THE EFFECTS OF SOCIAL COMPARISON ORIENTATION ON PSYCHOLOGICAL WELL-BEING AMONG UNIVERSITY STUDENTS

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Abstract

University student's psychological well-being is reported to be highly affected during the Covid-19 outbreak. To further explore the engagement between the sources of one's deflating well-being during this pandemic, this study was conducted to investigate the influence of social comparison orientation (SCO) on one's psychological well-being (PWB). A total of 401 undergraduate public university students in Malaysia participated in this study through the convenient sampling method. This study was a cross-sectional and correlational study which used quantitative data for analysis. The instruments used were Iowa-Netherlands Comparison Orientation Measure (INCOM) and shortened 18-items version of Ryff's Psychological public university. Regression analysis showed that there is a significant effect of SCO on PWB among students in public universities. It was found that high level of ability-based SCO will decrease PWB while high level of opinion-based SCO will increase PWB among public university students. In conclusion, this study highlighted the negative and positive effects of SCO on student's PWB through upward social comparison theory and social cognitive theory in higher-educational institution level. As to fully utilize the positive effects of opinion-based SCO, this study recommends public universities in Malaysia to develop a strong social support group as a platform for students to increase their PWB by feeling affiliated.

Keywords: Social comparison, psychological well-being, Iowa-Netherlands Comparison Orientation Measure, Ryff's Psychological Well-Being Scale

■ 1.0 INTRODUCTION

The sudden outbreak of the coronavirus has greatly impacted various aspects of our psychological and mental health (Farooq et al., 2020; Fitzpatrick et al., 2020; Marroquín et al., 2020; Masciantonio et al., 2021). During this pandemic, people were constantly anxious and worried about their health, financial problems due to the economic downturn and the unpredictable future within the catastrophic times (Satpathy & Ali, 2020). Additionally, the various changes of routine and lifestyles, as well as the quarantine or isolation period have peaked up people's anxiety and stress level, especially among college students who are constantly uncertain about their future (Satpathy & Ali, 2020; Sundarasen et al., 2020). Various findings from multiple researchers have consistently reported the declination in PWB among young adults (Eden et al., 2020; Ruggieri et al., 2021; Satpathy & Ali, 2020; Sundarasen et al., 2020), proving that young adults are among the largest that are being psychological affected.

Given the situation of this covid-19 pandemic, people especially young adults have opted to use social networking sites(SNSs) as their daily tools to communicate and stay connected with other people (Ruggeri et al., 2020). It has also been foundthat young adults with high levels of anxiety use social media as their coping-based strategies to curb the effects of social distancing during Covid-19 (Eden et al., 2020). Unfortunately, the use of social media has long been associated with the negative influence to the Psychological Well-Being (PWB) of the users like the increase of negative feelings and respond such as envy, social anxiety, lack of sleep and distractions (Priyadarshini et al., 2020; Sriwilai & Charoensukmongkol, 2016). This is because social networking sites provide an ample platform for its users to gain information about other people to make adequate social comparisons. Toworsen the condition, usually, SNSs users will only show the positive and favourable side of themselves in social media, consequently, increasing the tendency for others to engage with an upward social comparison that would more likely evoke negative feelings (Vogel et al., 2015). This, it is no surprise that social comparison activities are known as one of the greatestpredictors to one's deteriorating PWB (Liu et al., 2019; Pang, 2021).

Furthermore, based on one previous research conducted by Robinson and Eid (2017), it was found that, when a person feels threatened or anxious with themselves, they tend to make social comparisons to maintain their wellbeing or to re-establish their self-esteem. Given the prolonged unpleasant experiences and difficulties faced by people during this pandemic, most people have lower psychological motivation and higher levels of stress and anxiety (Sundarasen et al., 2020). Higher levels of stress and anxiety lead to an increased level of social comparison tendencies as people need to constantly compare themselves with other people to make self-evaluation and judgement. This is because, in stressful situations, people tend to make social comparisons to affiliate themselves to a social group that are like themselves to demote their anxiousness (Ruggeri et al., 2020). Hence, it could be said that people are more prone in making social comparisons during this Covid-19 pandemicera to alleviate their positive feelings from uncertainty (Ruggeri et al., 2020).

Furthermore, the individual's level of Social Comparison Orientation (SCO) will determine the degree of how the individual will be affected by the comparison outcomes (S. Schneider & Schupp, 2011). According to research regarding cultural variability and its effects on social comparison tendencies, it was found that cultural background influences the individuals' sensitivity to conduct social comparison behavior (Kang et al., 2013). This shows that our cultural background, nationality, and environment may influence one's social comparison tendencies and may bring different psychological effects on the person. Thus, the findings of the studies regarding SCO and PWB conducted in different countries with different cultural backgrounds may not be valid when applied to Malaysian society. Besides, the research of these variables is still underdeveloped in Malaysia. Therefore, to study whether SCO could be a reliable predictor to the PWB within the Malaysian population, a more thorough study regarding this subject comprises Malaysian as the subject of participants should be conducted more specifically.

