LISTENING TO THE VOICES OF UNDERGRADUATE STUDENTS:

EXPLORING ASTIN'S THEORY OF STUDENT INVOLVEMENT

DURING THE COVID-19 PANDEMIC

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Abstract

The COVID-19 pandemic has profoundly impacted higher education, particularly in terms of student engagement in academic and extracurricular activities. This study aims to investigate the specific challenges faced by undergraduate students in maintaining their academic and extracurricular involvement during the pandemic. Employing Astin's theory of student involvement as a theoretical framework, qualitative in-depth interviews were conducted with eight highly active undergraduate students. The findings reveal significant challenges both inside and outside the classroom. Outside the classroom, students struggled with ineffective teamwork, poor communication, and a lack of engagement in repetitive programmes. Inside the classroom, the shift to online learning led to participation shifts, increased workload, and stress due to non-conducive home environments and poor internet connections. The pandemic's impacts on students were mixed, with negative effects including increased stress

and feelings of missed opportunities, while positive effects included enhanced resilience, patience, and problem-solving skills. Students suggested several strategies for improvement, such as administrative support for extracurricular activities, enhanced communication, and innovative teaching methods balancing synchronous and asynchronous learning. The study concludes with recommendations for fostering positive student-lecturer relationships and improving the overall educational experience. The findings underscore the need for universities to develop resilient and adaptable systems to support student engagement during future crises.

Keywords: Astin's theory; COVID-19; student involvement; student voices; undergraduates

Abstrak

Pandemik COVID-19 telah memberi impak yang mendalam kepada pendidikan tinggi, terutamanya dari segi penglibatan pelajar dalam aktiviti akademik dan kokurikulum. Kajian ini bertujuan untuk menyelidik cabaran khusus yang dihadapi oleh pelajar pra-siswazah dalam mengekalkan keterlibatan akademik dan kokurikulum mereka semasa pandemik. Dengan menggunakan teori penglibatan pelajar Astin sebagai kerangka teori, temubual mendalam kualitatif telah dijalankan dengan lapan pelajar pra-siswazah yang sangat aktif. Penemuan menunjukkan cabaran penting di dalam dan di luar bilik darjah. Di luar bilik darjah, pelajar mengalami masalah dengan kerja berkumpulan yang tidak efektif, komunikasi yang lemah, dan kurangnya keterlibatan dalam program-program yang repetitif. Di dalam bilik darjah, peralihan ke pembelajaran dalam talian menyebabkan perubahan dalam penyertaan, peningkatan beban kerja, dan tekanan disebabkan oleh persekitaran rumah yang tidak kondusif dan sambungan internet yang lemah. Impak pandemik terhadap pelajar adalah campuran, dengan kesan negatif termasuk peningkatan tekanan dan perasaan peluang yang terlepas, manakala kesan positif termasuk peningkatan daya tahan, kesabaran, dan kemahiran penyelesaian masalah. Pelajar mencadangkan beberapa strategi untuk penambahbaikan, seperti sokongan pentadbiran untuk aktiviti kokurikulum, komunikasi yang dipertingkatkan, dan kaedah pengajaran inovatif yang seimbang antara pembelajaran secara serentak dan asinkron. Kajian ini disimpulkan dengan cadangan untuk memupuk hubungan positif antara pelajar dan pensyarah dan meningkatkan pengalaman pendidikan secara keseluruhan. Penemuan menekankan keperluan universiti untuk membangunkan sistem yang berdaya tahan dan mudah beradaptasi untuk menyokong penglibatan pelajar semasa krisis masa depan.

Kata kunci: Teori Austin; COVID-19; keterlibatan pelajar; suara pelajar; pelajar pra-siswazah

1.0 INTRODUCTION

Who would have thought that in the year 2020, the human race would be facing a global pandemic that could lead to millions of deaths until now? The World Health Organization (WHO) first announced that a novel coronavirus called COVID-19 was a global pandemic on March 11, 2020 (WHO, 2020). Soon after, Malaysia implemented a 14-day Movement Control Order to curb the virus on March 18th, 2020 (New Straits Times, 2020). Since then, there have been several phases of lockdown in Malaysia due to the pandemic (Hashim et al. 2021). The global health, economic, and educational sectors have all been impacted by the pandemic. Higher education sectors, in particular, have been forced to shut down, and students have been required to return to their home countries or become trapped in host nations due to global travel restrictions (Times Higher Education, 2020).

Universities around the world must adapt to the pandemic, with most staff needing to work remotely and many classes held online (Times Higher Education, 2020). Students are no longer exposed to the bustling university cultural life and the 'life on campus' experience. The sudden shift to online teaching-learning methods has posed challenges for both lecturers and students. For instance, lecturers struggle to cover the curriculum as online teaching tends to be slower, while students are adjusting to the absence of in-person classes. Additionally, many students face challenges due to a lack of internet access and technological devices essential for online learning (Schwartz, 2020). As COVID-19 persists into the end of 2021, students who were affected by the pandemic have lost nearly two years of education.

