Influence of Student Isolation on Students' University Learning Experiences: Perspectives of Academic, Social and Psychological Development

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Abstract. With the latitude of globalisation spreading across countries in the world, student transfer and studying abroad have been made easier and more economical for students who intend to further their studies abroad. This growing population of international students shows the need to start addressing critical underlying issues regarding accommodation of new environment of international freshmen, plausible barriers faced by international students at their host countries and measures to minimise negative impression of intercultural communication. The growing amalgamation of local and international cultures also evinces symptoms of isolation among the local students. In light of this aim, this descriptive-analytical study investigates the correlation between student isolation and their university learning experiences, with the latter variable indexed in terms of academic, social and psychological isolation. A total of 581 students across various disciplines participated in this study. Findings provide rich, descriptive understanding of the phenomenon of student isolation, and facilitate the awareness to all stakeholders to give more leverage in the engagement and management of such issue in the educational context. Conclusively, findings have shown the importance of prioritising students' needs from a holistic view as every aspect intertwines to enhance students' success rate during their learning journey in university, as well as employability rate after their graduation.

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1 Background to the Study

UCSI University has been welcoming students and educators from various parts of the world to disseminate and receive knowledge since 1986 (UCSI University, 2018). With a population of more than 10,000 students based in Kuala Lumpur, Kuala Terengganu and Kuching (UCSI University, 2018), UCSI University takes pride for its multicultural and multilingual learning environment.

The diversified education context has made students' university learning experiences extraordinary for students are able to immerse in different cultures in and out of their classrooms. In UCSI University, learning experiences are not only limited to students' academic activities, but also involve social interactions and psychological developments. A holistically nurtured student would pose higher chances in achieving success in all three aspects during his or her university learning experiences.

The variety of university learning experiences is a major contributing factor in developing all-rounded students who will be the nation's future human capital. However, studies have found that fruitless university learning experiences have been increasing among international students (Dickey, 2004; Andrade, 2006; Trice, 2007; Erichsen & Bolliger, 2011; Curtin, Stewart, & Ostrove, 2012). Student isolation has to be prioritised by all stakeholders involved in the educational context as it impacts students' overall achievement and future development on a long run.

2 Problem Statement

Review of prior studies have revealed the fact that very few research have been done to investigate the phenomenon of student isolation among students in traditional learning environment, since most studies were done in online and distance learning contexts (Dickey, 2004; Ali &Kohun, 2006; Vighnarajah, Wong, & Bakar, 2009; Croft, Dalton, & Grant, 2010; Vighnarajah, Hassan, Aziz, & Ooi, 2016).

Moreover, most studies employed a qualitative methodology in the investigation of student isolation in campus (Ali &Kohun, 2006; Gu, Schweisfurth& Day, 2010; Khawaja & Stallman, 2011; Ganapathy, Vighnarajah, & Kaur, 2015; Lim & Vighnarajah, 2018). In fact, very few studies have identified the impact of student isolation on university learning experiences (Zhao &Kuh, 2004; Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008; Khawaja & Stallman, 2011; Hu, Ching & Chao, 2012; Umbach & Wawrzynski, 2014). Hence, this research attempts to fill the gap by employing quantitative methodology in deriving statistical significance to describe the severity of student isolation among tertiary students. Further, this study also investigates the statistical impact of student isolation on students' university learning experiences and the magnitude of such influence.

3 Research Objectives and Hypotheses of the Study

The research objective for this study is to investigate the influence of student isolation, and its magnitude, on students' university learning experiences in UCSI University. Based on prior studies and review of literature, the following hypotheses were formulated to guide the direction of this study:

H_{10}: There is no statistically significant relationship between Academic Isolation (AI) and University Learning Experiences (ULE).

H_{1A}: There is statistically significant relationship between Academic Isolation (AI) and University Learning Experiences (ULE).

H_{20}: There is no statistically significant relationship between Social Isolation (SI) and University Learning Experiences (ULE).