In addition, according to the statistics provided by the Malaysian Communications and Multimedia Commission (MCMO) in 2020, it is stated that 45.9% of internet users are aged between 20-29, which is the highest compared to other groups of age. This indicates that in Malaysia, young adults are more prone in engaging with social comparison behavior as they are exposed to more information to compare themselves with other people since they make up most of the users on various social networking sites (Hassim et al., 2020). Therefore, studies regarding SCO and its effects on PWB should focus on young adults as they are more related and more likely to get affected by the outcomes of social comparison.

Moreover, there is also a discrepancy in findings among various previous researches regarding the effects of SCO to PWB. Various findings associated high SCO with negative PWB due to the occurrence of negative emotions like envy and fear of missing out (Civitci & Civitci, 2015; Hunt et al., 2018; Pang, 2021; M. D. Robinson & Eid, 2017). However, there are also studies that argued differently, in which they suggested that SCO can also heighten one's PWB through the evocation of benign envy that motivate and inspired people to improve themselves (Van de Ven, 2017; Fam et al., 2020) as well as the enhancement of social adaptations skills and positive relations with other (Miao et al., 2018). Therefore, a further study should be conducted to clarify and provide some extension of findings of the body of research.

Besides, most previous researches focused their studies on the mediator factor of social comparison tendencies and to the hedonic or subjective well-being of a person (Pang, 2021; Stapleton et al., 2017; Tian et al., 2017; C. C. Yang, 2016). Only few examine the direct effect of SCO to the specific dimension of an eudaimonic construct of a PWB model. To identify whether social comparison orientation is a predictor or protective factor of negative PWB, it is crucial to study how the differences in SCO gives an impact to each eudaimonic element of PWB.

Based on past studies, Leon Festinger (1954) was first to define social comparison as a process of comparing oneself to another individual or a group of people for the purpose of self-evaluation or self-enhancement. Meanwhile, social comparison orientation (SCO) refers to one's tendencies in making social comparison based on their opinion or abilities to other people (Civitci & Civitci, 2015). This is based on Gibbons and Buunk (2006) theory of SCO that stated one's tendencies in making social comparison, differ from a person to another person, in terms of its frequency and orientation. In this study, SCO is referred to the as a reliable individual characteristic of one's inclination to engage with social comparison behavior based on two types of aspects, which is ability-based and opinion-based. Following this, ability based social comparison is perceived as one's tendencies to compare themselves to other in relative to their skills, abilities, physical appearance, specialty, and status while contrastingly, opinion-based social comparison is defined as one' tendencies to make comparison of their opinions in relative to other's opinions that are widely accepted by social norms.

On the other hand, According to Burns (2015), PWB is defined as the level of individuals' positive functioning and their sense for personal growth and mastery in life. Oftentimes, researchers may also use the term of PWB when referring to a mental health condition or one's level of psychological distress such as anxiety and depression (Trudel-Fitzgerald et al., 2019). For example, various past researches measure their participants' PWB by assessing their anxiety, stress or depression level (Dodd et al., 2021; Sahu, 2020; Satpathy & Ali, 2020; Sundarasen et al., 2020). Meanwhile, some researchers used the term to refer to one's perceived satisfaction toward their life in general (Civitci & Civitci, 2015; Park & Baek, 2018). Other than that, there are also researchers that defined PWB by combining the hedonic and eudaimonic perspectives of well-being (Winefield et al., 2012).

In the context of this study, PWB will focus more on the eudaimonic perspectives of one's well-being that emphasize on the general construct of effective functioning and development in personal and social life, instead of the hedonic aspects of positive affective states of pleasure, happiness, and satisfaction. Consistent with the model of PWB developed by Carol Ryff (1989), there are six distinct key components measured in terms of PWB which are autonomy, environmental mastery, personal growth, positive relation with others, purpose in life and self-acceptance (Chen et al., 2013). However, this study attempted to measure PWB in one general aspect that include those dimensions based on recent previous study (Sobhani et al., 2020). Therefore, this study refers PWB as a condition where the individual have constructive evaluation about themselves (self-acceptance), have trusting relationship with people around him (positive relation with others), have a sense of direction and goal in life (purpose in life), have a drive to grow and enhance one's potential (personal growth), are able to adapt and utilize surrounding environment to function effectively (environmental mastery), and are able to comply or reject social expectation at their own wills (autonomy).

All in all, to further explore the engagement between the sources of one's deflating well-being during this period, this study was conducted to investigate the linkage between our daily mental activities, social comparison, and its effects to one's general psychological well-being. It will provide insightful findings whether SCO may be the predictor or protective factors of university students' deteriorating PWB. In addition, exploring the influence of SCO to PWB may also be helpful for students to become more aware of their emotional response after making a social comparison, and is able to assist them to enhance their PWB through lowering or increasing their exposure to activities that can help them indulge in social comparison tendencies. This study may assist public universities in guiding a proper intervention or program to could help improve the students PWB before it leads to a bigger problem, like other psychological disorders such as depression and mood disorders. Therefore, this study aims to investigate the effects of ability-based and opinion-based SCO on PWB among students in public university in Malaysia through these objectives:

    i.   To identify the level of SCO among students in public university
    ii.   To identify the level of PWB among students in public university
   iii.   To identify the relationship between SCO and PWB
   iv.   To identify the effects of social comparison of ability and opinion to PWB among students in public university

■ 2.0 LITERATURE REVIEW

Social Comparison Theory

The idea of social comparison processes darted all the way back during 1954 in Leon Festinger's paper of *Human Relations* (Suls & Wheeler, 2013). Based on Wills (1981) and Woods (1989), there are three fundamental factors that influence individuals' engagement in making social comparison. Firstly, for the purpose of self-evaluation in which people compare themselves with a targeted individual that they perceive have similar opinions and abilities with them. Secondly, for the purpose of self-improvements, in which people make comparisons with others they perceive as better than them (also called as upward comparison). Lastly, for the purpose of self-enhancements, in which people compare themselves with others they perceive as lower or beneath them (also known as downward comparison) (Alfasi, 2019).