Furthermore, a university is not just a place for education; it also boasts a unique ecosystem (Times Higher Education, 2020). It serves as a space where university students, especially undergraduates, develop themselves as young adults. According to Sirotová (2015), students shape their personalities based on the learning experiences provided by lecturers both in and out of the classroom within the university setting. The author illustrates how classroom learning, facilitated by lecturers, influences students' cognitive processes, emotions, and fosters creativity. However, extracurricular activities outside the classroom are often perceived as having the most significant impact on students' personality development and acquisition of soft skills (Yew, 2010). For instance, students can engage in club activities, serve as student representatives, participate in interfaculty competitions, attend conferences, or engage in charity events. Astin's theory of student development explores how students' involvement in the university environment contributes to their personality development (Astin, 1984).

Astin's theory emphasizes the importance of students' involvement in both academic and extracurricular activities. In essence, the theory suggests that the more students engage with university life, the more likely they are to achieve positive outcomes, such as academic excellence, strong personalities, and enhanced skills (Astin, 1984). Aliu and Aigbavboa's (2021) study support this notion, finding that students' engagement in university life, particularly through extracurricular activities, aids in personality development and enhances graduate employability.

Nonetheless, the COVID-19 pandemic presented unprecedented challenges to higher education globally. Although the immediate crisis has passed, its impacts on student engagement continue to be relevant as educational institutions seek to enhance resilience and adaptability in their systems. Due to this health crisis, universities around the world, including Malaysian higher education institutions (HEIs), particularly public universities, have geared up to employ hybrid or flexible learning systems as the best way forward towards a sustainable education system (Coates et al. 2022; Champagne et al. 2023; Radhi, 2023).

Although hybrid learning (HL) has been reported to offer many advantages (Nikolopoulou, 2022); there are various challenges of online learning in Malaysian HEIs during the pandemic include disparities in internet access and digital literacy, non-conducive home environments for students from lower income households and heightened emotional strain due to unfamiliarity with online learning and financial constraints (Selvanathan et al. 2020; Atan et al. 2023). These challenges could lead to low student engagement in online settings due to the absence of visual communication cues, resulting in negative experiences, dissatisfaction, and course dropout (Adi Badiozaman et al. 2023). As stated by Astin (1999) and Kuh (2009), engagement, encompassing cognitive, behavioural, and affective involvement, is critical for academic success in both traditional and online learning environments.

The COVID-19 pandemic has significantly disrupted higher education, affecting students' academic performance and extracurricular involvement. However, there is limited understanding of how these disruptions have impacted student engagement and development. Thus, this study sought to answer the following research questions: (1) What specific challenges do undergraduate students face in maintaining their academic and extracurricular involvement during the COVID-19 pandemic? (2) In what ways do these challenges impact students' personal and academic development? (3) What strategies can universities

implement to support student engagement and development during crises like the COVID-19 pandemic? With the questions raised, the objective of this study is to explore the specific challenges faced by undergraduate students in maintaining their academic and extracurricular involvement during the pandemic, using Astin's theory of student involvement as a theoretical framework. By examining these challenges, this research also aims to provide insights into how universities can better support student engagement in similar future disruptions.

In Section 2 of the literature review, the research report expands on how Astin's theory development may influence students' development. The research plan/design and data collection methods are presented in Section 3.0 of the methodology. The study's findings and discussion will be detailed in Sections 4.0 and 5.0, respectively. Finally, in Section 6.0, a summary of the study and its implications for practise will be discussed.

2.0 LITERATURE REVIEW

Astin's student involvement theory underscores the significance of student investing physical and psychological energy at a higher education level for their development and learning (Astin, 1984). Astin (1984) suggested that the extent of student learning and personal growth correlates directly with the quality and quantity of their participation; students who are more actively engaged in the institution's life are more likely to persist. A highly involved student is one who devotes substantial time to learning, engages significantly in campus life, actively participates in student groups, and communicates frequently with instructors and peers (Astin, 1999). Active learning practices in the classroom, such as delivering presentations, taking essay tests, and engaging in independent research projects, have been shown to significantly benefit student retention and personal/social learning outcomes, as noted by Astin (1993) and Strayhorn (2008). Moreover, connections with peers and interactions with school administrators have been found to positively impact students' social and personal learning achievements (Astin, 1991). Hence, effective interaction emerges as a crucial factor in engaging students to enhance learning and establishing a connection between engagement and student achievement.

This study will employ Astin's (1991) Inputs-Environments-Outcomes (I-E-O) conceptual model (see Figure 1). This framework was selected because it facilitates the exploration of the effects of the university environment on student educational outcomes while considering the students' background characteristics or growth (Astin, 1984; Astin, 1991; Pascarella & Terenzini, 1991). Student inputs in the model encompass various factors such