H_{2A}: There is statistically significant relationship between Social Isolation (SI) and University Learning Experiences (ULE).

H_{30}: There is no statistically significant relationship between Psychological Isolation (PI) and University Learning Experiences (ULE).

H_{3A}: There is statistically significant relationship between Psychological Isolation (PI) and University Learning Experiences (ULE).

H_{40}: There is no statistically significant relationship between Total Isolation (TI) and University Learning Experiences (ULE).

H_{4A}: There is statistically significant relationship between Total Isolation (TI) and University Learning Experiences (ULE).

4 Understanding Student Isolation

Engagement with diversity is no longer inevitable considering vast technological advancement in the growing landscape of education; in fact, "engagement with diversity is essential for 21st century learning as it provides opportunity for students and staff to interact across the limitations of culture, ethnicity, demography and many other aspects that typically define concerns of diversity." (Vighnarajah & Alias, 2018, p. 1).

However, one of the commonly underrated and overseen education issues in the context of diversity is the issue of student isolation. Past studies have shown the complexity of such issue in students' university learning experiences and the importance of addressing student isolation in campus (Bolliger & Martindale, 2004; Dickey, 2004; Andrade, 2006; Trice, 2007; Erichsen & Bolliger, 2011; Curtin, Stewart, & Ostrove, 2012). A student's progression from high school to tertiary education brings about many challenges, and even more so for high school students who intends to further their studies abroad in a foreign country (Peel, 2000).

Findings of a research conducted by Lim and Vighnarajah (2018) revealed that student isolation is not only apparent in Western educational context, but also in the Asian context where Malaysian students and International Chinese students were heavily affected by student isolation in their university learning experiences.

4.1 Academic Isolation

Experiences of anxiety and isolation are not uncommon for international students in their attempts to adjust to a new learning environment (Andrade, 2006). Isolation, in specific, is apparent among students who lack proficiency and competency in their medium of instruction as they failed to understand their peers and tutors, causing a breakdown in their communication channel (Turula, 2002). Sherry, Chui and Thomas (2009) highlighted problems international students experienced in their studies such as adapting to a new culture, lack of competency in the use of English language and lack of understanding from the university community. Clearly, these findings suggested that international students face major difficulties in their studies due to lack of English language proficiency.

In a qualitative study, Lim and Vighnarajah (2018) explored the effects of isolation experienced by international and host students - the results showed that students felt most isolated when they face difficulties in coping with the medium of instruction, as well as cultural terms used by local residents. Such isolation has caused deterioration in their academic performances as they were unable to communicate and effectively receive knowledge from their peers and instructors. International students have reported higher level of academic isolation as compared to local students for these international students were required to adapt to a distinctively different education system, pedagogy and medium of instruction.

The learning environment created by educators in a university has an immense effect on students' overall academic performances. Umbach and Wawrzynski (2014, p. 18) mentioned that "institutions where faculty engage students in and out of the classroom and place a high priority on enriching educational experiences had students who felt supported and were active participants in their learning". This only substantiates the fact that students who are isolated in and out of the classroom to (academically, socially and psychologically) withdraw from their studies. Attention and action to such issues call for measures to reconsider the role of instructors as they gradually change their teacher-centred pedagogy to a student-centred approach (Vighnarajah, Wong & Bakar, 2008). They further asserted that instructors shoulder critical roles in facilitating students into their learning environment as they take on roles extending the duty of teaching such as facilitator, guide, mentor and thinking catalysts.

4.2 Social Isolation

Students who just transitioned from high schools to tertiary education tend to establish closer rapport with their peers as they aim to be accepted as a part of the community (Robertson, Line, Jonas, & Thomas, 2000). However, new students, specifically international students, often voluntarily or involuntarily isolate themselves from their peers due to miscommunication and misunderstanding of one's culture (Robertson et al., 2000). Trice (2007) showed that international students face social isolation as they lacked the time pursue and positively establish closer relationship with their host (family).

