger & Schohn, 1995 p. 256). Meanwhile, self-confidence will be operationally defined using the Integrated Model of Self-Confidence scale by Perkins (2018).

In the light of religious teaching, particularly Islamic values, self-confidence is not about a belief of an individual in his ability to overcome struggles and do things right. However, it is on how man is clear of his innate life purpose. In surah Adh-Dhariyat verse 56, Allah said, “*I have not created the jinn, the spirits, nor the human beings, for any other purpose except to worship Me*”. From this verse, a Muslim should be cognizant of self-confidence as the construct is about having clarity of purpose in life and achieving something meaningful. Moreover, Allah guides human beings to realize that all creatures are the same, and their life purpose is also the same, but what makes someone different is how they execute or exercise the rulings or beliefs. Having a clear goal will make someone plan their life and write down

their objectives and the risks that they will encounter. They will also stand even more firm as the faith and certainty about themselves are planted in their heart and soul.

By instilling self-confidence in oneself, one will not discount the feeling of despair, grief, and hopelessness when they are lost or confused in their life journey. They are prone to welcome all those unpleasant feelings and believe that it is a way for them to realize that one's heart should rely on Allah and have faith that He will grant the strength of heart to the sincere one (*mukhlisin*) in his actions.

As this study executes a peer support-based intervention, one must have a clear view of the construct to ensure the study's reliability and validity. A peer support group in the recent study refers to "a group of people of approximately the same age who have similar interests, background, or social status. The members of this group are likely to influence an individual's beliefs and behaviours." (Spadafora et al. 2019). Another definition by Darby (2018) separately defined peer and support, which peer as an equal, someone with whom one shares demographic or social similarities. In contrast, support is "the kind of deeply felt empathy, encouragement, and assistance that people with shared experiences can offer one another within a reciprocal relationship."

As reported by Nurhayati et al. (2018), it can be stated that the existence of self-confidence in students is fundamental as it will allow students to be able to believe in the ability possessed, which to not give up easily in facing every problem and able to perform all tasks provided independently and with maximum results. Many past researchers have studied students' self-confidence. One of them is Parsons et al. (2011), who studied the self-confidence in mathematics of seven male engineering students in correlation with Bandura's self-efficacy theory. The results of the qualitative data analysis found that three of Bandura's four sources of self-efficacy were referred to by the students, in which enactive mastery experiences, vicarious experiences, and affective states, but not verbal persuasion, could be improved.

Moreover, Blanco et al. (2020) studied the relationship between self-confidence and self-efficacy among the randomly selected sixty students at the University of San Carlos, Cebu City, Philippines, who also engaged in online learning prior to COVID-19. The results showed a moderately high positive correlation between self-confidence and self-efficacy among the students while engaging in online learning. Therefore, it suggested that students who believe in their capacities are more likely to be more confident in themselves. Apart from that, another study by Jaaffar et al. (2019) on the relationships between self-efficacy, self-confidence, and self-esteem of 383 Malaysian undergraduates participating in Work Integrated Learning (WIL) programmes across five public universities. The results have demonstrated that self-efficacy and self-esteem have a positive and significant relationship with self-confidence. This study also confirms the moderating effect of self-esteem on the relationship between self-efficacy and self-confidence.

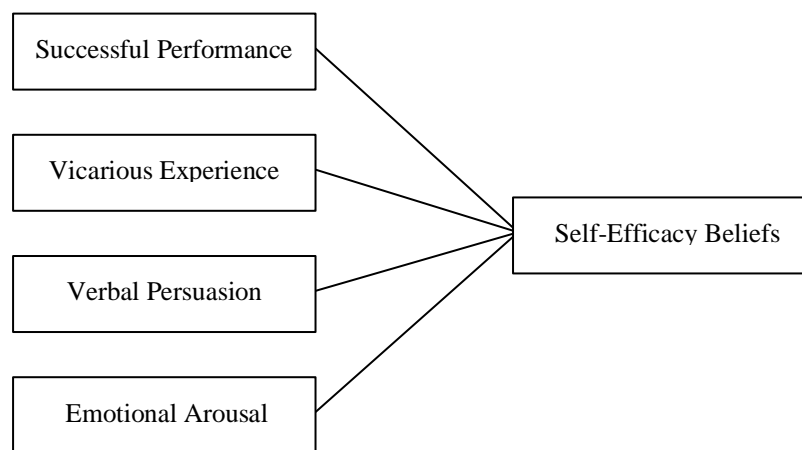
Other than that, a study by Saied (2017) examined the effect of using simulation on paediatric nursing students' knowledge, self-efficacy, satisfaction, and confidence. The study involved 158 third-year nursing students taking a paediatric nursing course. The researcher conducted simulation activities for the participants, and data was collected using the Learner Satisfaction and Self Confidence in Learning Questionnaire and General Self-Efficacy. The results found that self-efficacy is positively correlated with self-confidence and satisfaction. Thus, it can be concluded that having experience doing something can help build self-efficacy and increase the students' level of self-confidence.

A study by Kim and Kang (2016) examines learning self-efficacy's impact on nursing students' self-confidence. The data was collected from 231 university students in D city. The

results found that self-confidence and self-efficacy positively correlated with each other. Hence, students with high self-efficacy are likely to have high self-confidence. According to Kimhi et al. (2016), self-efficacy could lead to an increase in self-confidence. Another research by Kundu (2020) mentioned that students with high self-efficacy were more resilient in facing obstacles and had high levels of self-confidence, which affects their engagement and academic achievement positively in online education. Hence, the current study aims to examine whether the psycho socio-spiritual educational support groups using Bandura's Theory of Self-Efficacy can improve the internal and external levels of self-confidence among IIUM undergraduate students.