as demographic background, characteristics, academic and test scores, talents, skills, goals, and other potentials for growth and learning, observed when a student initially enters college or university (Astin, 1991; Lundberg et al. 2007; Strayhorn, 2008; Popkess, 2010). Additionally, the environment refers to the college or university setting wherein students interact with peers, faculty members, participate in classroom activities, and engage in educational or curriculum programmes (Astin, 1991; Strayhorn, 2008; Popkess, 2010; Raia-Taylor, 2012). It can also encompass a student's actual educational experiences, practices, programmes, or interventions (Astin, 1991). Over time, a student's behaviour changes because of exposure to the environment, and these changes are termed outcomes. Various types of student outcomes include cognitive, psychosocial, personal/social, cognitive psychological, cognitive behavioural, and affective psychological outcomes (Astin, 1991; Popkess, 2010; Strayhorn, 2008).
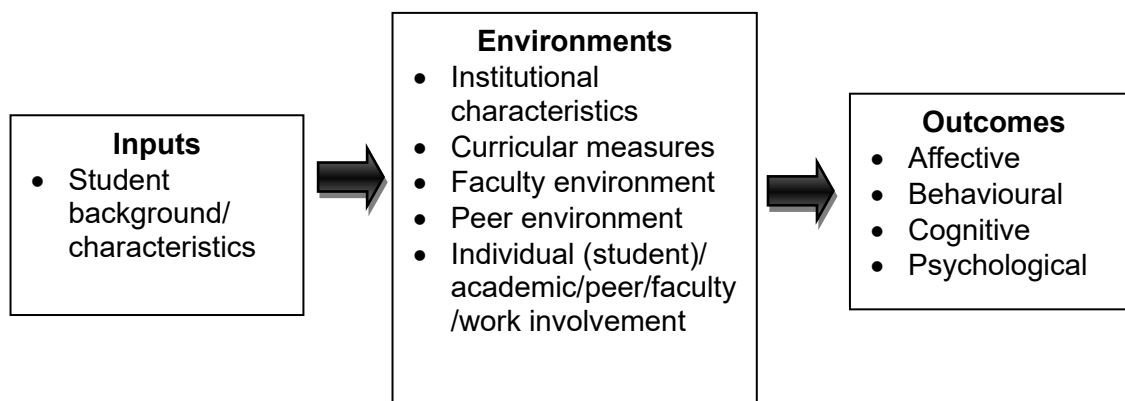

Figure 1. Astin's *theory of involvement: Inputs-Environments-Outcomes (IOE) model*

As affirmed by Astin (1984) and Kahu (2013), learning success is determined by students' participation in learning, which now includes online learning (Akbari et al. 2016; Farrell & Brunton, 2020). Thus, this I-E-O model aids higher education professionals in understanding how specific interventions, such as academic advising or the university ecosystem of learning, affect learners' outcomes like grades, satisfaction, and development. Furthermore, Pascarella and Terenzini (2005) noted that Astin's concept of involvement balances the responsibilities of the institutional environment and active student engagement in promoting student development. Research reveals that one's interactions with the environment affect behaviour (Barker, 1968) and self-determination (Ryan & Deci, 2000), which, in turn, impacts the final achievement outcome.

Existing studies that analyse student involvement using the I-E-O model under the disruption of COVID-19 are more focused on social, cognitive, behavioural, collaborative, and emotional engagement. For instance, Malan (2020) introduced an online accounting module, which was beneficial in improving students' learning experience. Additionally, Perez (2020) and Colclasure et al. (2021) conducted research on the effects of mental health on student involvement on campus. On the other hand, Comeaux and Harrison (2007), Cole (2007), Hu (2010), Ahmad, Anantharaman, and Ismail (2012), Hu and McCormick (2012), and Kim and Kutscher (2021) also conducted studies analysing student involvement on campus during non-epidemic periods using Astin's I-E-O framework.

Based on the above studies, most of them use quantitative analyses, while qualitative research work, particularly comparison studies on inside and outside classroom students' involvement, is almost non-existent. The primary function of qualitative research is to understand the how and why of an experience, adding humanistic value to a study (Merriam & Tisdell, 2016). Additionally, earlier studies omitted the changes in the university environment when outlining students' current life struggles during this COVID-19 pandemic. Thus, this study aims to address these gaps by focusing on the impacts of the COVID-19 pandemic and online learning, providing a new dimension for student academic performance. Moreover, the study explores comparison studies between student involvement inside and outside the classroom. Furthermore, this study aims to address gaps in student involvement theory by using the I-E-O model.

3.0 MATERIALS AND METHODS

The objective of this study is to explore the specific challenges faced by undergraduate students in maintaining their academic and extracurricular involvement during the pandemic. By examining these challenges, this research aims to provide insights into how universities can better support student engagement in similar future disruptions.

3.1 Research Design

To achieve the research objectives, a qualitative research methodology was employed. Qualitative methods are particularly effective for exploring complex phenomena and understanding the experiences and perspectives of individuals (Tracy, 2019). In this study, qualitative in-depth interviews were chosen as the primary data collection method. This approach allows for a detailed exploration of students' characteristics, the specific challenges they faced with remote learning, and the impact of these challenges on their development as

students. The richness of qualitative data provides deep insights into personal and contextual factors that quantitative methods may not fully capture (Tracy, 2019).

To achieve these research objectives, data collection took place via qualitative in-depth interviews to enable the researcher to identify and explore the students' characteristics, the challenges they faced with remote learning, and how these challenges affected their development as students. The purpose of the investigation was to establish the effect of the pandemic on student development and to suggest ways the university could play an active role in making things better for students in these trying times.

To achieve this, the researchers implemented purposive sampling, selecting highly active students as informants for the study. In particular, students who hold leadership positions in student clubs (e.g., president, vice president) were chosen, as their heightened involvement and responsibilities provided valuable insights into the broader student experience. These students were interviewed through the Microsoft Teams Meeting Platform, ensuring accessibility and convenience given the ongoing pandemic restrictions.

The interview questions were grounded in academic literature and designed to elicit detailed responses. Informants were asked to share their perspectives on their campus participation experiences through open-ended questions, allowing them to freely express their thoughts and experiences. This approach ensured that the data collected was rich, detailed, and reflective of the students' genuine experiences and challenges.