International students need to put in more effort in their academic lives due to language difficulties and the need to negotiate with a foreign academic culture. Such unfortunate situations would force-oblige these international students to attach to culturally relevant groups of friends (Trice, 2007). Students who fail to fulfil their social needs are prone to experience negative emotions, such as loneliness or even depression, as they do not have the channel to reach for support and assistance (University of Nebraska-Lincoln, 2016).

4.3 Psychological Isolation

Students in universities experience isolation beyond their classrooms and social circles where they are forced to face conflicts within themselves, as they struggle to adjust their mindset and psychological state throughout the learning process (Imperial College London, 2016). Poyrazli's (2015) study revealed that international students experienced certain degree of psychological problems in relation to the stress they felt in their studies – and this was primarily due to lack of English language competency leading to difficulties to function in a new cultural setting.

Feelings of isolation eventually lead up to depression among affected students and bring a rise in student attrition rate. Goncalves and Trunk (2014) found that students who felt isolated and neglected in campus faced grave obstacles in pursuing academic success, which may cause them to eventually choose to withdraw from their studies. In other words, psychological isolation poses as much risk as other forms of isolation in a student's university learning experience.

5 Methodology

This study adopted a quantitative approach where numerical statistics and descriptive interpretations complement each other to generate findings that are substantiated with width and depth (Peel, 2000; Mark & Anthony, 2007; Croft *et al.*, 2010; Erichsen & Bolliger, 2011). A quantitative approach would allow the researchers to generate data and findings with width and apply the results in general context as the findings are supported with statistics of large scale (Andrade, 2006).

Specifically, this study adopted the correlational research design, and this particular research design was deliberately selected as it allows for proper investigation of relationship between the variables to be measured (Creswell, 2012; Cohen, Manion, & Morrison, 2011). In the context of this study, the correlational research design guides for rigorous planning, implementation and analysis of variables between student isolation in students' academic, social and psychological developments and students' university learning experiences.

5.1 Description of population and sample

The chosen population for this study is a cohort of undergraduate students with approximately 6,000-7,000 students housed in (one of the) nine faculties in UCSI University Kuala Lumpur campus (UCSI University, 2018). The nine faculties include Faculty of Medicine and Health Sciences (FMHS), Faculty of Pharmaceutical Sciences (FPS), Faculty of Applied Sciences (FAS), Faculty of Hospitality and Tourism Management (FHTM), Institute of Music (IoM), Faculty of Engineering, Technology and Built Environment (FETBE), Faculty of Business and Information Science (FOBIS), Faculty of Social Sciences and Liberal Arts (FoSSLA), and De Institute of Creative and Design (ICAD).

According to Krejcie & Morgan (1970), the ideal sample size for a population size of 6,000 would be 361. However, this study gathered a sample size of 581 through stratification of the chosen population for the purpose of achieving 95% of confidence level with 5% of confidence interval. This measure was imperative to establish the relationship and its impact between the variables of the study.

5.2 Sampling method

Stratified sampling is deemed to be the most appropriate sampling method as it includes representative samples from the target population with fixed criteria (Hardon, Hodgkin & Fresle, 2004). Also, this method of probability sampling ensures that the researchers gather data from samples who share similar characteristics that represent the entire population (Creswell, 2012). Due to the nature of the population where strata are heterogeneous between each other, stratified sampling fits the population characteristic where division of the strata is based on shared attributes (Sharma, 2017). There were two specific advantages of employing stratified sampling in this study. First, the sampling method ensures that the population is properly represented by the sample. Second, human biasness is reduced in this sampling process as this method takes into account the similarities in characteristics shared by the sample.

The stratification was done by dividing the population based on the nine faculties housed in UCSI University Kuala Lumpur Campus. The selection criteria for the participants are:

1. The participant must be an active and current student in either one of the nine faculties;

2. Participants must be enrolled in either undergraduate degree year one, year two or year three or year four;

3. Selection of participants must be random and equal in sample size; 70 sets of survey questionnaires were distributed to each of the faculty.