According to Bandura, there are four fundamental elements by which people gain information to influence their self-efficacy beliefs (Kiran & Sungur, 2012). The first and most crucial element of self-efficacy refers to successful performance, which provides feedback on individuals' capabilities. Actions perceived as successful typically raise self-efficacy, whereas those perceived as failures lower it (Joët et al., 2011). Next, vicarious experiences are gained by observing others, such as peers, who succeed at a task and are likely to believe that they, too, can succeed in the same task (Nicolaidou, 2012). Furthermore, verbal persuasion is the persuasive messages from peers, teachers, or parents that can influence their self-efficacy, which also can take the form of self-persuasion, such as self-talk. Lastly, emotional arousal and physiological arousals, such as stress, fatigue, mood, tension, emotion, and pain, can alter individuals' efficacy beliefs which influence their readiness in learning (Fong & Krause, 2014). The theoretical framework includes these four fundamental elements that discuss the development of high and low self-efficacy: i) successful performance, ii) vicarious experience, iii) verbal persuasion, and iv) emotional arousal, as shown in Figure 1.

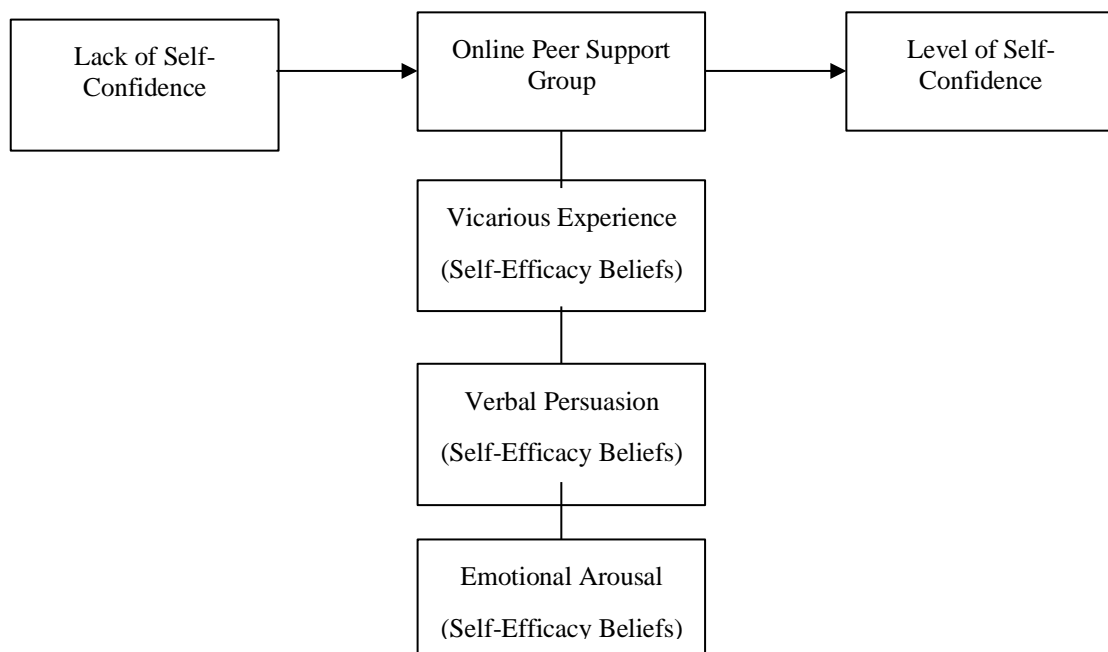
Figure 1: Bandura's Theory of Self-efficacy.



A conceptual framework is developed based on the model of Bandura's (1997) theory of self-efficacy above. The information presented in Figure 1 indicates that three of the fundamental elements (i.e., vicarious experience, verbal persuasion, and emotional arousal) are shown to effectively develop individuals' self-efficacy beliefs, which could also improve their self-confidence. As mentioned by Bandura, self-efficacy is defined as individuals' own judgments about their capabilities to establish and execute actions to acquire a certain target, where individuals are more likely to put themselves in certain situations if they think they are confident in executing those behaviours successfully (Baral & Arachchilage, 2019). Hence, self-efficacy and self-confidence appear to be used interchangeably, which suggests that

individuals' self-confidence could be developed through developing their self-efficacy beliefs. As stated by Pfitzner-Eden (2016), successful performance provides information about individuals' successes but also their failures, in which successful experiences increase self-efficacy beliefs, while experiences of failure lower them. Therefore, this present study reached an agreement to eliminate the first fundamental elements of Bandura's theory of self-efficacy (i.e., successful performance) in order to prevent lower self-confidence, as well as to only focus on positive fundamental elements approaches to improve self-confidence. The lack of self-confidence could be improved through online peer support groups, which utilise three of the fundamental elements of self-efficacy: i) vicarious experience, ii) verbal persuasion, and iii) emotional arousal, as is shown in Figure 2 down below.

Figure 2: The conceptual framework of the present study showing the intervening effect of the Online Peer Support Group on Self-Confidence.



Research Questions:

1. How do students perceive their internal and external self-confidence among 4th-year undergraduate IIUM students?
2. What is/are the issue(s) faced by the 4th year undergraduate IIUM students?
3. What is the effectiveness of the psycho socio-spiritual educational online support group using Bandura's Theory of Self-Efficacy approach?

Research Objectives:

1. To identify the issue(s) on self-confidence facing the 4th year undergraduate IIUM students.
2. To evaluate the effectiveness of psycho socio-spiritual educational support groups using Bandura's Theory of Self-Efficacy approach on the levels of internal and external self-confidence among 4th-year undergraduate IIUM students during the Covid-19 pandemic.

HYPOTHESIS

The hypothesis of this study is as below:

Null Hypothesis:

1. There will be no significant difference in means pre-test and post-test for students' internal self-confidence level.
2. There will be no significant difference in means pre-test and post-test for students' external level of self-confidence.

Alternative Hypothesis:

1. H1a: There will be a significant difference in the internal level of self-confidence among undergraduate students after the psycho socio-spiritual educational online support group sessions
2. H1b: There will be a significant difference in the external level of self-confidence among undergraduate students after the psycho socio-spiritual educational online support group sessions

METHOD

Study design

A mixed-method, exploratory approach with a qualitative and a quasi-experimental one-group pre-test-post-test design was employed in the present study which utilized a qualitative research study as well as a quasi-experimental study (Cresswell & Clark, 2008). An initial qualitative design via in-depth interview has been conducted before the quantitative design to allow the researcher to achieve the objectives of this study by acquiring greater depth and breadth information regarding the particular subject discussed (Almalki, 2016).