     Later, Schachter (1959) further widened the theory by implementing individuals' emotional disposition in his Social-Cognitive theory. As an outcome of making social comparisons, he stated that people tend to affiliate themselves when they feel threatened or scared as to evaluate whether their emotional states and thoughts are appropriate or not within the circumstances (Suls & Wheeler, 2013). In other words, when people are in a stressful situation, people tend to make social comparisons with others to evaluate what they are feeling and what they should be feeling. In this way, the process of social comparison acts as a tool to connect ourselves to other standards. Additionally, social comparison behavior is also known as an automatic and spontaneous response in our daily life (Civitci & Civitci, 2015).

     Although it is a universal human nature to engage in social comparison, various researchers have clarified that certain individuals are quite hesitant to admit that they had made any social comparison toward others, and thus claiming they have lower tendencies in making social comparison. Due to this reason, Buunk and Gibbons (1999) developed a model of SCO to measure whether different individuals have an indeed different level of needs or frequency in engaging with social comparison processes (Gibbons & Buunk, 1999). In the model, they proposed that different people have different levelsof inclination in comparing themselves with other people (S. Y. Lee, 2014).

     In addition to that, with the use of their new model of social comparison, the act of social comparison is divided based on two types of aspects, which are ability and opinion. They suggested that opinion-based and ability based social comparison elicit different aspects and emotions within ourselves. In opinion-based comparison, people would usually change their opinions if their opinions are different from other people as they want to fit with others in a sense to create uniformity of identity. Meanwhile for ability-based comparison, people do not strive for uniformity but rather superiority (Gibbon & Buunks, 1999). This means, when people compare their ability with others, they strive to do better than the comparison target, and thiwill lead them to make more upward social comparisons in which it can negatively evoke negative emotions like envy and jealousy as an outcome. Due to this, other researchers indicated SCO as a reliable trait that could reflect the individual upbringing and surroundings in determining their PWB (Vogel et al., 2015).

     Based on past studies, it was found that social comparison behavior peaked during young adulthood, as making comparison is important in the development of self-identity (Stapleton et al., 2017). Later, the tendency to make social comparisons weaken throughout late adulthood as older people are more prone in making self-evaluation in correlation to their past, personal experiences, instead of making comparisons to others around them (Callan et al., 2015). University students are proven to have high level of SCO as they are greatly influenced by peer pressure and social influences (Li, 2019; Litt et al., 2015; Pang, 2021; Vogel et al., 2015; Wang, 2019; C. C. Yang, 2016). Other attributes that contribute to high SCO among university students are females (Fitzsimmons-Craft et al., 2012; J. K. Lee, 2020; Nesi & Prinstein, 2015), have high personal life idealization (Fitzsimmons-Craft et al., 2012) and active in social media (de Vries et al., 2018; Hassim et al., 2020; Vogel et al., 2015). SCO is also recognized as one of the individual's personal attributes, that is known for its effects to influence an individual's state of well-being (Diener, 2013).

Psychological Well-Being Model

In terms of well-being, Chen et al. (2013) stated that the concept of well-being can be explained through two different constructs; whether through the subjective or psychological perspectives of well-being. For subjective well-being (SWB), it follows the Diener's Tripartite Model of SWB (1984) in which there are three fundamental aspects of well-being, which are the emotional experience of positive feelings, the decreasing emotional experience of negative feelings, as well as the occurrence of cognitive evaluations of life satisfaction (Proctor, 2014) and Schreier (2013) had further highlighted that the most dominant key aspect in SWB is positive feelings (happiness) as it follows the hedonic principles of maximizing pleasant feelings. Combination of both elements of PWB and SWB as well as the use of psychological disorders has become increasingly popular to expand the measurement of well-being (Winefield et al., 2012). However, to some researchers, PWB still has the upper-hand than SWB as PWB was proven as being sturdier and a more congruent antecedent of well-being in longer terms than SWB (Joshanloo, 2018) because, SWB still lacks a crucial aspect of indicating well-being, which is the occurrence of development and personal growth (Burns, 2015).

     Therefore, various other researchers had assessed one's well-being using the PWB concepts that emphasize the importance of maximizing one's true potential and positive functioning in life to assess one's true well-being. This is consistent with how Chen, Jing, Hayes, and Lee (2013) had described PWB as the outcomes of one's positive development and goal

pursuits efforts. In addition, Burns (2015) had similarly supported the concept by defining PWB as the level of one's positive functioning, personal growth, and expanded mastery of skills in life as well as having a meaningful purpose in life.