5.3 Instrumentation

The instrumentation in this study focuses on the use of survey questionnaire. This measure was deemed as the appropriate form of data collection as the chosen research design for this research is of quantitative nature. Moreover, use of survey questionnaires would allow for ease of access to the target population for a large scale study.

The survey questionnaire used in this study was based on two separate survey instruments, as well as literature governing the study of student isolation and university learning experiences. The combination of two questionnaires into a new set of instrument is done for the fitting of this study. The reason for combining the items is that Russell, Peplau and Ferguson (1978) addressed the aspect of psychological isolation whereas Erichsen and Bolliger (2011) addressed the aspects of academic and social isolation. A combination was needed as this study aims to measure the impact of student isolation on the aspects of academic, social and psychological isolation. Prior to the pilot study and distribution for data collection, the survey questionnaire was contextualized in terms of language to better suit the context of this study.

A pilot study was conducted to test the validity and reliability of the instrument. The pilot study comprised 40 participants who did not participate in the actual study. The selection of 40 sample size for the pilot study was based on recommendation given by Johanson and Brooks (2010) as they find the sample size of 36 suffices the necessary confidence levels. The finalised questionnaire was validated again by the identified experts before the instrument was administered for the actual data collection process.

The reliability results of the constructs in the questionnaire indicated that each construct has high internal consistency reliability as the alpha values range from 0.70 to 0.85. The individual academic, social and psychological isolation constructs were combined to form a new construct labelled Total Isolation (TI). The obtained Cronbach's coefficient alpha value for TI was 0.88. The final procedure is to measure the overall reliability of the entire instrument by combining AI, SI, PI and ULE. The obtained Cronbach's coefficient alpha value was 0.72, indicating that the overall instrument has high reliability and is able to yield data that are reliable for further analysis and interpretation.

Table 1. Reliability for constructs in questionnaire.

Construct	Cronbach's coefficient alpha
Academic isolation (AI)	0.85
Social isolation (SI)	0.83
Psychological isolation (PI)	0.70
Total isolation (TI)	0.88
University learning experiences (ULE)	0.81
Full instrument	0.72

6 Findings and discussion

The analysis of 581 questionnaires generated results for all four categorical variables, namely gender, year of study, faculty and nationality. A total of 293 males (50.43%) and 288 females (49.57%) participated in the survey, indicating that the data pose similar distribution of gender. This measure was necessary in reducing the risk of obtaining biased data which would interfere with the analysis and interpretation of data (Field, 2013). There were higher number of students who are currently in their second year of studies (n=222, 38.21%) as opposed to year one (n=165, 28.40%) and year three (n=157, 27.02%). Year four students (n=37, 6.37%) showed significantly fewer participants. Since most courses are based on a 3-year programme structure and students generally complete their courses within the 3-year frame. Hence, these year four students could potentially be those who subscribe to a four-year programme structure or typically extending the three-year programme structure duration.

The nationality of participants showed that the majority of the sample comprised of Malaysian participants (n=424, 72.98%), followed by participants from Mainland China (n=58, 9.98%) and Indonesian participants (n=54, 9.29%). Countries with comparatively smaller numbers of participants were Korea (n=6,1.03%), Nigeria(n=2, 0.34%), Pakistan (n=6, 1.03%), Bahrain (n=9,1.55%), Iraq (n=6, 1.03%), Morocco(n=4,0.7%),Kyrgyzstan(n=5, 0.86%) and Uzbekistan(n=7, 1.21%).

Pearson product moment correlation was used to investigate the relationship between the independent sub-variables academic isolation (AI), social isolation (SI), psychological isolation (PI) and the dependent variable university learning experiences (ULE). The analysis was then conducted between the main independent variable total isolation (TI) and the dependent university learning experiences (ULE). Data cleaning and preliminary analyses were conducted to eliminate any possibilities of anomalies and violation of assumptions.