The details of the research plan could be summarised as below:

1- Interviewee: Eight (8) undergraduate students from various courses in the undergraduate programmes were interviewed. The profiles of interviewees are outlined in Table 1.

2- Interviewee selection: A group of potential active students (ranging from semester 3 to 7) are selected. They hold positions in various college and university-level programmes.

3- An interview protocol was outlined in Appendix A.

Table 1. Profiles of interviewees

Name of student	Course/Semester	Position in Student's Club
Student 1	Bachelor of Accounting/ Sem 5	President
Student 2	Bachelor of Tourism Management/ Sem 7	Secretary
Student 3	Bachelor of Accounting/ Sem 7	President
Student 4	Bachelor of Tourism Management/ Sem 7	President
Student 5	Bachelor of Business Management/ Sem 9	Committee
Student 6	Bachelor of Business Management/ Sem 9	Vice President
Student 7	Bachelor of Communication/ Sem 3	President
Student 8	Bachelor of Communication/ Sem 5	Treasurer

3.3 Data Analysis

The recorded video of the interview session was first transcribed and then analysed using thematic analysis. Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data. Thematic analysis organises and describes the data in rich detail (Braun & Clarke, 2006). The researcher followed iterative coding process by O'Dwyer (2004) and Miles et al. (2014) where they suggested the qualitative data analysis embraces three linked subprocess which are data reduction, data display, and conclusion drawing/verification, which O'Dwyer (2004) refers to as data interpretation. After all interviews, transcriptions were uploaded into the Atlas.ti software to aid coding process. Deductive coding was utilized where preliminary codes were created from research questions and sub codes are then added into the main category until all relevant statements in the transcripts are covered. Table 2 below shows the sample of how transcripts were coded into the category pertaining to research question 1.

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O'Dwyer (2004) refers to these processes collectively as data interpretation.

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Table 2. Sample of category 1 - RQ1

Impact of Covid-19 on Students Involvement Inside and Outside Classroom: Research Question 1 (RQ1)

Inside Classroom	**Outside Classroom**
Category: Impact	Category: Impact
Sub-category: Inside Classroom	Sub-category: Outside Classroom
Code: IMPACT: IN	Code: IMPACT: OUT
"Honestly speaking, I am one of the students who always focused in the class and jot down every single thing. I will make sure to stay consistent during a class and get things done properly. But after pandemic, online classes do not really give me the same degree of understanding which then makes me feel down." [Student 8]	*"I think I am not developing, it's a waste, I feel guilty because I can't feel the enjoyment as a university student".* *[Student 5]*

4.0 RESULTS

Before interpreting the detailed results, the outcomes of the thematic analysis are primarily divided into two mains key parts, corresponding to the research objectives. The first part describes the challenges students faced in outside classroom (extracurricular) versus inside classroom (academic) activities during the COVID-19 pandemic and the effects on their development. The second part provides suggestions on how the university ecosystem of learning can further enhance students' development.

In general, challenges in both extracurricular and academic activities emerged during the pandemic. In extracurricular pursuits, students faced issues with teamwork, communication, and engagement due to repetitive programmes. Academic challenges included a shift in participation dynamics, exacerbated by environmental factors like poor internet connections. Despite these challenges, students developed resilience and problem-solving skills. Recommendations for improvement include administrative enhancements and innovative teaching approaches to foster positive student development. Following this thematic overview, the detailed findings corresponding to these themes will be elaborated in the subsequent sections.

4.1 Challenges Faced During the Pandemic and the Effects on Student Development

Outside Classroom

Many students reported facing various issues and challenges during the pandemic, and from the perspective of the organizing committee, a significant portion of these issues revolved around effective teamwork that needed to be addressed. They mentioned difficulties in gauging the working pace of team members, resulting in work delays, ineffective communication and connection among team members, and a lack of understanding regarding their teammates' external commitments. These challenges led to weak team spirit and overall disengagement.

From the perspective of regular members, the pandemic led to a decreased level of involvement. With most programmes being conducted online, primarily consisting of talks and seminars, many members found them uninteresting, non-engaging, and repetitive. It's worth noting that while there were numerous programmes available, students were demotivated to join due to the lack of variety. They hoped for more diverse activities beyond just talks, as expressed by one student.

"As a regular member, the challenges would be there's too many events, but they all look the same that it gets a bit boring at times. There are talks that interesting, but I hope they actually gives us more than just talks".
[Student 4]

Alas, the challenges they faced during the pandemic have also had a negative impact on their development. Their growth is impeded as they are unable to experience the full university environment and enjoy the essence of being a university student, as depicted by Student 5.

"I think I am not developing, it's a waste, I feel guilty because I can't feel the enjoyment as a university student". [Student 5]

The challenges they encountered during the pandemic have also adversely affected their development. Their growth is hindered as they are unable to experience the complete university environment and savour the essence of being a university student, as illustrated by Student 5.

"It really affects me in a positive way. It was enhancing my tolerant level to people and also help me in insist on stress level. I'm becoming more accept with stress and can overcome it". [Student 2]

Furthermore, students also reported gaining the ability to see things from perspectives other than their own. Moreover, the challenges they faced developed their resilience and openness to setbacks, and they expressed a sense of accomplishment when they successfully navigated through these trials.