As Ryff's Six Factor Model is one of the most prominent well-being constructs in assessing PWB, this study followed the RPWB model of well-being. The Ryff's Six Factor model of PWB is build based upon the combination of Maslow's Theory of self-actualization (1970) as well as Deci and Ryan's (2000) theory of self-determination (Šarotar Žižek et al., 2015). According to the positive functioning factors, there are six sub-elements encompassed in the model which are autonomy, positive relation with others, environmental mastery, personal growth, purpose in life as well as self-acceptance (Ryff & Keyes, 1995). Based on Ryff (2013), autonomy is the individual's perception that he/she is free and not tied to any social expectation, and instead live their life in their own accord, belief, and judgements. Meanwhile for self-acceptance, it was viewed as an aspect of well-being in which the individuals are acknowledging all aspects of their personality by being aware and accepting towards their strength as well as their limitations (Seifert, 2005). Thirdly, for environmental mastery in life, Véliz Burgos (2012) explained that it is the individual's ability in positively controlling and fully utilizing his environment to his fullest favours and interest (Páez-Gallego et al., 2020). Fourth, for the dimension of personal growth, Gao & McLellan (2018) refers it as the extent of the individuals' abilities and feelings to further enhance their personal potential and talents. Fifth, for positive relations with others, Ryff (2013) had reiterated that it refers to one's ability in making an in depth, trusting relationship with other people. Lastly, for the purpose of life dimension, Henn, Hill and Jorgensen (2016) referred it as one's sense of having a meaningful life, intention and clear goal to pursue in life. García-Alandete (2015) had suggested that this dimension is indeed very important to one's well-being as it strongly impacts the individual's motivation and provides an existential meaning for them to be truly alive. Low PWB are also perceived as very closely related to the development of psychological disorder like anxiety, depression, and distress.

Based on past studies, many university students are associated with having lower PWB due to the sudden increase of responsibilities (Mehmood & Shaukat, 2014), financial problem, assignments, and examination (Satpathy & Ali, 2020; Shahira et al., 2018) as well as their high internet usage (Sharma & Sharma, 2018). Following this, the Covid-19 pandemic had also affected students PWB due to financial constraints, problems with online distance learning, anxiousness, and uncertainty of work opportunities (Bairagi et al., 2021; Dodd et al., 2021; Godinic et al., 2020; Lopes & Nihei, 2021; Sundarasen et al., 2020). However, other researchers differ in their findings that students have high PWB and their most prevalent contributors are environmental mastery, personal growth, and autonomy (Bhullar et al., 2014; Freire et al., 2016; Hughes et al., 2015). It was also found that men attained higher scores in the aspects of self-acceptance and autonomy than women; while women scored higher in the aspects of positive relations with others and personal growth than men (Khairani et al., 2019; Matud et al., 2019).

Social Comparison Orientation and Psychological Well-being

In respects to the relationship and effects of SCO to PWB, many previous researches concluded that SCO is significantly negative correlated to PWB as it elicits feelings of inferiority and pessimistic view to oneself through upward social comparison processes (Appel et al., 2015; Liu et al., 2019; C. C. Yang, 2016). Civitci and Civitci (2015) had also identified that students with low level of SCO have higher PWB especially in terms of their life satisfaction and resiliency. Later, Yang and Robinson (2018) had further expanded the study by assessing the relationship between students' ability and opinion-based comparison and social adaptation. The result obtained was consistent with previous study conducted in China, in which ability-based comparisons are significantly related to lower college adjustment while opinion-based comparisons are related to higher level of college adjustment (Miao et al., 2018). From the study, it was explained that the tendency of making social comparisons with other people helps students integrate themselves better into their new social community and thus lead to a higher PWB (Miao et al., 2018; Yang & Robinson, 2018).

Research conducted by Lee (2020) in Korea, has proven that SCO has a negative effect on PWB among Korean SNS users. This is due to the high inclinations of the users to engage with upward comparison behavior that would likely evoke negative emotions like distress and disappointment within themselves that would lead to lower quality of PWB. In this study, it was also found that the effects of this relationship are much higher among Korean women. According to Yuu and Kim's (2020) model of dual path, this happened due to the occurrence of self-discrepancy feelings when these individuals compared themselves with their idealized images of others.

Similarly, in another study conducted in Korean population two years back, Park and Baek (2018) has also identified that there are more prominent effects of SCO to PWB with additional effects of mediating factors of the different types of comparison-based orientation (opinion or ability-based comparison). In the study, they clarified that the level of PWB among Facebook users are heavily influenced by their level and tendency of SCO. In their explanation, they stated that people with high levels of ability-based SCO, have lower PWB due to the upward contrastive emotions of envy or depression. Meanwhile, those with high levels of opinion-based SCO, have increased levels of PWB due to assimilative emotions of increased inspiration and optimism. Interestingly this shows that even though both groups have high level of SCO, the comparison outcomes of their PWB are different depending on their comparison-based orientation.

Other than that, research conducted among American university students further proves that SCO negatively affects one's PWB by the engagement of upward and downward social comparison (Robinson et al., 2019). Based on the research, it was clarified that people with high SCO would be more attracted to compare themselves with people they perceived as better than them. These upward comparison behaviors would consequently evoke their inferiority and depressive feeling and thus lowered their PWB in life (Robinson et al., 2019).

