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Implementation of PERMA Model into Teaching and Learning of Generation Z

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Abstract. Teenagers and young adults (Gen Z) experience high rates of depression and anxiety, and one of the contributing factors is related to academic stress. Gen Z has unique characteristics, and technology has a powerful influence on the learning of Gen Z. Notwithstanding, evidence-based learning remains limited pertaining to the use of technology to alleviate the academic stress for Gen Z learning. Hence, to address this issue, this study integrates a well-being model, the Positive, Engagement Relationships, Meaning and Achievement (PERMA) Model into a technology-based teaching and learning approach, by introducing the Happy Capsule as a kit to promote learning engagement. Happy Capsule is a combination of five digital tools which are Padlet, Kahoot!, Wiki, e-portfolio, and an online learning style test. Employing the Participatory Action Research, this paper explores the experiences of 50 first-year university students' in learning with Happy Capsule for over 14 weeks. Thematic analysis was used and four main themes emerged, namely self-management, engagement in learning, emotional aspects, and soft skills. The findings emphasize that digital learning has become a necessity to fulfil students' learning needs, especially in the higher education setting. The study found that the implementation of positive emotion, engagement, relationship, meaning, and achievement elements in teaching and learning helps educators in designing more effective learning and assessment strategies to meet the current demands as well as to cater to students' needs, styles, and preferences. In addition, it also increases motivation, enthusiasm, and builds good communication skills among students. Future research may focus on conducting more Action Research to improve practice by integrating various digital tools in teaching and learning in diverse contexts.

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1. Background of the study

Individuals born between the mid-1990s and early 2000s are commonly referred to as Generation Z (Gen Z). Growing up in a highly connected, on-demand, and technology-driven environment has made technology a significant influence on their learning experiences, presenting a challenge for educators to adapt their teaching methods to effectively engage and educate this group. Technology is important in higher education for Gen Z since they are the generation born with the Internet of Things in their surrounding life. Consequently, how Gen Z learns differs fundamentally from the previous generations, highlighting the need for research to identify their learning preferences and characteristics in the context of the latest technological advancements. Gen Z has its unique behaviours, lifestyles, and attitudes as impacted by technological development worldwide. Past studies show the significant impact of technology on the life of Gen Z (Mohr & Mohr, 2017; Seemiller & Grace, 2017). University students have their preferred learning styles. While being technology savvy, Gen Z students have certain traits that may impact their well-being. Howe and Strauss (2000) found that seven key characteristics define Gen Z students as follows:

- Special- many from smaller families with fewer siblings to compete with, so they received greater attention and increased security from their parents.
- Sheltered- parents kept them closer to home with a focus on safety and connection to family but also involved with many organized activities and sports.
- Confident- increased parental involvement and coaching/external adult involvement gave them lots of support and self-confidence.
- Team oriented - grew up among the most diverse population ever, and learned to be civil and less "me-oriented".
- Conventional- more resourceful, dynamic, and environmentally conscious.
- Pressured - overscheduled, over-mentored, and driven to succeed among peers.
- High achieving- future-oriented, planners, focus on long-term success.

Understanding students' learning styles can be advantageous in helping educators to identify the most effective learning strategies. Research has shown that recognizing learning styles at the primary education level can enhance student achievement and reduce negative attitudes toward certain subjects (Özerem & Akkoyunlu, 2015). Hence, educators should be able to adapt their teaching style to better match the learning styles of their students. Yet, the use of learning style inventories to increase self-awareness has received little attention. Therefore, research on preferred learning methods among the new generation of learners who have joined tertiary education in the last decade is critical. Inappropriate learning styles, strategies, and tools may impact the students' well-being.