"I believe it enhances my life development as I become more prepared to face many potential drawbacks. It makes me more flexible in a good way. For instance, I do not easily give up when things don't go according as planned as I am always optimistic and open to the idea of a Plan B." [Student 7]

Inside Classroom

Each student has mentioned a few challenges and problems related to how the pandemic has impacted their classroom learning. To begin with, transitioning from a traditional classroom to an online setting appears to have both positive and negative effects on students' learning behaviours. Due to the shift in the learning environment, some students who were previously

active in class are now passive in the online setting, while others who were once passive are now active.

It's fascinating to discover that both student personality and changes in the learning environment have a significant impact on student participation in class. As described by Student 4, an introverted student felt more comfortable in the online setting, which encouraged her to engage more frequently in class discussions and improve her skills through conversation. In her own words, Student 4 explained:

> *"I was never the one to talk in the classroom before the pandemic. I am a passive student. Just kind of blend in. But surprisingly I am able to talk more in online class. The reason is probably because no one can see my face. I could see the different though. I become more confident to talk about some topics. There are times I did not talk though but I do see changes in my speaking skills." [Student 4]*

Extroverted students, on the other hand, experienced the opposite situation, feeling less engaged in the online class environment and becoming demotivated due to poor internet connections and limited interaction between students and professors. As pointed out by Student 2, such circumstances contribute to the stress of learning for students.

> *"I am feeling less motivated because the environment is not suitable for study. Most of the time I will having classes in my own room, or at my home. The environment was cause me feeling too comfortable and not create a situation that can make me study." [Student 2]*

The most common issue noted by most students during the pandemic, regardless of personality type, is the unpredictable internet connection, which affects their engagement in online classes, instructional materials, and activities throughout the semester. In essence, they perceived that their learning experience in online classes was not as effective as in physical classes. Additionally, they felt that their workload had increased compared to physical classes, as explained by Student 8.

> *"Honestly speaking, I am one of the students who always focused in the class and jot down every single thing. I will make sure to stay consistent during a class and get things done properly. But after pandemic, online classes do not really give me the same degree of understanding which then makes me feel down. It takes much more effort for me to concentrate*

and much of the connection that came with learning has been lost until that

I don't have the mental bandwidth to sit down and take notes." [Student 8]

The majority of them experienced significant stress due to the workload, which seemed challenging to manage both individually and as a group task. Firstly, the impact on individual health is influenced by the growing stress and anxiety among students due to the "fear of missing out" (FOMO) in an online learning environment. The excessive reliance on technological gadgets, such as computers and smartphones, has resulted in an unhealthy relationship with these devices. As described by Student 1:

"I became very stressed up to a point where I can only sleep for 3-4 hours a

day. And I have somewhat separation anxiety with my phone in fear of

missing an important message from lecturers." [Student 1]

Secondly, the workload of group assignments presents another significant issue that negatively impacts students' health. Students face challenges in keeping their group members engaged and committed to completing class group work. They believed that the efforts required to maintain group cohesion were substantial, adding to their stress. To compensate for the "free rider" group members, they end up having to exert more effort. As explained by Student 4:

"Group presentation, group assignments, group videos - everything that

related to groups. If this was before pandemic, if any of my group mates

aren't available or not participating in the discussion, I could always find them

in the next class. But during the pandemic, they suddenly missing in action,

even when there are classes, they might nor might not be available. We see

them online, but they still didn't reply. This kind of communication is hard

during pandemic and because we are unable to contact them, we need to

cover for their work, which make our works even more than we should have.

Not to mention people that are sending their part late because of other

assignments. We do understand but at the same time, we also have a lot of

assignment too." [Student 4]

4.2 Suggestions for Learner Development Through University Support

Outside Classroom

Respondents utilised various methods to characterize their learning experiences. Additionally, they outlined how activities and experiences outside the classroom help or hinder their personal development. One student expressed concern about their effectiveness in leading society. Therefore, students have articulated their expectations of the university environment in improving the university system, whether in terms of administrative or online learning systems. They require prompt assistance when encountering problems online, whether related to academic studies or club activities. They also expect the procedure for approving club programmes to be streamlined to facilitate preparation. Students 4, 7, and 8 made the following constructive suggestions:

> *"The university can improve administrative and computer system accessibility so that students can reach out when they are having problems, whether academic or club-related." [Student 7]*
>
> *"It is hoped that the university could improve the university system to make it more organised and efficient as there are many issues regarding the application and student portal." [Student 8]*
>
> *"It is difficult to obtain approval to conduct a programme. And if the 'TNC' (Deputy Vice-Chancellor) is late in approving it, we'll have to start over and change the deadline. I believe that if university can enhance this, it will make things much easier for others." [Student 4]*

Students proposed conducting a survey to determine the types of programmes or club activities that they are interested in, aiming to enhance participation rates and stimulate students' interest in university programmes. Before enforcing the new rules, their thoughts and feelings should be considered. Student 2 recommended that:

> *"Use the university site to create a section for the club to promote club activities, registration, and so forth. Aside from that, a club or society could conduct a poll to determine student demand for the type of programme they are interested in. It can assist in motivating students to participate in a programme since the content or type of programme may be of interest to them." [Student 2]*