Therefore, based on the findings of past researches and rationales, it is hypothesized that:

H1: There is a significant negative effect of ability-based social comparison orientation to students' psychological well-being.

H2: There is a significant positive effects of opinion-based social comparison orientation to students' psychological well-being.
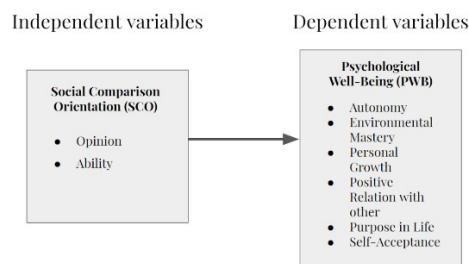
Figure 1: Conceptual Framework

Figure 1 shows the conceptual framework of this study. The arrow from the independent variable to the dependent variable indicates that SCO is the predictor for PWB among students. The researcher believes that SCO has negative effects on students' PWB. It is expected that comparison of ability but not comparison of opinion, have negative effects on the student's general PWB.

■ 3.0 METHODOLOGY

Research Design and Procedure

This study was a cross-sectional and correlational study which applied quantitative methods of gathering large sample of data in one time and used the reliable statistical application to standardize the findings to the population. In this study, data from respondents were collected using online survey in Google Form that was distributed to the researcher's social networks in online social platforms such as WhatsApp, Telegram and E-mail. Then, the participants were asked to share the link to their friends that fit the criteria of the targeted respondents to obtain the required information. The process of sharing was continued until the targeted number of sample sizes was achieved.

Population and Sample

In this study, the population is the undergraduate students studying in public universities in Malaysia. As the total number of undergraduate students in public universities is unknown, the appropriate sample size to draw conclusion from this study must be more than 384 respondents, based on the calculation of sample size through 95% confidence level and 5% margin of error (Kibuacha, 2021). Following this, a total of 428 public university students in Malaysia participated in this study. However, out of the 428 data collected, 27 data were deleted as the respondents did not fit the criteria of the targeted respondents. The sampling method employed in this study was the snowball sampling. Snowball sampling refers to the process of selecting samples using the researcher's networks (Kumar, 2019). The reason for choosing this method sampling allows for relatively quick recruitment of participants, as the process relies on referrals from existing participants. This can be advantageous when time constraints are a factor in the research and cost-effective in identifying and recruit additional respondents.

Data Analysis

The data gathered were tabulated and analyzed using the Statistical Package for Social Science (SPSS) software to reduce human error in calculation. There are three types of data analysis being conducted in this research which are the descriptive data analysis to satisfy the first and the second objectives, the Pearson Correlation to satisfy the third objective and the Multiple Linear Regression to satisfy the fourth objective.

Measures

In the questionnaire used for this study, the demographic data such as age, gender, year of study and their public university affiliation were collected. This study adopted the Iowa–Netherlands Comparison Orientation Measure (INCOM) developed by (Gibbons and Buunk, 1999) to measure the level of SCO among university students. There are two dimensions contained in this questionnaire which are comparison of abilities and comparison of opinions (S. M. Schneider & Schupp, 2014). This inventory consists of 11-item and the score of answer ranged from strongly disagree (1) to strongly agree (5). The higherthe score in each dimension of SCO, the greater the individuals are identified as having opinion or ability-based orientation. The INCOM has a high internal reliability with the value of cronbach alpha of 0.82 (Civitci & Civitci, 2015). Meanwhile, to examine the level of PWB among students, this study adopted the shortened 18-items scale of Ryff's PWB Scale (Ryff & Keyes, 1995). This inventory contains of 18 items within six sub aspects of well-being; autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance; and the score answer ranged from strongly agree (1) to strongly disagree (7). The RPWB has a moderate internal consistnecy with the cronbach's alpha value ranging between 0.71 to 0.76 when used among university students (Akbari & Khormaiee, 2015; Klainin-Yobas et al., 2016).

Pilot Study

A total of 15 respondents that are studying in any public university were randomly selected by the researcher and participated in the pilot study. The pilot test was conducted to measure the reliability of this study's instruments and identify any potential weaknesses or issues that may hinder the targeted respondents from understanding the items tested in the questionnaire. The link of the online questionnaire in Google Forms was given through social networking platforms such as Whatsapp and Telegram. Then, the data gathered from the respondents were analyzed using SPSS. The results of the pilot study showed that the INCOM had a moderate reliability with the Cronbach alpha of 0.724, while the RPWB had a good reliability with the Cronbach alpha of 0.855.

■ 4.0 RESULTS

Demographic Characteristic

This study was highly dominated by 326 female respondents (81.3%) while there are only 75 male respondents (18.7%) involved in this research. Other than that, more than half of the respondents were mostly between the age of 22 to 24 years old (58.1%), followed by a group of respondents in the age of 19 to 21 (33.7%). Following this, students above the age of 25 as well as the students aged 18 or below were in the least group of respondents involved in this study with each consisted of 17 (4.2%) and 16 respondents (4.0%). The findings also showed that most of the respondents are in their fourth year (29.2%) of study, followed by the third-year students (28.4%), second year students (21.2%) and the first-year students (15.5%). In terms of the public university they attended, most respondents were attending UTM (57.4%), followedby UiTM students (19.2%) and UM students (6.2%). Following that, only 19 students from UniSZA and 18 students from UIA participated in the research. Additionally, out of 401 respondents, only 12 students were from UPSI (3.0%) and the others (5.0%) are from various other public university in Malaysia such as UKM, UPM, USM and UMT.