As for the quantitative study, participants were given the same scales at two different periods; 1) before participation in the online support group and 2) after participation in the online support group, in order to allow the researcher to track the changes in the population's performance. It also helped to reveal the pattern of changes of an individual throughout the period (Institute for Work and Health, 2015). The first online support group session was conducted on 19th November 2021, and the second online support group session was conducted on 3rd December 2021.

Participants

For the qualitative study, this study interviewed seven 4th-year IIUM undergraduate students (N = 7) to identify the issues that might arise from them. The participants were selected via purposive sampling method and probed with five questions during the interview session. The inclusion criteria for the initial method were IIUM students that were in their fourth year of study and not participating in the same or similar nature of study. Meanwhile, the exclusion criteria would be the IIUM students who are in their first to third year of study and have participated in the similar nature of study before.

This study succeeds in recruiting twenty-two participants (N = 22) within the age group of 22 to 24 years old for the latter method. This study approached the participants through purposive and snowball sampling to reach out through an online platform where each

researcher needed to find at least three participants. The participants also are encouraged to help in spreading the poster and viral messages of the online support group participation to their friends who have the same criteria. The inclusion criteria for the participants of this quantitative approach were 1) 4th-year undergraduate students of IIUM and aged between 22 until 24 years old. Meanwhile, the exclusion criteria would be the IIUM students who are in their first to the third year of study.

Measures

The presented study used the existing self-confidence scale by Perkins (2018). It consists of two different self-confidence subscales: the Internal Self-confidence Scale and The External Self-confidence Scale. The Internal Self-Confidence scale consisted of 12 questions, and it was divided into three sections of internal self-confidence measurements: self-efficacy, self-esteem, and self-compassion. Each question was required to answer with a level of response scale: 1- Strongly Disagree, 2- Disagree, 3- Somewhat Disagree, 4- Neither Agree nor Disagree, 5- Somewhat Agree, 6- Agree, and 7- Strongly Agree. The second subscale used in the study was The External Self-confidence Scale by Perkins (2018).

There are 12 questions and distributed into six external self-confidence measurements: affectivity, taking action, nonverbal communication, verbal communication, independence, and decisiveness. Each question can be responded with a level of response scale: 1- Strongly Disagree, 2- Disagree, 3- Somewhat Disagree, 4- Neither Agree nor Disagree, 5- Somewhat Agree, 6- Agree, and 7- Strongly Agree.

The interview session consisted of five questions and namely: 1. Self-confidence can mean different things to different people. What does self-confidence mean to you? (Perkins, 2018) 2. What factors have contributed to your sense of self-confidence? (Morowati Sharifabad et al. 2020) 3. How do students perceive self-confidence as an influence on general performance? (Ballane, 2019) 4. Describe how satisfied you are as an individual. 5. Does your satisfaction with yourself influence your self-confidence? (Ballane, 2019)

Procedure

During the initial qualitative method, seven fourth-year students were randomly selected for an interview to identify the issues faced on self-confidence. Data transcription has been conducted, and the information was posited into categories and themes using thematic analysis. The interview session only lasted for one session and ended with the debriefing of the project and the objectives. There were no further interviews being held with the same participants. Then, with the data obtained the researchers developed the modules of online peer support group sessions using the Bandura self-efficacy approach. Meanwhile, the poster was advertised, and the survey titled 'Online Peer Support Group on the Levels of Internal and External Self-Confidence among Undergraduate Students during the Covid-19 Pandemic' was distributed to all participants. The survey is estimated to be completed between 5 to 15 minutes and comprises five different sections, which are a) Demographic info, b) Consent form, c) Internal Self-Confidence Scale d) External Self-Confidence Scale e) Debriefing form.

This study's confidentiality and withdrawal rights have been explained at the beginning of the survey to avoid misunderstanding and discomfort during the research. Then, two online peer support group sessions were conducted through Google Meet to help the participants build their self-confidence. The first session involved five agendas, and the second one entailed four courses. The first session began with a briefing in which the overview, significance and tentative of the first session were explained. After that, the first activity, the introduction of self-confidence adapted from a study by Lundberg (2008) was conducted. During this activity,

the participants discussed their views on self-confidence with other participants through verbal and Mentimeter application; an online software provided interactive elements to the lecture, presentation, and recorded session. For instance, in this study, researchers selected Word Cloud to gauge participants' opinion. They were free to express and share their thoughts.

Next is watching the related self-confidence video, the Self-confidence Video activity adapted by a study from Nurasyah et al. (2021). The researchers share videos of inspired people talking about building self-confidence. Then, the researcher explains the content of the video and relates it with self-confidence. Two participants were selected to share their views and experiences regarding the video. The last main activity in the first session is the Imagery activity adapted from a study by Sari (2015). In this activity, participants were guided by the researcher's storyline to imagine a successful life and future with self-confidence. After that, the participants shared their emotions and experience regarding the activity. The researchers also discuss their emotions and how self-confidence could help the participants.

The first session ends with a simple relaxation exercise, some general feedback from the participants, a recap and conclusions made by the researchers, and a photography session. After a week, the second online peer support group session was conducted. As usual, the session begins with a Briefing and sharing session on self-confidence from the participants. Then, the Imagery activity was conducted twice as the last session, which served the same method and function to imagine their future confidently. The participants also share something that drives them to be confident. For instance, they share their feelings during a specific situation, what they imagine and how self-confidence can help them achieve many things in life.