Inside Classroom

Despite the various challenges raised by students regarding the online learning environment, they have suggested that lecturers be more understanding of students' difficulties studying at home, considering factors such as varying internet connection speeds and personal issues. Furthermore, students appreciate lecturers who can be more innovative in their lecture delivery and include asynchronous activities. They do not find extended hours of teaching through Webex engaging enough. As succinctly mentioned by Student 7:

> *"In my opinion, I think lecturers should be more considerate towards their students' situation during online classes as not everyone is privileged with good internet connection. Some of them also have personal problems at home which they do not talk about that might affect their performance in class so I think it is crucial for a lecturer to be more understanding towards the students. In terms of teaching style, maybe lecturers can balance between having lectures and also asynchronous classes to spice things up a little. Long lectures may cause a student to be disinterested so asynchronous classes could maybe give the students something to new to focus on." [Student 7]*

Students, on the other hand, believed that fostering a positive relationship with their lecturers would undoubtedly enhance their intellectual achievements and enable them to study more effectively. Last but not least, students appreciated participating in class activities that ignited their interest in learning.

> *"In terms of the lecturers, it is good to have a positive relationship among students. When students are nurtured in such surroundings, they are likely to increase their intellectual accomplishments and learn more effectively. Also, some lecturers need to allow students to participate actively in a student-centric environment and have constructive feedback. The lectures must create a stimulating environment to make her students thirst for knowledge."*
> *[Student 8]*

5.0 DISCUSSION

This study outlines the students' involvement in university inside and outside of the classroom during the COVID-19 pandemic. Astin (1991) described outcomes as the changes in a student's behaviour as a result of exposure to the environment over time. Students in our study confirmed this prediction. They described how the pandemic has resulted in their lack of participation outside the classroom because all the programmes are held online and primarily revolve around speeches and seminars. They draw their attention away from partaking because they find it non-engaging and most of the programmes look similar. Students' development has been hindered as they cannot experience the university environment and enjoy being a university student. These findings demonstrate that students' behaviours are changed after the COVID-19 pandemic and when things all go virtual.

The I-E-O model of Astin (1991) emphasised the importance of a student's characteristics in determining their educational success. However, the COVID-19, which caused a transition in the learning environment from face-to-face to online classes, has had an impact on students' participation in the classroom. According to the findings of this study, our students have been experiencing anxiety and stress since the COVID-19 outbreak. Students claimed that their personalities had changed and that they were once active in face-to-face classes but were now passive in online learning classes. They perceived that what they learnt in an online class was less effective than what they learnt in a physical class. Astin (1977, 1982) identified that student place of residence (environment factor), which is on-campus living, would lead to academic persistence in all types of institutions and among all students, regardless of race, gender, academic ability, or family background. As a result, when students' mobility is restricted and they study from home, it can affect their learning abilities. In comparison to the physical class, many also felt that their burden had increased and spend more effort on their assignments due to the changed of assessing modes by lecturers. Students have a harder time keeping their group members engaged and committed to finishing class group work. They believed that the amount of effort required to keep the group together was immense, which added to their anxiety. This outcome is consistent with Astin (1993) and Strayhorn (2008) studies that suggest peer interaction tends to have great impacts on students' social and personal learning accomplishments.

Nevertheless, as the lockdown continues and time passes, students begin to exhibit positive behaviours. They learn to be more understanding despite the fact that the increased workload has left them highly stressed. They are now able to successfully manage the stress

and tension. This means that the practise of online programmes or classes after a long period will have favourable impacts on student retention and personal learning improvement. Furthermore, students indicated that they were able to see things from several perspectives and that their problem-solving skills had improved. They are improving psychologically and mentally as a result of the happiness they get after successfully overcoming the challenges. This supported Astin's (1991) theory that students' actual educational experiences and practises will influence their mindset and emotional psychology.

6.0 CONCLUSION AND IMPLICATIONS FOR PRACTICES

The goal of this study is to investigate the particular challenges that undergraduate students encountered in sustaining their academic and extracurricular activities during the COVID-19 pandemic. Through this examination, the research sought to offer valuable insights into how universities can enhance their support for student engagement during similar future crises. Student involvement theory by Astin (1991) was used to describe student involvement struggles during the COVID-19 pandemic. To address the research objectives, a qualitative research methodology through in-depth interview was used to collect data for this study. Eight students from the undergraduate programme who are highly active have been interviewed to know their current lives (student involvement in-and outside classroom activities) during this COVID-19 pandemic. Additionally, their experience of student engagement, especially during the COVID-19 epidemic, in enhancing or hindering their life development as individuals as well as university students, is also being explored.

The findings of this study are primarily divided into three main parts, corresponding to the research objectives. First, for the outside classroom challenges, students faced several issues during the pandemic, particularly with teamwork. They struggled with ineffective teamwork, difficulties in gauging team members' pace, poor communication, and a lack of understanding of outside commitments. Additionally, the lack of engagement in extracurricular programmes was notable, as students found the programmes repetitive and boring, leading to demotivation and low participation. An overabundance of similar programmes also contributed to disinterest among students.

Shifting to inside classroom challenges, online learning caused a significant participation shift, with previously active students becoming passive and vice versa. Introverted students felt more comfortable engaging online, while extroverts felt less engaged. Non-conducive home environments and poor internet connections further exacerbated stress

and demotivation. Students perceived online classes as less effective and more demanding, leading to an increased workload. Group work presented additional challenges, as coordinating and engaging group members became more difficult, resulting in increased stress and extra effort.