Objective 1: To identify the level of SCO among students in public university

The first objective in this research study is to identify the level of ability and opinion-based social comparison orientation of public university students in Malaysia. Table 1 shows the level of ability-based social comparison among public university students based on the Iowa-Netherlands Comparison Orientation Measure (INCOM). From the 1 table, most respondents have moderate tendencies (46.1%) to make an ability-based social comparison while 44.9% and 9.0% of the respondents have moderate and low score in conducting ability-based social comparison respectively.

Table 1: Summary of the level of ability-based SCO

Level	Frequency (f)	Percentage (%)
Low	36	9.0
Moderate	185	46.1
High	180	44.9
Total	401	100

Mean value (Low = 1.00 - 2.33; Moderate = 2.34 - 3.67; High = 3.68 - 5.0)

Next, table 2 shows the level of opinion-based social comparison among public university students. From table 2, more than half of the respondents (50.1%) have a moderate level of opinion-based social comparison tendencies, followed by a close 49.4% of respondents that scored high level. Ironically, only 0.5% of the respondents scored low in the opinion-based SCO level.

In conclusion, based on the overall means in each dimension, university students attending public university, have moderate level of conducting ability-based social comparison (M=3.47, ±0.70) but have high level of making opinion-based (M=3.69, ±0.57) social comparison with other people.

Table 2: Summary of the level of opinion-based SCO

Level	Frequency (f)	Percentage (%)
Low	2	0.5
Moderate	201	50.1
High	198	49.4
Total	401	100

Mean value (Low = 1.00 - 2.33; Moderate = 2.34 - 3.67; High = 3.68 - 5.00)

Objective 2: To identify the level of PWB among students in public university

The second objective in this study is to identify the level of psychological well-being among students in public university. Table 3 illustrates the frequency and percentage of the respondents' level of PWB. From table 3, the majority of 72.1% ofthe respondents have moderate level of PWB. Following this, 24.2% of the respondents have high level of PWB while only 3.7% of the respondents have low level of PWB. Based on the RPWB item analysis, the overall mean of items in the RPWB scale is (M=4.47, ±0.827), indicating that the level of PWB among public university students is in the moderate level.

Table 3: Summary of level of PWB among public university students

Level	Frequency (f)	Percentage (%)
Low	15	3.7
Moderate	289	72.1
High	97	24.2
Total	401	100

Mean value (Low = 1.00 - 3.00; Moderate = 3.01 - 5.00; High = 5.01 - 7.00)

Objective 3: To identify the relationship between SCO and PWB

The third objective of this study is to investigate the relationship between SCO and PWB among students in public university. Table 4 shows the relationship between the student's SCO and level of PWB. Based on table 4, the results indicate that there is indeed a negative correlation (r = -0.215, p= 0.00 <0.05) between SCO and PWB among public university students in this sample of study. However, the strength of the relationship is very low as the value of the correlation coefficient is very small.

Table 4: The relationship between SCO and PWB

Variables	Psychological Well-Being	
	r	P
Social Comparison Orientation:	-0.215	0.000

*Note: *p<0.05, N= 401

Objective 4: To identify the effects of social comparison of ability and opinion to PWB among students in public university

The fourth objective of this study is to identify the influence of ability-based social comparison and opinion-based social comparison to PWB among public university students. Table 5 illustrates the effects of SCO on PWB of public university students in this study. Following are the two hypotheses in this study:

H1: There is a significant negative effect of ability-based social comparison orientation to students' psychological well-being.

The findings from table 5 shows ability-based SCO has a significant negative effect (ß= - 0.342, p < 0.05) on PWB of public university students in this research. Thus, the first hypothesis is accepted.

H2: There is a significant positive effects of opinion-based social comparison orientation to students' psychological well-being.

Next, in terms of opinion-based SCO, the result displays that opinion-based social comparison does have a significant positive effect (ß= 0.121, p < 0.05) on the public university students' PWB. Therefore, the second hypothesis is also accepted.

Firstly, from the 5 table, it can be viewed that the multiple linear correlation between SCO and PWB has a value of 0.307 which indicate that there are effects of multiple dimensions of SCO to the public university student's PWB. The finding also shows that the correlation determination of this analysis has a value of 0.094 which indicates that 9.04% of the students' PWB were influenced by their level of SCO.

Table 5 The effects of SCO on PWB among public university students

Variables	Psychological Well-Being		
	β	t	sig
Social Comparison Orientation			
Ability-based	-0.342	-6.403	0.000
Opinion-based	0.121	2.268	0.024
R		0.307	
R²		0.094	
F		20.747 (0.000)	

*Note: *p < 0.05, N=401

Next by looking at the significant level of SCO in each dimension, it can be concluded that the ability-based SCO is able to significantly predict the student's PWB (ß= - 0.342, p < 0.05) with the suggestion that with every one unit of change in the student tendencies to make ability-based comparison, there will be decrease a of -0.342 of the student's psychological well-being. Moreover, from the table, it can also be seen that opinion-based SCO is also the predictor for the students' PWB (ß= 0.121, p < 0.05). This means that with every one unit of change in the student's tendencies in making opinion-based comparison, there will be a positive increase of 0.121 in the students' PWB.