1.1 Issues among Gen Z learners

The recent COVID-19 pandemic has accelerated the adoption of online learning in all different educational settings, and this trend is expected to persist for years to come (Kim & Gurvitch, 2020). Experts assert that the proliferation of online learning has created a parallel attrition problem at the tertiary education level across the globe. Declining academic motivation and the increase in academic stress have been cited as primary reasons for students dropping out of their undergraduate studies (Cleary, 2021; Colferai & Gregory, 2015; Ibdaet al., 2023). Lack of motivation has been identified as one of the top challenges faced by "Gen Z" students in Malaysia, especially amidst the COVID-19 pandemic (Ahmad et al., 2021; Allam et al., 2020; Chung et al., 2020; Mahdi et al., 2020; Tan, 2021). The above-mentioned findings are also corroborated by a qualitative study in which the participants have made remarks such as "Can't focus during online class, don't feel like doing anything" and "Feel lazy because study alone in the house" (Ang et al., 2021).

Declining academic motivation will contribute to an increase in academic stress among students. This academic stress may include academic focus and academic procrastination (Ibdaet al., 2023). The lockdown has increased academic stress, with disruptions in health training practices, decreased interaction with family, financial difficulties, and emotional distress. Assessment, for example, has been highlighted as a significant contributor to students' stress, with concerns such as assessment design, workload, and feedback influencing student well-being (Jones et al., 2020). Poorly constructed learning experiences, inappropriate teaching materials, lack of engagement, and a lack of appropriate activities are all identified as obstacles to well-being in pedagogy and curriculum. Activities, such as group projects can also have an impact on students' confidence and well-being. Unmatched educator-student learning preferences and inappropriate learning practices were also identified as risk factors for academic stress. Lastly, excessive curriculum content and inappropriate course materials might pose major mental health issues for certain students (Baik et al., 2019; Bentley, 2017).

Students' mental health can have a substantial influence on their prospects of success in higher education. Individuals who struggle with mental health issues are more likely to drop out of university, are less likely to finish or pass courses, and receive poorer marks. Moreover, research has demonstrated that academic pressure, university culture, and processes within higher education may all contribute to the exacerbation of these mental health concerns for students. Many research has reported on these findings, including Winzer et al. (2018), and Tinklin et al. (2005). As social awareness of mental health and well-being grows, higher education institutions are being asked to take a proactive and all-encompassing approach to include mental health in learning, tuition, and curriculum. This demand for actions has come from multiple sources, including students, and stresses the importance of working in partnership with them. Consequently, several studies have attempted intervention-based approaches that have had limited or short-term success. These interventions however lack empirical evidence in the literature. As a result, there is a need for a comprehensive

approach that addresses the root causes of this issue as noted by Hartrey et al. (2017, p. 26), among other researchers.

The learning environment is one of the crucial aspects that requires attention in a higher education setting. The learning environment in higher education, whether it is conducted in person or online, encompasses social interactions, the culture and structures of organizations, as well as physical and virtual spaces that impact learners' experiences and perceptions. In addition, the differences in character, ages, personalities, styles, and other aspects between educators and students may impact students' learning outcomes. Mutual understanding and cooperation from both parties, educators and students are prominent to ensure a harmonious environment for teaching and learning.

1.2 The PERMA Model

The PERMA Model of Well-Being was developed by Seligman (2011). PERMA is the acronym for five elements in the model which are (1) Positive emotions, (2) Engagement, (3) Relationships, (4) Meaning, and (5) Achievement. Seligman (2011) argued that these five elements have the capacity to contribute to total well-being. The elements are not treated separately, in contrast, they interact and influence one another. For instance, if someone has a positive relationship with others, the individual would experince positive emotions, and the relationships are meaningful to their life. In the teaching and learning context, focusing on the five elements of PERMA can foster the students' and educators' well-being. Hence, it may help students to not only to thrive academically, but also personally.