The challenges negatively affected students' personal and university life development, leading to feelings of guilt, and missed opportunities. However, there were positive effects as well, including increased patience, tolerance, and resilience, along with improved stress management and problem-solving skills. For example, introverted students experienced positive impacts, such as increased participation and improved communication skills. Conversely, extroverted students faced decreased engagement and motivation, leading to stress. Overall, the online learning environment increased stress and anxiety, fostered an unhealthy reliance on technology, and made managing group assignments more difficult.

To address these challenges, students suggested several strategies. Outside classrooms, administrative improvements were needed for better support and streamlined processes for club activities. Conducting engagement surveys to tailor programmes to student interests was recommended. Enhanced communication systems within the university were also crucial for providing timely support to students. Inside classrooms, students proposed that lecturers should adopt more considerate teaching approaches, considering students' challenges and incorporating asynchronous activities. Innovative delivery methods, balancing synchronous and asynchronous teaching, were suggested to maintain interest. Fostering strong student-lecturer relationships and creating a stimulating, student-centric learning environment with active participation and constructive feedback were also emphasized as vital strategies.

For further recommendations, the way instructors offer the learning experience in class and at university in general shapes students' personalities, thinking styles, emotions, and rising creativity (Sirotová, 2015). As a result, a good lecturer must also be an active listener, besides being a knowledgeable and skilled teacher. Good listening skills are required to establish empathy and understanding with students and to determine if they understand what they are being taught. On the other hand, maintaining a pleasant student-lecturer relationship would undoubtedly improve their academic achievements and allow students to study more effectively (Klem & Connell, 2004). For example, lecturers should express their concern and care for students by providing meaningful feedback and conveying the notion that they are

supported in their learning.

The limitation of this study lies in its small sample size, which comprises a limited number of students from a single university degree program, as it is part of an exploratory research undertaking. Consequently, its generalizability is constrained. Therefore, this study could be enhanced by employing quantitative methodologies that offer generalizable findings across a broader sample, utilizing surveys or experiments.

5.0 ACKNOWLEDGEMENTS

6.0 REFERENCES

Adi Badiozaman, I.F. Ng, A., & Voon, M.L. (2023). "Here we go again": Unfolding HE students' hybrid experience and resilience during post-covid times. *Asia Pacific Journal of Education*, 1–22.

Aliu, J., & Aigbavboa, C. (2021). Reviewing the roles of extracurricular activities in developing employability skills: a bibliometric review. *International Journal of Construction Management*, *23*(10), 1623–1621.

Akbari, E., Naderi, A., Simons, R. J., & Pilot, A. (2016). Student engagement and foreign language learning through online social networks. *Asian-Pacific Journal of Second and Foreign Language Education*, *1*(4), 1–22.

Ahmad, Z., Anantharaman, R.N., & Ismail, H. (2012). Students' motivation, perceived environment and professional commitment: An application of Astin's college impact model. *Accounting Education: An International Journal*, *21*(2), 187–208.

Astin, A. W. (1977). *Four critical years.* San Francisco: Jossey-Bass.

Astin, A. W. (1982). *Minorities in American higher education.* San Francisco: Jossey-Bass.

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, *25*(4), 297–308.

Astin, A. W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: American Council on Education/Macmillan.

Astin, A. W. (1993). *What matters in college?* San Francisco, CA: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, *40*(5), 518–529.

Atan, M. A., Abdul Hamid, A. A., Zaini, N., Norwahi, N. A., & Jamil Azhar, S. B. H. (2023). Navigating higher education in Malaysia: Lessons from pandemic challenges in online learning. *International Journal of Academic Research in Business & Social Sciences*, *13*(12), 375–382.

Barker, R. G. (1968). *Ecological psychology: Concepts and methods for studying the environment of human behaviour*. Stanford, CA: Stanford University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Champagne, E., Choinière, O., & Granja, A .D. (2023). Government of Canada's teleworking and hybrid policies in the aftermath of the COVID-19 pandemic. *Canadian Public Administration, 66*(2), 158-175.

Coates, H., Zhang, Y., Li, M.L, & Zhong, Z. (2022). *A Turning Point for Chinese Higher Education: Developing Hybrid Education at Tsinghua University*. London: Routledge.

Colclasure, B. C., Marlier, A. M., Durham, M. F., Brooks, T. D., & Kerr, M. (2021). Identified challenges from faculty teaching at predominantly undergraduate institutions after abrupt transition to emergency remote teaching during the COVID-19 pandemic. *Education Science*, *11*(556), 1–24.

Cole, D. (2007). Do interracial interactions matter? An examination of student-faculty contact and intellectual self-concept. *The Journal of Higher Education*, *78*(3), 249–281.

Comeaux, E., & Harrision, C. K. (2007). Faculty and male student athletes: Racial difference in the environmental predictors of academic achievement. *Race Ethnicity and* Education, *10*(2), 199–214.

Farrell, O., & Brunton, J. (2020). A balancing act: A window into online student engagement experiences. *International Journal of Educational Technology in Higher Education, 17*(25), 1–19.

Hashim, J. H., Adman, M. A., Hashim, Z., Mohd Radi, M. F., & Kwan, S. C. (2021). COVID-19 epidemic in Malaysia: Epidemic progression, challenges, and response. *Frontiers in Public Health*, *9*(560592), 1–19.