Next, the second activity is titled "Positive You Journal" adapted from the study by Lim et al. (2005). In this activity, the host asked the participants to list three positive aspects through Jamboard within 5 minutes. The participants may include everything, no matter how small, insignificant, modest, or unimportant positive qualities they think they have. Then, the participants verbally elaborated the positive qualities that they had already shared on Jamboard to increase their self-confidence. The second session ended with a simple relaxation exercise, a recap, conclusions made by the researchers, and a photography session. Before the participants dispersed, the feedback survey consisted of 1) Post-test questions which are Internal and External Scales, 2) Debriefing sections and 3) Feedback questions were distributed at the end of the session. The collected data of the participants were keyed in and compared using IBM SPSS to analyse.

Data analysis

Paired Sample T-Test was selected as the statistical procedure to analyse this study statistically. Also, it was utilized to investigate the differences in the population means before and after the conduction of online peer Support Groups from a Sport Psychology approach on internal and external self-confidence levels among undergraduate students during the Covid-19 pandemic. The data collected from the participants were measured to determine whether the psycho socio-spiritual educational support group using Bandura's Theory of Self-Efficacy approach effectively affects the level of self-confidence among 4th-year undergraduate IIUM students during the Covid-19 pandemic.

This study harnessed the 26.0 version of Statistical 14 Package for the Social Sciences (SPSS) to analyse the data with a P-value $<.05$ considered statistically significant. Next, the thematic analysis was used to analyse the outcome of the interview session. It was applied to examine the issue faced by the target community during the Covid 19 pandemic for intervention purposes. Moreover, this design also was used to review participants' feedback

upon the online peer support session. The data from the interview were extracted and dissected into a systematic coding to identify the issues concerning. Then, the coded components were organized into more general divisions connected to broader themes.

Peer Support Group Model Development

Bandura's self-efficacy theory was used as a framework to develop the module for this peer support group. Self-efficacy refers to a person's confidence in his or her ability to execute the actions necessary to create particular performance outcomes (Bandura, 1997). Self-efficacy is the belief that one can exert control over his or her own motivation, conduct, and social environment: hence the use of this model in helping students with their self-confidence levels. According to Akram and Ghazanfar (2014), students grow their efficacy beliefs by observing others, in which models may play an influential role in developing individuals' self-efficacy beliefs. Therefore, vicarious experiences of Bandura's self-efficacy theory could help grow the participants' self-efficacy and self-confidence. Nurasyah et al. (2021) studied improving the self-confidence of counselling students through modelling information services, where they used modelling as the primary approach. The results showed an increase in the self-confidence of counselling students after being given modelling the way information services. Therefore, modelling techniques were incorporated in this peer support group module, where a modelling video in which a YouTube video helps to boost self-confidence was presented to the participants (Motivation2Study, 2021). The video was presented until timestamp 4.48, and the participants were encouraged to continue watching the video in their own free time as the link was given in the Google Meet chat box.

Furthermore, studies have indicated that emotional arousal is positively related to self-efficacy. Lin (2016) reported that individuals could also obtain an efficacy message from their physiological states, where unpleasant emotions are associated with poor performance. Besides, self-efficacy perception can be enhanced through physical strength development, stress reduction, positive thought patterns development, and positive mental interpretation of bodily states (Cioffi, 1991, as cited in Hendricks, 2016). Therefore, emotional arousal could influence individuals' efficacy and confidence. According to Sari (2015), in a study examining the relationship between imagery with intrinsic motivation, self-efficacy, and performance, and determining the effect of imagery on these variables, the result suggested that imagery is related to intrinsic motivation and self-efficacy and affects these two variables. Hence, the execution of imagery is the second technique in this module, as successfully applying a mental technique can positively influence self-confidence (Sari, 2015). The imagery scripts for both sessions were adapted from the past study (Williams et al., 2013).

Next, a study by Beatson, Berg, and Smith (2018) stated that verbal persuasion is an individual's beliefs that can be changed through positive words. In another study by WebbWilliams (2017), humans depend on other people, such as friends, family, and lecturers, to give positive evaluative feedback about their performance. Hearing positive and encouraging words from other people positively impacts one's self-confidence. This study uses verbal persuasion concepts to improve IIUM undergraduate students' self-confidence. The related activity was named Positive You Journal under the psychoeducation module. The activity was named after Lim, Saulsman, and Nathan (2005) for the Centre for Clinical Interventions. According to them, individuals tend to have negative views about themselves, leading to low self-confidence. 16 Participants were given a few minutes to think and share three positive qualities through Google Meet or Mentimeter. The flow of the program with module are as follow

Table 1

Summary of Sessions for the Online Peer Support Group

No.	Module	Sessions	Activities	Duration
1.	Self-confidence	1	Sharing session (Mentimeter/Jamboard)	10 Minutes
			Self Confidence Video (Vicarious Experience)	10 Minutes
			<i>Debriefing</i>	5 Minutes
			Imagery (Emotional Arousal)	10 Minutes
			<i>Debriefing</i>	5 Minutes
			Sharing session (Feedback)	10 Minutes
2.	Self-confidence	2	Sharing session (Mentimeter/Jamboard)	10 Minutes
			Imagery (Emotional Arousal)	10 Minutes
			<i>Debriefing</i>	5 Minutes
			Positive You Journal (Verbal Persuasion)	10 Minutes
			<i>Debriefing</i>	5 Minutes
			Sharing (Feedback)	10 Minutes

Table 1

Note. This table depicts a summary of the program.

FINDINGS

A Paired sample t-test was conducted to evaluate the impact of the intervention on a student's score on Internal Self Confidence and External Self Confidence. There was a statistically significant increase from in Internal Self Confidence score from pre-test ($M=55.64$, $SD=9.459$) to post-test ($M=69.55$, $SD=9.012$), $t(21)=5.670$, $p=0.000$ (two-tailed). The mean increase in Internal Self Confidence was 13.909 with a 95% confidence interval ranging from 8.808 to 19.010. Meanwhile, for the External Self-Confidence score from Pre-test ($M= 41.00$, $SD=10.156$) to Post-test ($M=50.18$, $SD=13.800$), $t(21) =3.217$, $p=0.004$ (two-tailed). The mean increase in the External Self-Confidence score was 9.182, with a 95% confidence interval ranging from 3.246 to 15.117. Both eta squared statistics (0.6) for Internal Self Confidence score and (0.3) for External Self Confidence score indicate a large effect size. Hence, based on the result of this study, it shows that there was a significant difference in means pre-test and post-test for students' internal and external self-confidence level with p-value < .05, thus both of the null hypothesis was rejected.