According to Seligman (2011), experiencing good feelings such as pleasure, happiness, joy, and contentment is an important element of total well-being. A substantial degree of pleasant feeling can relate to great pleasure or ecstasy. Moreover, Trigwell et al., (2012) discovered that college students who experience a lot of good emotions are more likely to use a deep learning technique. Happy emotions and the use of deep learning methodologies have been connected to better academic success. Furthermore, Engagement is where the person wholly being involved in the activities that he or she participated in. The person makes his effort, and skills, and voluntarily spends time in the activities to the utmost. According to Seligman (2011), the most important aspect of engagement is recognizing which activities in life bring us to the state of flow that is full of positive endorphins and serotonin. In the teaching and learning context, student engagement in class contributes significantly to the improvement of academic achievement (Engeser et al.,2005). In a study by Kuh et al. (2008) for instance, it is found that first-year college students who actively participate in class activities and spend more time to study have better Grade Point Average and are more motivated to further their studies to another level. Also, psychological and behavioral engagement are crucial as they mediate the relationships between classroom context and students' academic achievement (Dotterer et al., 2011).

Seligman (2011) pointed out that positive connections are characterized by a sense of social support, integration, and concern for others. Feeling connected to others, showing affection for them, and sharing your feelings with them are all part of

this. Close interactions are supposed to satisfy a basic human need (Peterson, 2006). Moreover, college students who are involved in more regular and significant romantic and interpersonal connections are more likely to be happy than those who are not (Diener & Seligman, 2002). Meaning corresponds to Seligman's definition of the idea that one's existence has significance and purpose, as well as a sense of connection to something higher than oneself (Seligman, 2011). Many studies have discovered a relationship between a higher sense of meaning, life satisfaction, positive affect, and academic success among college students (DeWitz et al., 2009). According to Seligman (2011), achievement includes progress toward goals and a sense of accomplishment in one's life. It is not just about actual accomplishments, but also the desire and persistence to pursue something. Academic achievement also positively influenced the students' well-being (Morinaj & Hascher, 2022). Those who always achieved their academic goals were reported as higher well-being individuals and most likely to have engagement in class. (Davis & Hadwin, 2021).

Students have been much impacted by the Covid-19 pandemic. Due to this pandemic, teaching and learning styles have changed. During the pandemic, digital online learning had taken place in almost all educational settings. Hence, both educators and students were required to adjust themselves to the new way of teaching and learning. The Movement Control Order which was announced in Malaysia restricted the movement across the country. This includes the mobility of students to the physical campus of the university which limited their physical existence in university. Since all classes were diverted to online basis, no physical interaction and communication took place among the students, which was challenging especially for new students. The situation was tough for first-year students who were first-timers as university students.

1.3 Objective of the study

This paper aims to explore students' experiences participating in a learning environment that fused the PERMA elements into technology-based teaching and learning approach. In this study, the fusion of PERMA elements and the digital learning is called Happy Capsule and how students make sense of their experiences in learning with Happy Capsule were evaluated and explored in this study.

2. Methodology

2.1 Study design

This study employed Participatory Action Research (PAR) as its research design. PAR is a process for improving educational practices which involves action, evaluation, and reflection. In this PAR, we utilized project-based learning (PBL) as our strategy to improve students' engagement in the technology-based teaching and learning process. PBL enables students to immerse themselves in real-world problem-solving. The social interactions that occur during PBL can enhance cognitive skills, knowledge, and understanding. Neo and Neo (2009) found that students learn best when they collaborate with their peers in an environment that fosters discussion and idea exchange. The project was conducted over 14 weeks during the Covid-19 pandemic when most classes were

held online. The Happy Capsule was used as a teaching and learning tool, with a combination of synchronous and asynchronous learning methods. The development of this project entailed the implementation of numerous phases. This PAR was based on the "Think Actively in a Social Environment" framework by Wallace and Adams (1993) that was embedded in the three stages of this PAR – action, evaluation, and reflection.