Hu, S.P. (2010). Scholarships awards, college choice, and student engagement in college activities: A study of high-achieving low-income students of color. *Journal of College Student Development, 51*(2), 150–161.

Hu, S. P., & McCormick, A. C. (2012). An engagement-based student typology and its relationship to college outcomes. *Research in Higher Education, 53*(7), 738–754.

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758–773.

Kim, M. M., & Kutscher, E. L. (2021). College students with disabilities: Factors influencing growth in academic ability and confidence. *Research in Higher Education*, *62*(3), 309–331.

Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, *74*(7), 262–273.

Kuh, G.D. (2009). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, *141*, 5–20.

Lundberg, C. A., Schreiner, L. A., Hovaguimian, K. D., & Miller, S. S. (2007). First-generation status and student race/ethnicity as distinct predictors of student involvement and learning. *NASPA Journal, 44*(1), 57–83.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research in practice: A guide to design and implementation* (4th ed.). San Francisco, California: Jossey-Bass.

Malan, M. (2020). Engaging students in a fully online accounting degree: An action research study. *Accounting Education, 29*(4), 321–339.

Miles, M. B., Michael Huberman, B, & Saldaña, J (2014*). Qualitative data analysis: A methods sourcebook*. United States: Sage.

New Straits Times. (2020, March 16). 14-day Movement Control Order begins nationwide on Wednesday. *NST Online*. https://www.nst.com.my/news/nation/2020/03/575180/14-day-movement-control-order-begins-nationwide-wednesday

Nikolopoulou, K. (2022). Face-To-Face, Online and Hybrid Education: University Students' Opinions and Preferences. *Journal of Digital Educational Technology, 2*(2), ep2206, 1-7.

Pascarella, E. T. & Terenzini, P. T. (1991). *How college affects students*. San Francisco: Jossey-Bass Publishers.

Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass Publishers.

Perez, C. (2020) Caring for the whole self: Analyzing the relationship between graduate students' involvement on campus and the onset of imposter syndrome. *M.A. in Higher Education Leadership: Action Research Projects, 51*, 1–42.

Popkess, Ann. (2010). *The relationship between undergraduate, baccalaureate nursing student engagement and use of active learning strategies in the classroom* [Doctoral Thesis, Indiana University]. Dissertation Abstracts International: Section B: The Sciences and Engineering. 71, 1 – 124.

Radhi, N. A. M. (2023). *MoHE to introduce hybrid, flexible learning system at universities: Khaled. New Straits Times.* NST Online. https://www.nst.com.my/news/nation/2023/06/916471/mohe-introduce-hybrid-flexible-learning-system-universities-khaled

Raia-Taylor, M. (2012). *A case study examining the influence of dual enrollment and high school advising on student persistence in college* [Doctoral dissertation, Northeastern University Boston, Massachusetts]. ERIC Institute of Education Sciences. https://eric.ed.gov/?id=ED552418

Ryan, R. M., & Deci, E. L. (2000) Facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78.

Schwartz, S. (2020). *Survey: Teachers and Students Are Struggling with Online Learning.* Education Week. Retrieved November 6, 2021, from https://www.edweek.org/teaching-learning/survey-teachers-and-students-are-struggling-with-online-learning/2020/11

Selvanathan, M., Hussin, N. A. M., & Azazi, N. A. N. (2020). Students learning experiences during COVID-19: Work from home period in Malaysian higher learning institutions. *Teaching Public Administration*, *41*(1), 13-22.

Sirotová, M. (2015). Causal attributes of university students and their preferences in the process of evaluation of their learning activity results. *Procedia - Social and Behavioral Sciences*, *174*, 2361–2367.

Strayhorn, T. L. (2008). How college students' engagement affects personal and social learning outcomes. *Journal of College and Character*, *10*(2), 1–16.

Times Higher Education. (2020). *The impact of coronavirus on higher education.* Times Higher Education (THE). Retrieved November 6, 2021, from https://www.timeshighereducation.com/hub/keystone-academic-solutions/p/impact-coronavirus-higher-education

Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (2nd ed.). USA: Wiley Blackwell.

WHO. (2020). *Listings of WHO's response to COVID-19.* World Health Organization. Retrieved November 6, 2021, from https://www.who.int/news/item/29-06-2020-covidtimeline

Yew, H. (2010). Extra-curricular activities build character and personality. *The Star.* https://www.thestar.com.my/opinion/letters/2010/08/13/extracurricular-activities-build-character-and-personality

6.0 APPENDIX A: INTERVIEW PROTOCOL

General

  i.   Tell us about you as a university student.

Outside classroom

  i.   The activities outside classroom that you involve (which level, the position you hold)

  ii.   With the position that you hold, what are the challenges you face during this
        pandemic?

  iii. How does it affect you?

  iv.   How do these experiences enhance or hinder your life development as a person?

Suggestion

  i.   How can the university make it better for you in this trying times? (What can we
        improve? The system? The facility? The people?)

Inside classroom

  i.   Could you describe what kind of student you are inside a classroom? (Any differences
        between before and after pandemic?)

  ii.   In terms of academic, what are the challenges you face during this pandemic?

  iii. How does it affect you?

  iv.   How do these experiences enhance or hinder your life development as a person?

Suggestion

  i.   What can we, as a university, improvise to make it better for you in terms of formal
        learning (The facility? The lecturers? Teaching style?)