Moreover, to further strengthen the result, all participants were asked to fill in the feedback form after the program to perceive its effectiveness in embracing their sense of self-confidence. It contains open-ended questions which ask participants to describe the effectiveness of the program, its strength and weakness that need to be solved by the researchers. Based on the analysis from the feedback, five occupied themes were highlighted with most respondents expressing the positive feedback upon the program. The first theme was

positive personal growth where the participants agreed that the online peer support session has benefited them embracing self in a positive manner such as it helps in adopting the positive mindset, positive thought, resilience and subjection to a new experience. As mentioned by one of the participants, “*I’ve always thought that I was confident before, but this session made me notice that I have not been trying out new things due to fear. So, I’m glad to be reminded that failure can teach you success and you can always get back up after failing.*”

^(P35) Next, the second theme was *self-consciousness*. Most of the participants stated that they started to be aware and value themselves more after joining the session. As mentioned by participants, the session has given them the opportunity to learn about oneself, reflect upon it and love it for who they are. As quoted on their feedback, “*The session helped to remind me that everyone has struggles with self-confidence and that makes me more sure of where I am in life and I also feel comforted and seen.*” and “*It makes me appreciate myself even though I have many flaws. The 'flaw' I have can be my strength*”.

Thirdly, the occupied theme was *an effective approach*. The approaches that have been utilised throughout the session have been discussed thoroughly by the researcher as it needs to focus on enhancing the sense of self confidence among the participants. Thus, it can conclude that the approach used was favourable as it met with the objective and gave an impact toward them. Average participants stated that one of the activities which ‘self-confidence video’ has helped them in overcoming shyness and being more confident in front of people as mentioned by one of them, “*The committee of this programme had shared each slot with things or points that can boost my self-confidence such as videos of Priyanka Chopra and others, slot of Bro Izzat if I am not mistaken and many more. I hope that I can apply all of the things that I get from this programme in my daily life in order to overcome my self confidence in front of other people.*”. Apart from that, the session of “positive you journal” has made them feel safe and comfortable in sharing their thoughts and concerns that are hovering their life.

Furthermore, the theme discovered was *knowledge discovery*. One of the participants mentioned that the session has benefited her in increasing the sense of self confidence as she got to know others' perspectives upon the same issue she had and adopt it in her daily life. Lastly, the fifth theme identified was *motivation*. In this regard, the participants agree that the session has given them motivation and inspiration in increasing their sense of self confidence and confidently moving forward in their life.

There are also criticisms highlighted by the participants for the researchers to improve their peer support session in further. Firstly, some of the participants mentioned that the activities need to be varied and include any attractive activities such as online games. By this, it helps participants to enjoy the session and be more relaxed. Secondly, one of the participants mentioned the need for the facilitators to engage more with the participants as it is essential to build rapport and make them feel comfortable to share their thoughts.

DISCUSSION

This study set out to empirically study a) student’s perception of their internal and external self-confidence, (b) Issue(s) faced by the 4th year undergraduate IIUM students, and (c) the effectiveness of the psycho socio-spiritual educational online support group using Bandura’s Theory of Self-Efficacy approach. First, the data revealed the significant result for both levels of self-confidence, internal and external, perceived that peer support groups can be an effective mechanism in tackling the issue of self-confidence among undergraduate students. It also managed to identify concerns among the fourth-year undergraduate students in IIUM and acknowledge their perceptions of the internal and external level of self-confidence. The

expected hypotheses were that there would be a significant difference in the internal level of self-confidence and superficial level of self-confidence among undergraduate students after the psycho socio-spiritual educational online support group sessions. This result is inconsistent with the finding of the study of Perkins (2018), which stated that the student's sample did not apply to his findings that men scored higher on the internal and external self-confidence scales and subscales.

The differences in scores before and after the sessions could be derived from the implementation of Bandura's self-efficacy theory. There were four gist that this study magnified videlicet, successful performance, vicarious performance, verbal persuasions, and emotional arousal. The participants experienced affirmation events as the constructed module emphasized listing their capabilities and skills that they occupied. After the participants sensed the feeling, they witnessed that everyone tried to heal and aid each other in improving their self-confidence and actively engaged throughout the sessions. Then this stimulated them to do better. Followed by the verbal persuasion and affirmation that repeatedly articulated encouraged the participants to work on their self-confidence. Last but not least, the host will always begin the session by asking their current feelings to ensure that the participants are ready to refine the level of internal and external self-confidence.

The results of this evaluation suggest that a peer support group for undergraduate students with psychosocial issues such as a low level of self-confidence is feasible and practical. The peer support group has received favourable evaluation and satisfaction from participants. This study can serve as a point of reference for other universities and even research in Malaysia, where there is still a paucity of research in developing peer support services within the respective 24 communities. Although this study did not establish a standardized model for the procedure of peer support groups, the work may provide a general framework upon which to build such intervention.

The palpable limitations that tended to influence the findings were lack of study on measuring the internal and external level of self-confidence, study-oriented more on medical fields, and severe mental disorders.

Furthermore, the result from this study cannot be used to generalize the whole population of undergraduate students because of the limited number of participants. Only 22 participants represent undergraduate students, and all of them are 4th-year students. Future researchers should recruit more participants from every level of study to find out the effectiveness of peer support groups in improving self-confidence among undergraduate students. Having representatives from each level of study and various universities will help generalize the results for the undergraduate population in Malaysia.