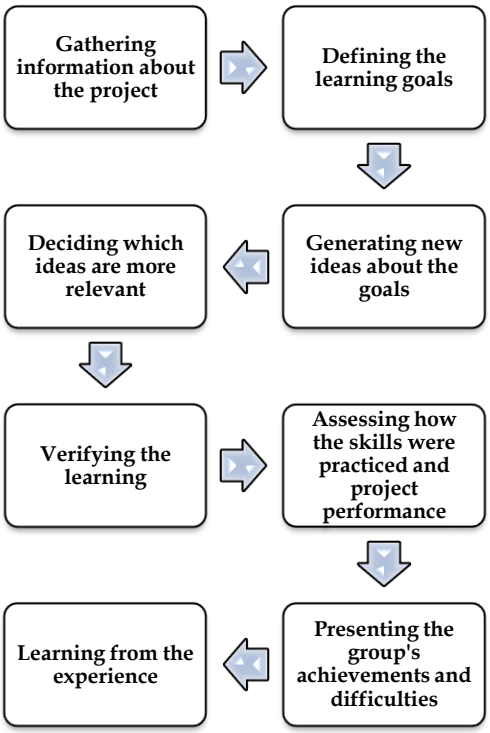

Figure 1: Think Actively in a Social Environment" techniques by Wallace & Adams (1993)

2.2 Participants

The participants of the study consisted of fifty first-year students from a public university in Malaysia. The participants were selected based on convenience sampling as they were conveniently accessible to the researchers since they were enrolled in the "Computer Skills for Counselors" course during a common semester (14 weeks) in the academic year 2020/2021. The participants were from diverse backgrounds and races including Malay, Chinese, and Indian, with age range between 19-22 years old, consisting of males and females.

2.3 Research Instruments and Activities

Happy Capsule was the main instrument used in the study. Happy Capsule incorporates the PERMA model into a combination of digital tools for online learning. In this project, five digital tools that were identified by researchers as potentially powerful in creating positive emotion, engagement, relationships, meaning, and achievement environments for students were used as explained in Table 1.

Table 1: The Mapping of PERMA elements, learning environment, and digital tools

Elements in the PERMA Model	Learning environment	Digital tools
Positive emotion	- Good sensations include pleasure, happiness, gladness, and satisfaction. -Feelings of good effect were strongly connected with total life satisfaction among college students.	e-portfolio, Padlet, Online Learning Style Test
Engagement	Active participation and engagement in the class.	Padlet
Relationships	-Learning environment that has a sense of support, social integration, and concern from others (Seligman, 2011). -It entails the feeling of connectedness to people, including loving them and being expressive with them.	Wiki, Padlet
Meaning	- The conviction that one's existence is worthwhile and a sense of belonging to something bigger than oneself (Seligman, 2011). -Individuals' search for significance in their lives because it makes them feel fulfilled and makes their lives worthwhile.	Padlet, e-portfolio
Accomplishments	-A sensation of success and progress towards goals in one's life. -Achievement is a desire to achieve something rather than real accomplishments.	Kahoot!, e-portfolio

To ensure successful implementation, various digital tools were utilized in the Happy Capsule namely; 1) Wiki, 2) Padlet, 3) Kahoot!, 4) online learning Style Test, and 5) e-portfolio. These tools were used by the participants on different tasks assigned to them:

Wiki is a tool embedded in the learning management system (LMS) of participants' university. Wiki is a tool that enables online collaboration by its users. In Wiki, the users can create, edit, and systematically organize the content that they posted on. Some of the main functions of Wiki are to generate, communicate, analyze, and evaluate information. By using Wiki in the university's LMS, students can form a collaborative work, create, express, and share their thoughts while being able to be revised by their team members.

Wiki was utilized during group activities and all participants have the full access to this function. In a group of five to six members, students were asked to create a Wiki on a selected topic. The instructor provided a list of topics for students to choose from. The given topics were related to counseling and psychology (e.g., mental health, bullying, cyberbullying, abuse, etc). Students were required to review relevant materials related to the topic such as websites, past studies, blogs, social media platforms, and others. They were free to add any information, videos,

audio, graphics, and other relevant materials to their Wiki. The objectives for this task were to create an online collaborative platform where the students can work in team, acquire knowledge on the topic content, and to be more creative and responsible in disseminating information to the audience.