■5.0 DISCUSSION

The first findings of this study suggested that public university students have a moderate level of tendencies in making ability-based comparison with others. This finding is incongruent with most other findings that suggested that there is a high level of

ability-based SCO among students due to social influence and peer pressure (S. Y. Lee, 2014; Miao et al., 2018). According to Yang (2016) greater exposure to another people's information of their skills will heighten the tendencies to make ability-based social comparison. Subsequently, academic institution like public universities that can provide such ample information of other people's skills and abilities are known to be most prominent factors of the increasement of social comparison behavior (Litt et al., 2015).

However, due to the Covid-19 pandemic, most public universities in Malaysia are closed and online distance learning are opted as the new medium of learning and discussion, and thus reducing the face-to-face social interaction between students (Sundarasen et al., 2020). Due to this reason, it can be said that the students have lower chances to engage with ability-based social comparison due to the deficit of information they received regarding their peer's skills and abilities, through the online-based platform like WhatsApp, Google Meet, Zoom and WebEx. Besides, unlike private university students that show greater tendency of valuing power, social status, conformity, and tradition; public university students were found to be less likely to adhere to such values (Fatih Yigit, 2017). Thus, it can be perceived that students in public university have an only moderate level of ability-based SCO because they do not have high social comparison needs to constantly prioritize and satisfy such core value needs of power, status, tradition, and conformity.

Next, the finding had also suggested that public university students have a high level of tendencies to make opinion-based social comparison. This is consistent with the results of a previous study conducted by Miao, Li, Yang and Guo (2018) in which they exhibited that students constantly engage with opinion-based social comparison behavior to socially adapt with their friend and surrounding peers. This study's finding is also supported by previous researches that suggested university students have high level of opinion-based SCO because they are continuously trying to identify their similarities and differences with their peers to gain validation and affiliate themselves to a group (Stapleton et al., 2017; Yang &Robinson, 2018). This ultimately follows the SCO model of Gibbons and Buunk (1999) in which it stated people would match their opinions and feelings to create uniformity of identity as to fit in with their surroundings. Therefore, it can be viewed that students in public university scores higher in opinion-based SCO to satisfy their needs for affiliations, social adaptation, and social identity. Only by making opinion-based social comparison will the students found their fits in their social settings and standard, and thus making it a 'must-do' behavior to socially adapt with others during their academic journey.

Besides that, the study also found that that public university students have a moderate level of PWB. This finding is aligned with the result of a previous study that show, university students have a moderate level of PWB, with autonomy (Bhullar et al., 2014) and personal growth as the highest prevalence aspects of PWB (Freire et al., 2016) among students. Unfortunately, the result of the student's PWB in this study was inconsistent with many previous studies that claimed university students have a low PWB, especially in terms of having high psychological distress and anxiety level (Aboalshamat et al., 2015; Calderon et al., 2021; Lee, 2020).

It is also found in recent researches, that a lot of undergraduate students have low PWB during Covid-19 compared to postgraduate students, as they struggle to successfully adapt with the sudden change of the online academic environments and financial constraints (Dodd et al., 2021; Sahu, 2020; Sundarasen et al., 2020). Public undergraduate university students are also more vulnerable to various academic stressors like inadequate access to a smooth online learning condition and insufficient social support from their peers and friends (Lopes & Nihei, 2021). Therefore, despite having an increasementof psychological distress and anxiousness due to the uncertainty and vulnerabilities to greater academic stressors during the Covid-19 pandemic, public university students are still able to moderately functions well during the period of pandemic. Additionally, this finding also suggested that the student's drive to develop and further enhance their potential and skills are not diminished by the catastrophic struggles due to their moderate level of PWB in this study.

Other than that, the current study also found a significant negative relationship between SCO and PWB among university students. This finding is aligned with various previous study that found SCO are significantly negative correlated with PWB through the occurrence of upward social comparison (Appel et al., 2015; Li, 2019). Based on the studies, upward social comparison affects students in a negative way due to the development of negative feelings like envy (Appel et al., 2015; Fam et al., 2020), jealousy, and anxiousness that may be instigated after engaging in a social comparison behavior (Li, 2019). Moreover, it was also proposed that SCO are connected to the measurement of one's level of self-satisfaction through the association of how the individual perceived stress and pressure in his or her life (Civitci & Civitici, 2015). Therefore, it can be viewed that SCO are significantly negative correlated with PWB as it can alters the way of how the public university student's perceived stressful events or pressure when they compare themselves with others in the same situation. However, since there may have lower chances for students to conduct social comparison behavior with their friends through the online learning platform, the strength of the negative relationship between SCO and the students' PWB during the pandemic may not be as strong as the previous studies.

The findings of this study had also revealed that the ability-based social comparison has a significant negative effect to the students' PWB, while the opinion-based social comparison has a significant positive effect to the student's PWB. These are consistent with many previous findings that highlighted the differences of affects between the two orientation of social comparison behavior on one's PWB (Lee, 2020; Miao et al., 2018; Park & Baek, 2018; Robinson et al., 2019; Yang & Robinson, 2018).