From an Islamic perspective, the concept of self-confidence is aligned with the concept of Tawakkul. In Islam, trusting and believing in Allah's plan is like being Tawakkul. Allah has blessed humans with uncountable graces, and we need to recognize them without underestimating ourselves. Through self-confidence, we can put it in our mind that we can succeed and believe Allah will guide us through the rough path. We need to believe that we are one of Allah's creatures that have been given many blessings, and Allah will not pressure us with things we cannot bear. Perceived in Quran Surah Al-Baqarah, verse 286, "Allah does not burden a soul beyond that it can bear." Being Tawakkul can help us be independent and avoid underestimating our abilities. Believing in our ability and being confident in ourselves is vital to success.

CONCLUSION

A peer support group was successfully conducted to identify the internal and external self-confidence issues faced by 4th-year undergraduate students through an online platform. The study has also been conducted to evaluate the effectiveness of psycho socio-spiritual support groups using Bandura's Theory of Self-Efficacy. Twenty-two participants were recruited among 4th-year undergraduate students, and they were invited to join an online peer support group for two sessions. The support group was conducted to help them build their self-confidence through various activities such as discussing the meaning of self-confidence, sharing sessions through Mentimeter application, watching videos, simple exercises, writing journals, and imaginary activities. These activities help the participants to recognize their ability, charm, and positive qualities that help in boosting their self-confidence. The support group helps the participants to engage in the activities and boost their self-confidence. Also, it was suggested that the activities that require the participants to believe in their own abilities will help them to be more confident.

Based on the participant's feedback that has been collected through Google Form after both sessions, it shows positive feedback among respondents. Their feedback was grouped into five themes which are 1) Personal Growth, 2) Self Consciousness, 3) Motivation, 4) Effective Approach, and 5) Knowledge Discovery. Therefore, this peer support group helps the participants think and find their hidden strength in believing themselves. The study helps them build their self-confidence and discover new ways to exercise their positive thinking to become confident. The result of the statistical analysis shows a statistically significant increase in the participants' internal self-confidence and external self-confidence before and after the intervention. It showed that the current study was effective, and that the hypothesis was met.

For future studies in improving self-confidence using the approach from Bandura's Theory of Self-efficacy, it is recommended to use the method and modules toward an enormous population of undergraduate students to benefit many people. It is encouraged to recreate the study to the different demographics of the participants in order to tackle the limitation of this present study.

The current study contributes to helping the students to explore their abilities and become more confident with themselves through various activities conducted during the program. Peer support groups give opportunities to the participants to give support and share their concerns with a group of people with similar problems. In conclusion, it is hoped that this online peer support group will help students' self-confidence to be nourished due to these actions through various activities and approaches, potentially improving their lives and academic achievement.

REFERENCES

- Akram, B., & Ghazanfar, L. (2014). Self-efficacy and academic performance of the students of Gujrat University, Pakistan. *Academic Research International*, 5(1), 283.
- Almalki, S. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research-Challenges and Benefits. *Journal of education and learning*, 5(3), 288-296. <http://dx.doi.org/10.5539/jel.v5n3p288>
- Ballane, G. P. (2019). Understanding of Self-Confidence in High School Students (Doctoral dissertation, Walden University).
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Baral, G., & Arachchilage, N. A. G. (2019, May). Building confidence not to be phished through a gamified approach: conceptualising user's self-efficacy in phishing threat avoidance behaviour. In *2019 cybersecurity and cyberforensics conference (CCC)* (pp. 102-110). IEEE.
- Basavanna, M., A. (1975). A study on self-confidence as an attribute of self-concept. Unpublished PhD Dissertation, S.V. University, Tirupati.
- Beatson, Nicola J.; Berg, David A.G.; Smith, Jeffrey K. (2018). The impact of mastery feedback on undergraduate students' self-efficacy beliefs. *Studies in Educational Evaluation*, 59, 58–66. <https://doi.org/10.1016/j.stueduc.2018.03.002>
- Blanco, Q. A., Carlota, M. L., Nasibog, A. J., Rodriguez, B., Saldaña, X. V., Vasquez, E. C., & Gagani, F. (2020). Probing on the Relationship between Students' Self-Confidence and Self-Efficacy while engaging in Online Learning amidst COVID-19. *Journal La Edusci*, 1(4), 16-25.
- Byrom N. (2018). An evaluation of a peer support intervention for student mental health. *Journal of mental health (Abingdon, England)*, 27(3), 240–246. <https://doi.org/10.1080/09638237.2018.1437605>
- Cabassa, L. J., Camacho, D., Vélez-Grau, C. M., & Stefancic, A. (2017). Peer-based health interventions for people with serious mental illness: A systematic literature review. *Journal of psychiatric research*, 84, 80–89. <https://doi.org/10.1016/j.jpsychires.2016.09.021>
- Cox, R. (2012). *Sport psychology: Concepts and applications, Seventh Edition*. McGraw-Hill Education.
- Çutuk, S., & Çutuk, K. S. Z. A. (2020). Investigating the relationship between self-confidence, psychological resilience and problematic Internet use. *Studies*, 7(4), 48-58.