Padlet is one of the tools in Happy Capsule. Padlet is an online digital tool for collaboration and interaction purposes. In Padlet, students could share materials and content, engage in online collaborative activities, and communicate with others interactively. According to DeWitt et al., (2015), Padlet is widely used to facilitate communication both synchronously and asynchronously. Padlet is known to be user-friendly due to its simplicity and convenience.

Kahoot! can be considered as a new way of teaching and learning. It is an online interactive learning tool that can be used in education settings at any level. Kahoot! is also widely used in business and organizational settings. It is known to have many interesting features that can stimulate class engagement through interactive ways. Its catchy sounds and pleasant graphical design enable Kahoot! to capture users' interest easily. Kahoot! assists educators in giving instant feedback to students, monitoring students' progress, and fostering creativity in the classroom. In addition, instructors could generate instant reports and analyze the results immediately. In this study, Kahoot! served as a continuous assessment for students. While it could function as an assessment, students learned a lot from their experiences in Kahoot! In this study, an online quiz comprised of 20 multiple-choice questions which covered the topic throughout the semester was administered in the middle of the semester using Kahoot! The duration was set to 30 minutes for the whole questions. Our objectives in administering an online interactive platform for the quiz were to provide an interactive way of conducting the continuous assessment as well as to ensure students were motivated to answer and learn from the questions. Students could also check for the correct answer in Kahoot! Furthermore, Kahoot! was used in this project as an exposure to online quizzes for students so that it could challenge their creativity in utilizing this platform in any program or activities that they will conduct in future.

Online Learning Style Test was also included in the Happy Capsule. Understanding their own learning style is important for students to optimize their quality learning time and their method of learning. This test was conducted to promote awareness among the students about their learning style preference since students who know their learning preference style can better equip themselves with appropriate learning strategies. In this study, an online learning style test called the Index of Learning Styles Questionnaire (Felder & Soloman, 1991) was administered. This test could disclose four learning styles of individuals, namely active and reflective, sensory and intuitive, visual and verbal, as well as sequential and global. The interpretation of each learning style was attached so that students can prepare for the appropriate learning strategies that suit their learning style.

e-portfolio was also used as a tool in the Happy Capsule kit. e-Portfolio is a compilation of work or shreds of evidence that has been collected or experienced by the user for a certain period, in the form of an electronic version. In this project, the e-portfolio was considered as students' collection of work, where they were

asked to compile the learning materials during the semester. Students were requested to create an e-portfolio using their creativity. Upon submission, students utilized a variety of platforms or tools to create their e-portfolio (e.g., Canva, Google Slides, Powerpoint, Word, and Emaze). This e-portfolio comprised any materials, students' reflections, feedback, and other relevant content that the student collected throughout the semester. Students were asked to write their reflections on experiences, challenges, and outcomes for each topic they learned, synchronously and asynchronously. Our objectives for this task were to help the students to immerse themselves in each topic they learned, encourage students to think creatively, and create a happy environment while doing the task.

2.4 Data collection procedure

After implementing the Happy-Capsule program for 14 weeks, participants were briefed thoroughly on how to write a critical self-reflection on their learning experiences before embarking on writing their self-reflection where they shared their experiences, challenges, and opinions participating as well as on how their experiences relate to their future career. These critical self-reflections were then collected and analyzed using the Thematic Analysis technique.

2.5 Data analysis and validation

Since there were a total of fifty participants, we received around a hundred and fifty pages of self-reflection. All self-reflections were then transcribed into Malay before proceeding with data analysis. Following the six steps given by Braun and Clarke (2006), we thematically analyzed the data using Word and Excel.