First, the finding that ability-based social comparison has a negative effect to PWB is aligned with a study conducted by Park and Baek (2018), in which they revealed that people with high ability-based SCO have lower PWB because of their greater tendencies to engage with upward social comparison than downward social comparison. This is due to the reason that people strive to do better than their comparison target when they compare their skills, ability and physical attractiveness to others (Gibbons & Buunk, 1999). This fact is also supported by another research, in which it found that peoplewith high ability-based SCO would often view their comparison target as a competitor (Park & Baek, 2018), and this will thus,increase their competitiveness which can lowers their PWB (Garcia et al., 2013).

Furthermore, the finding that ability-based SCO have a negative influence to PWB is also supported by a study done byYang and Robinson (2018) in which they stated that high ability-based SCO among studentsis a predictor of lower PWB since the competitiveness can evoke jealousy and disrupts the development of a healthy relationship with others. Additionally, high

ability-based social comparison behaviour is more likely to cause psychological distress and disappointment to oneself and this reduce one's level of PWB (Lee, 2020). Therefore, the findings of these previous researches proved that having high level of SCO negatively affects university student's PWB by eliciting their negative feelings, enhancing their competitiveness, and deteriorating their relationship with others. Thus, based on the result in this study, having a moderate level of ability-based SCO explains why public university students have a moderate level of PWB.

Second, the results had also revealed that opinion-based social comparison has a positive effect to student's PWB. This finding is congruent with quite a few past researches (Miao et al., 2018; Park & Baek, 2018; Yang & Robinson, 2018) that found opinion-based SCO give positive influence to PWB in the aspects of positive social adaptation as people tend to align their opinion to other's mentality to fit in a social group. This closely follows the SCO model (Gibbons & Buunk, 1999) that implied people have a higher tendency to alter their opinion or affiliate themselves to a group of people who have the same way of thinking to develop a sense of uniformity, identity and belonginess. This will then lead to a higher PWB as people have a stable sense of social identity and belonginess.

Additionally, according to Yang and Robinson (2018), people with high opinion-based SCO would less likely encounternegative feelings as the intention of the opinion-based social comparison is to evaluate the similarities and differences of opinion regarding a subject to find affiliation and be more adaptable. Therefore, rather than facing self-criticization, opinion-based SCO may be the method of self-evaluation that university students use to associate themselves in theirsocial circle of friends. This increases their self-adaptations to their environments and surroundings, making them excel in the aspect of environmental mastery and personal growth of PWB. Those previous researches proved the findings of this study that opinion-based SCO have a positive affect to students' PWB. However, due to the catastrophic era of Covid19, the student's PWB may also be greatly affected by other external factors and stressor, and thus decreasing the positive effects of opinion- based SCO to the student's PWB. Therefore, even though the students have high level of opinion-based social comparison, their level of PWB still remained moderate.

■ **6.0 LIMITATION AND RECOMMENDATION**

Nevertheless, of all the findings above, this present study has several limitations. Firstly, since the current study employed the convenient and snowball sampling method, the proportion of the valid data obtained from students across various public universities became extremely unproportionate.

Thus, to increase the accuracy of the finding's generalization to the larger population of public universities students in Malaysia, future research should consider collaborating with members from other public universities in Malaysia to engage with wider potential respondents from each university equally. Secondly, as an alternative to using cross-sectional research design like this study, future researchers should consider conducting longitudinal research to fully investigate the causal-effects of SCO to student's PWB across a period. Thirdly, as this study relied on the use of INCOM to measure the student's tendencies to conduct social comparison based on two types of orientation, this study has limited opportunities to study the direction of the social comparison activities. Other than that, futureresearcher may also consider using a physical data collection method, instead of using online survey, to reduce respondents' response bias when answering the questionnaire without proper monitoring.

■ **7.0 CONCLUSION**

As this study highlighted the effects of SCO to PWB on public university students during the Covid-19 pandemic, this study provides an insightful finding on the relationship and the effects of student's social comparison behavior to their PWB, that had not been fully explored in our local settings, especially among public university students. In addition, this study has been able to expands the SCO researches as it investigates the student's social comparison aspects in two different aspects of ability and opinion. Other than that, this study would be able to prove and create awareness among community in higher level of academic institutions regarding the negative and positive impacts that SCO can exhibit to students' PWB. This would help public universities to consider the intervention that they can implement to lower the deteriorating effects of ability-based SCO and instead channel the effects of opinion-based SCO to increase student's PWB. Following this, this study recommends public universities to fully utilize and consider these integral circumstances of social comparison behavior to the most benefits by developing a strong social support group among students in public universities, as it can be agood platform that enhance the development of opinion-based social comparison. Through this way, students would be able to increase their PWB as they will feel more affiliated and supported. This recommendation is also supported by a study that suggested treatment of psychological disorder like depression should consider the social comparison processes that may be bring constructive positive effects (Appel et al., 2015). In addition, this study would be able to prove that social comparison behavior among university students is indeed concerning during the pandemic, and encourage people living in thecommunity to take into consideration and precautions steps to not normalize any comparison activities especially during the Covid19 as it can escalates the negative effects of SCO more than the positives ones.

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