- Darby Penney, M. L. S. (2018). Defining “Peer Support”: Implications for policy, practice, and research. Retrieved from: https://www.mamh.org/assets/files/DPenney_Defining_peer_support_2018_Final.pdf
- Ding, X., & Yao, J. (2020). Peer education intervention on adolescents’ anxiety, depression, and sleep disorder during the Covid-19 pandemic. *Psychiatria Danubina*, 32(3-4), 527-535.
- Field, T., Diego, M., Delgado, J., & Medina, L. (2013). Peer support and interpersonal psychotherapy groups experienced decreased prenatal depression, anxiety and cortisol. *Early human development*, 89(9), 621-624.
- Fong, C. J., & Krause, J. M. (2014). Lost confidence and potential: A mixed-methods study of underachieving college students’ sources of self-efficacy. *Social Psychology of Education*, 17(2), 249-268.
- Ghasemi, Z., Yousefi, H., & Torabikhah, M. (2021). The Effect of peer support on foot care in patients with type 2 diabetes. *Iranian journal of nursing and midwifery research*, 26(4), 303–309. https://doi.org/10.4103/ijnmr.IJNMR_163_18
- Hardy, S., Hallett, N., & Chaplin, E. (2019). Evaluating a peer support model of community wellbeing for mental health: a co-production approach to evaluation. *Mental Health & Prevention*, 13, 149-158.
- Hendricks, K. S. (2016). The sources of self-efficacy: Educational research and implications for music. *Update: Applications of Research in Music Education*, 35(1), 32-38.
- Institute for Work and Health. (2015). Cross-sectional vs. longitudinal studies: Institute for Work and Health. Retrieved from Institute for Work and Health Web Site: <https://www.iwh.on.ca/what-researchers-mean-by/cross-sectional-vs-longitudinal-studies>
- Jaaffar, A. H., Ibrahim, H. I., Rajadurai, J., & Sohail, M. S. (2019). Psychological impact of work-integrated learning programmes in Malaysia: the moderating role of self-esteem on relation between self-efficacy and self-confidence. *International Journal of Educational Psychology*, 8(2), 188-213.
- Joët, G., Usher, E. L., & Bressoux, P. (2011). Sources of self-efficacy: An investigation of elementary school students in France. *Journal of educational psychology*, 103(3), 649.
- Kalita, G. (2021). Analyzing the Level of Self Confidence of the Post Graduate Students in Relation to Certain Variables. *Psychology and Education Journal*, 58(3), 1381-1383. https://doi.org/10.1007/978-3-319-16999-6_155-1

- Kennett, D. J., & Keefer, K. (2006). Impact of learned resourcefulness and theories of intelligence on academic achievement of university students: An integrated approach. *Educational Psychology*, 26(3), 441-457. <https://doi.org/10.1080/01443410500342062>
- Komarraju, M., & Nadler, D. (2013). Self-efficacy and Academic Achievement: Why do implicit beliefs, goals, and effort regulation matter? *Learning and Individual Differences*, 25, 67–72. <https://doi.org/10.1016/j.lindif.2013.01.005>
- Kiran, D., & Sungur, S. (2012). Middle school students' science self-efficacy and its sources: Examination of gender difference. *Journal of Science Education and Technology*, 21(5), 619-630.
- Kim. S., O. & Kang. B., H. (2016). The Influence of Nursing Students' Learning Experience, Recognition of Importance and Learning Self-efficacy for Core Fundamental Nursing Skills on their Self-confidence. *Journal of the Korea Academia-Industrial cooperation Society*, 17(8), 172-182. <http://dx.doi.org/10.5762/KAIS.2016.17.8.172>
- Kimhi, E., Reishtein, J. L., Cohen, M., Friger, M., Hurvitz, N., & Avraham, R. (2016). Impact of simulation and clinical experience on self-efficacy in nursing students: Intervention study. *Nurse Educator*, 41(1), 1-4. DOI: 10.1097/NNE.0000000000000194
- Kundu, A. (2020). Toward a framework for strengthening participants' self-efficacy in online education. *Asian Association of Open Universities Journal* 15(3), 351-370. <https://doi.org/10.1108/AAOUJ-06-2020-0039>
- Lin, G. Y. (2016). Self-efficacy beliefs and their sources in undergraduate computing disciplines: An examination of gender and persistence. *Journal of Educational Computing Research*, 53(4), 540-561.
- Lim, L., Saulsman, L., & Nathan, P. (2005). *Improving Self-Esteem*. Perth, Western Australia: Centre for Clinical Interventions.
- Mahlke, C. I., Priebe, S., Heumann, K., Daubmann, A., Wegscheider, K., & Bock, T. (2017). Effectiveness of one-to-one peer support for patients with severe mental illness—a randomised controlled trial. *European Psychiatry*, 42, 103-110.
- Morowati Sharifabad, M. A., Baghernezhad Hesary, F., Miri, M., Dastjerdi, R., & Sharifzadeh, G. R. (2020). Self-Esteem in adolescent girls: a qualitative study. *Women's Health Bulletin*, 7(2), 26-32.
- Motivation2Study (2021, May 10). CONFIDENCE - Best Motivational Speeches That Will Boost our Self Confidence. Youtube. <https://www.youtube.com/watch?v=wvdqAkwCThe>

- Nicolaidou, I. (2012). Can process portfolios affect students' writing self-efficacy?. *International Journal of Educational Research*, 56, 10-22.
- Nurasyah, Putri R. F., & Fitriani, E. (2021). Modelling the Way Information Service in Improving Guidance and Counseling Students' Self-Confidence.
- Nurhayati, N., Rosmayadi, R., & Buyung, B. (2018). Efforts to improve student's selfconfidence using collaborative learning model. *JPMI (Jurnal Pendidikan Matematika Indonesia)*, 2(2), 57-62.
- Parsons, S., Croft, T., & Harrison, M. (2011). Engineering students' self-confidence in mathematics mapped onto Bandura's self-efficacy. *Engineering Education*, 6(1), 52-61.
- Peimani, M., Monjazebi, F., Ghodssi-Ghassemabadi, R., & Nasli-Esfahani, E. (2018). A peer support intervention in improving glycemic control in patients with type 2 diabetes. *Patient education and counseling*, 101(3), 460-466.
- Perkins, K. E. (2018). The integrated model of self-confidence: Defining and operationalizing self-confidence in organizational settings (Doctoral dissertation).
- Pfitzner-Eden, F. (2016). Why do I feel more confident? Bandura's sources predict preservice teachers' latent changes in teacher self-efficacy. *Frontiers in psychology*, 7, 1486.
- Sari, I. (2015). An investigation of imagery, intrinsic motivation, self-efficacy and performance in Athletes. *The Anthropologist*, 20(3), 675-688.
- Shrauger, J. S., & Schohn, M. (1995). Self-confidence in college students: Conceptualization, measurement, and behavioral implications. *Assessment*, 2(3), 255-278. <https://doi.org/10.1177%2F1073191195002003006>
- Spadafora, N., Schiralli, K., & Al-Jbouri, E. (2019) Peer Groups. In: Shackelford T., WeekesShackelford V. (eds) *Encyclopedia of Evolutionary Psychological Science*. Springer, Cham. https://doi.org/10.1007/978-3-319-16999-6_155-1
- Stankov, L., Lee, J., Luo, W., & Hogan, D. (2013). Confidence: A better predictor of academic achievement than self-efficacy, self-concept and anxiety. *Learning and Individual Differences*, 22(6), 747-758. <https://doi.org/10.1016/j.paid.2013.07.006>
- Tomasino, K. N., Lattie, E. G., Ho, J., Palac, H. L., Kaiser, S. M., & Mohr, D. C. (2017). Harnessing peer support in an online intervention for older adults with depression. *The American Journal of Geriatric Psychiatry*, 25(10), 1109-1119.
- Uglanova E. (2014) Self-Confidence. In: Michalos A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_2624