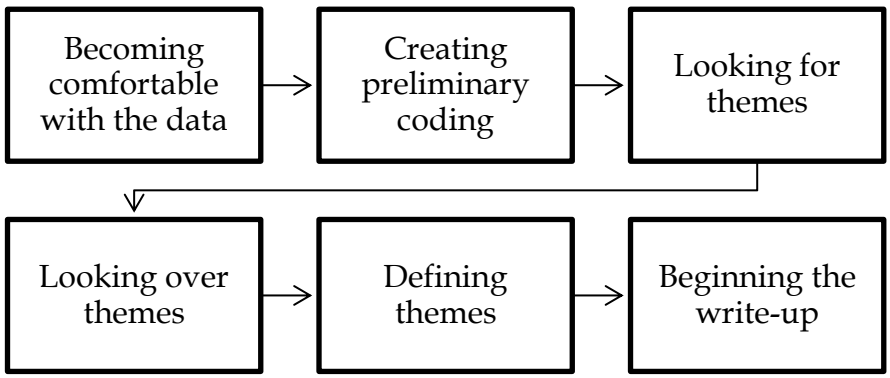

Figure 2: Stages in the data analysis process

To ensure the validity and trustworthiness of the gathered qualitative data, member checking, peer review and bracketing were employed. Member checking and verification were used to confirm the accuracy of the data gathered for this study. Member verification served as the participants' verification of the outcomes' plausibility where participants were requested to provide input on the information that had previously been presented. Member checking was performed with the participants during a follow-up session to ensure that the information gained earlier really reflects the meaning of their shared experiences.

To ensure the reliability, accuracy, credibility, and validity of the study, two experts in qualitative research were invited to conduct a peer review. The peers validated the themes and sub-themes that emerged from the self-reflection data. Experts in the fields of qualitative research and psychology validated the findings, confirming that the themes accurately reflected the research questions and objectives. The validation of themes by these experts is an important aspect of this research.

Throughout the research process, bracketing was utilized to prevent researchers' preconceived notions from influencing the understanding of the phenomena. Before commencing the research, researchers began the bracketing process by identifying and listing any personal inclinations, prior inputs, or previous understandings we held regarding the experiences in digital learning with the psychology aspect. This allowed us to approach the research with a more open and neutral perspective, enabling us to examine the phenomena objectively.

3. Findings and Discussion

After collecting and analyzing the data, we identified four key themes that emerged: (a) self-management, (b) engagement in learning, (c) emotional aspects, and (d) soft skills. Excerpts from the self-reflection were included according to the related themes in the following sections to answer the research question of the study – "How do students make sense of their experiences in learning with Happy Capsule?"

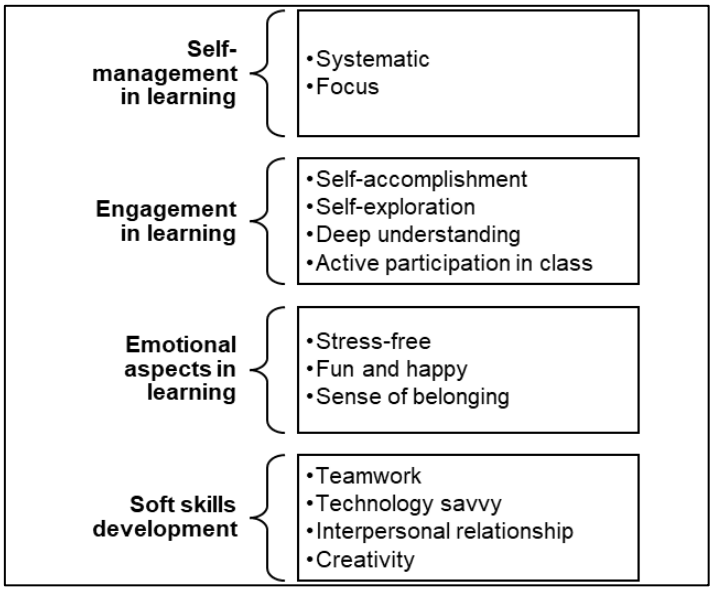

Figure 3: Emerging themes and sub-themes

3.1 Self-management in Learning

Self-management in learning embraced key concepts of systematic and focus. Some students experienced that they were more systematic and tasks were more manageable when learning with Happy-Capsule.