The results in Table 2 shows that academic isolation (r = -.62, n = 581, p <0.001), social isolation (r = -.50, n = 581, p <0.001) and psychological isolation (r = -.44, n = 581, p <0.001) have moderate to strong and negative relationships with university learning experiences. Total Isolation, which is a combination of academic, social and psychological isolation, has the strongest, negative relationship with university learning experiences (r = -.72, n = 581, p <0.001). All relationships have reached statistical significance at the level of p<0.001.

Table 2. Correlation matrix.

	1	2	3	4	5
1. University learning experiences	-	-.622*	-.498*	-.442*	-.715*
2. Academic isolation	-.622*	-	.466*	.183*	.805*
3. Social isolation	-.498*	.466*	-	.212*	.816*
4. Psychological isolation	-.442*	.183*	.212*	-	.532*
5. Total isolation	-.715*	.805*	.816*	.532*	-

*p<0.001 (2-tailed)

Academic isolation indicates strong and negative correlation (r = -.62) with university learning experiences. That is, increase in academic isolation would have substantial decrease in university learning experience. This finding is supported with past studies (Turula, 2002; Andrade, 2006; Sherry, Chui & Thomas, 2009; Erichsen & Bolliger, 2011; Umbach &

Wawrzynski, 2014; Lim & Vighnarajah, 2018) that found isolation in students' academic activities lead to a decrease in their academic performances and satisfaction towards their university learning experiences. It is crucial for educators and policy makers to recognize the importance of mitigating academic isolation in attempt to decrease student attrition rate and maximise academic success.

The second variable, social isolation, indicates strong and negative correlation ($r =$ -.50) with university learning experience. The result shows that an increase in social isolation leads to substantial decrease in students' university learning experiences. The result is similar to findings of past studies (Robertson, Line, Jonas & Thomas, 2000; Reynolds & Constantine, 2007; Erichsen & Bolliger, 2011) as students who suffer from social isolation in campus generally feel dissatisfied with their university learning experiences. These findings suggest that the university learning environment should be designed to promote active and positive engagement between students in and out of the classroom. This outcome could be achieved by conducting activities that enhance students' interpersonal and communication skills, and preferably with reference in the interests of diversity and culturally responsive pedagogy.

Psychological isolation, on the other hand, shows only moderate and negative relationship ($r = $-.44) with university learning experience. The result contrasts with prior studies (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2011; Goncalves & Trunk, 2014; Poyrazli, 2015) as past findings indicated that psychological isolation is strongly associated with poor learning experiences. Upon further deliberation, one very possible reason for this is the early detection of student isolation and action taken by relevant departments in UCSI University in attempt to ensure the students experience positive university learning experience.

The overall isolation poses robust, negative relationship with university learning experiences ($r = $-.72). The result suggests that students' university learning experiences are influenced by student isolation as a whole to a great extent, proposing all stakeholders in the education field to pitch into student isolation as an entity consisting three areas of concern and not as separate aspects.

7 Implications for Future Studies

The findings of this study surfaced several crucial implications that require urgency and importance from various stakeholders. First, students would be more aware of the student isolation phenomenon i.e. it is very probable for students themselves not to be aware that they feel isolated by mistaking such feelings with mere stress. This is a common situation where students would miss their family and friends back in their home country – not realizing that this stress is due to their inability to familiarize with the learning environment, instead of missing the company of their loved ones.

Secondly, instructors should be aware of signs of student isolation stemming from students' academic performances, social lives and psychological development. Being aware of such signs would give instructors the proper guidance to mollify such unfortunate issues, and be more acclimatized to measures taken by the University in recognizing and mitigating the student isolation phenomenon.

8 Conclusion

This study highlighted the influence of student isolation on students' university learning experiences and the strength of impact towards different aspects in student's university learning experience. Findings showed that academic isolation and social isolation were strongly associated with poorer university learning experiences as compared to psychological isolation. Student isolation as a whole proffers extensive negative relationship with university learning

experience. Stakeholders in the educational context ought to prioritise the impacts of student isolation among tertiary students as higher education institutions are the main producer of future human capital for a nation to continue developing its economy.

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