- Williams, S. E., Cooley, S. J., Newell, E., Weibull, F., & Cumming, J. (2013). Seeing the difference: Developing effective imagery scripts for athletes. *Journal of Sport Psychology in Action*, 4(2), 109-121.
- Webb-Williams, J. (2017). Science self-efficacy in the primary classroom: Using mixed methods to investigate sources of self-efficacy. *Research in Science Education*, 48(5), 939-961. <https://doi.org/10.1007/s11165-016-9592-0>
- Kasmani, M. F., Sabran, R., & Ramle, N. (2014). Can Twitter be an effective platform for political discourse in Malaysia? A study of# PRU13. *Procedia-Social and Behavioral Sciences*, 155, 348-355.
- Leong, P. P. Y. (2015). Political communication in Malaysia: A study on the use of new media in politics. *JeDEM-eJournal of eDemocracy and Open Government*, 7(1), 46-71.
- Ler, L. [lynnieler] (2018, May 8) How privileged must you be if you can choose to detach yourself from your country's politics ... [Tweet] Retrieved from <https://twitter.com/lynnieler/status/993889605626814464>
- Linvill, D. L., Boatwright, B. C., Grant, W. J., & Warren, P. L. (2019). "THE RUSSIANS ARE HACKING MY BRAIN!" investigating Russia's internet research agency twitter tactics during the 2016 United States presidential campaign. *Computers in Human Behavior*, 99, 292-300.
- Lodge, M., & Taber, C. S. (2013). *The rationalizing voter*. Cambridge University Press.
- Miranakajima [miranakajima] (2018, May 10) AW LOOK AT BOTH TUN DR. MAHATHIR AND TUN DR. SITI HASMAH!!! ... [Tweet] Retrieved from <https://twitter.com/miranakajima/status/994588715115675648>
- Mejova, Y., Srinivasan, P., & Boynton, B. (2013). GOP primary season on twitter: popular political sentiment in social media. In *Proceedings of the sixth ACM international conference on Web search and data mining* (pp. 517-526). ACM.
- Metaxas, P. T., & Mustafaraj, E. (2012). Social media and the elections. *Science*, 338(6106), 472-473.
- Mitchell, A., & Guskin, E. (2013). Twitter news consumers: Young, mobile and educated. *Pew Research Journalism Project*, November, 4.
- Pocahontas [pookoonhontas] Can I know why for the past elections, the new term PMs were sworn in right away... [Tweet] Retrieved from <https://twitter.com/pookoonhontas/status/994548139641090048>
- Reese, S. D. (2001). Understanding the global journalist: A hierarchy-of-influences approach. *Journalism studies*, 2(2), 173-187.

- Reese, S. D., & Shoemaker, P. J. (2016). A media sociology for the networked public sphere: The hierarchy of influences model. *Mass Communication and Society*, 19(4), 389-410.
- Sani, M. A. M. (2014). The Social Media Election in Malaysia: The 13th General Election in 2013. *Kajian Malaysia: Journal of Malaysian Studies*, 32.
- Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the Message*. White Plains NY.
- Small, T. A. (2011). What the Hashtag? *Information, Communication & Society*, 14(6), 872-895.
- Sweetser, K. D., & Lariscy, R. W. (2008). Candidates make good friends: An analysis of candidates' uses of Facebook. *International Journal of Strategic Communication*, 3(2), 175-198.
- #TeamRayaKajang [mumuedstar]. (2018, April 28) I thought Azwan Ali was the worst candidate for #PRU14... [Tweet] Retrieved from <https://twitter.com/mumuedstar/status/990061915593297920>
- theikrammasiri [ikram_masiri] (2018, May 8) Esok pangkah PAKATAN HARAPAN #PRU14 [Tweet] Retrieved from https://twitter.com/ikram_masiri/status/993824607135150082
- Trilling, D. (2015). Two different debates? Investigating the relationship between a political debate on TV and simultaneous comments on Twitter. *Social Science Computer Review*, 33(3), 259-276.
- Twitter (2018) What are "top" Tweets? Available at: < <https://help.twitter.com/en/using-twitter/top-search-results-faqs>> Accessed date: 25 September 2018
- Vaccari, C., & Valeriani, A. (2015). Follow the leader! Direct and indirect flows of political communication during the 2013 Italian general election campaign. *New Media & Society*, 17(7), 1025-1042.
- Vaccari, C., Valeriani, A., Barberá, P., Bonneau, R., Jost, J. T., Nagler, J., & Tucker, J. (2013). Social media and political communication: a survey of Twitter users during the 2013 Italian general election. *Rivista italiana di scienza politica*, 43(3), 381-410.
- Yaqub, U., Chun, S. A., Atluri, V., & Vaidya, J. (2017). Analysis of political discourse on twitter in the context of the 2016 US presidential elections. *Government Information Quarterly*, 34(4), 613-626.
- Yoong [yoongkhean] (2018, May 8) *I don't know about you, but the fact Najib thinks candies ...* [Tweet] Retrieved from <https://twitter.com/yoongkhean/status/993862112286920705>

Yoong [yoongkhean] (2018, May 8) *Dr M giving the speech of his life ...* [Tweet] Retrieved from <https://twitter.com/yoongkhean/status/993860709074198529>