> *'By learning about all these applications, I find myself being more organized doing my work and rather more effective and efficient compared to myself before*

signing for this course.' *- Mikha*

'I am very grateful that this experience has facilitated me to complete my assignments. Now, I can complete my assignments more systematically'
- Izzah

Interesting activities and assignments bring more focus to the participants in class as well as while doing the assignments.

'Having to engage in reflection after class encouraged me to be more focus during class.' *-Paah*

'I feel that this application is very interesting and can attract my interest and focus in the subject' *-Sally*

3.2 Engagement in Learning

Students commented on their accomplishments where they were satisfied with their work (assignments and activities in class).

"I'm pleased with what I have accomplished. I realize that comes quite simply currently." *-Pari*

The activities and assignments provide space for them to explore themselves and new pieces of knowledge.

'I found that I have limited knowledge about it and this course made me explore more in-depth' *-I-man*

'In the first week, I was worried and I attended class with confusion, I had the impression that the computer subject will be more difficult as the class is online. I was very worried but over time my worries turned into a feeling of curiosity on what I will be learning this week and there was a feeling of happiness especially when doing quiz on Kahoot!" *- Lila*

A good learning environment can foster deep understanding among students especially when they are more focused and have a high interest in completing class assignments.

'I anticipated this class every week as I want to study new things about the interplay between multimedia and counseling.' *-FBihah*

'This subject is the only subject that I fully understand because apart from interesting way of learning, the inputs are also interesting.' *-Paah*

'As for my thoughts and feelings throughout this semester, I feel rather happy and confident about myself using technology. I think that this has been a good experience to learn about something that I use every day to the extent that I could understand it better and deeper.' *- Mikha*

Additionally, students commented on their active participation in class. Some students acknowledged their changes where they were more active in this class as compared to previous semester

'I was not a very expressive person and I rarely spoke during class in previous semesters, but this class is very entertaining and I have even started to open up a bit and shared my thoughts during class.'
'-Lava

3.3 Emotional Aspects in Learning

Emotional aspects in learning incorporated three sub-categories namely stress-free, fun and happy, and sense of belonging.

The integration of the positive psychology aspect into teaching and learning with technology creates an enjoyable learning experience for students. Most students felt happy and fun when involved with the class activities and assignments.

> *'This class was overall very fun and impart useful knowledge to me. I had so much fun while learning all sorts of new things and I enjoyed them thoroughly*
>
> *-Roshi*

> *'I am feeling extremely joyful to have attended such an awesome class.'*
>
> *– YiG*

> *'I loved and enjoyed Dr.'s classes so much that I look forward to it every week. This is one of the best classes I have attended so far this semester.'*
>
> *– Lava*

Students also valued the experiences as they found the class was stress-free and considered it a stress buster.

> *"It is joyful and such a stress buster when attending her class. Not for the joke but it is deeply true."* *- Pari*

Students also put much voluntary effort and strong passion for the subject which then creates a sense of belonging in themselves.

> *'I dedicate all the ideas and creativity that I have in the assignment and when producing it, I enjoyed and was solemn in decorating and editing it.'*
>
> *-Aman*

3.4 Soft Skills Development

Four sub-categories emerged under soft skills development which are: a) teamwork, (b) technology savvy, (c) interpersonal skills, and (d) creativity.

Even though students went through the first semester of university life virtually, they could still create good teamwork with peers. They also developed their interpersonal skills through communication and teamwork.

> *"My group mates and I have a high team spirit and we have prepared a poster related to the pros and cons of IT. It was the first group assignment and I can say that we were very cooperative with each other. That made me feel enthusiastic and more comfortable completing the assigned task'*
>
> *- Paah*

Happy-capsule also helps them be more receptive towards the use of technologies in learning and later develop interest and skills in technologies.

> *'To be truth, I used to have very little information about these computer skills however once I began this course, I gained and learned a lot of new skills and new concepts on computer.'* *- Pari*

'Compared to the skills and pieces of knowledge I had at the first week of learning this module and to now, I can see gradual improvements and better understanding towards the digital world.' *- VTya*

'I think it is very fruitful to gain the ICT knowledge that we can apply in the Counselling field.' *- YiG*

'As I look back over the semester, I am surprised to find that what I was unable to do accurately previously becomes quite easy now.' *-Pari*

Students also found that their creativity in problem solving and completing tasks is enhanced.

'I could unleash my creative side and that was one assignment I enjoyed the most.' *-Roshi*

'This 14-week of teaching and learning session has opened my mind to think creatively and explore the world of creativity. This course has given me an amazing experience and feeling.' *-Meni*

'What I have gained from this course is, that it has made me more creative and taught me to be more open-minded in everything that I'm going to do.' *-Melody*

4. Discussions

Incorporating self-management skills into students' learning involves empowering them to set goals, plan, monitor, and evaluate their progress. Developing this skill is vital for students as it enables them to become independent learners and take responsibility for their education actively. Students can enjoy numerous benefits by improving their self-management skills, such as becoming more motivated and engaged in the learning process. These skills also help them gain essential life skills like time management, organization, and self-discipline, which are critical to succeed in school and beyond. In addition, students also found that digital learning helps them to be more focused on their learning process. They are more likely to be focused (Amrullah & Nanzah, 2022), voluntarily explore new knowledge, and perform better on assessments. Maintaining focus is important for effective learning because it allows students to comprehend and search for information more effectively, and these may lead to better academic performance. This includes using interactive teaching methods, providing opportunities for students' collaboration and discussion, as well as offering feedback and guidance to help students to stay on track. A well-designed and structured learning environment can help students stay engaged and focused on their studies. Therefore, educators should create a supportive and engaging learning environment to support students' focus in the classroom besides building their passion towards learning. The created environment must incorporate positive psychology elements (e.g. PERMA) to boost their good experiences.

Learning engagement encompasses students' level of interest, involvement, and motivation while learning (Cayubit, 2022; Veznez et al.,2023). It refers to the degree to which students are willing to participate in the learning process, including asking questions and seeking feedback. By participating in class discussions, students actively process and integrate new information, while also considering diverse perspectives. Research highlights the critical role of engagement in learning for student success. Engaged students are more likely to develop a deeper understanding of the material, explore additional information, and apply their knowledge in practical settings. Class discussions, group projects, and hands-on activities are effective ways to foster student engagement. Furthermore, students become more aware of what they are learning and motivated to apply their learning outcomes to real-world situations. Additionally, when students receive timely and constructive feedback on their work, they are more engaged in the learning process (Tanis, 2020) and more likely to positively compete with peers. Active engagement involves both mental and physical involvement, enabling students to be deeply involved in their learning and achieve a better understanding of the course materials. By actively participating in hands-on, real-world activities, students may apply their knowledge and abilities in meaningful ways, fostering a deeper feeling of ownership and responsibility for their learning (Green & Plessis, 2023).

Digital learning environments with engaging activities help students feel happier and less stressed in class. This may enhance student's well-being as happiness, joy, and pleasure are important aspects of well-being (Seligman, 2011). Fun learning activities can relieve academic pressure and motivate students to attend class, as the pressure can hinder students' commitment to attend class (Rincon-Flores et al.,2022) and negatively affect academic achievement, students' cognitive, emotional, behavioral, and social aspects. A study conducted by Tee et al. (2023) also found that engaging activities like e-writing therapy are potential tools for enhancing the mental well-being of students. The use of digital tools also can pique the interest of Generation Z students, who are synonymous with technology use in their lives. Interactive tools, especially those that involve the use of various graphics and exploring new knowledge through internet searches, can create a more enjoyable learning atmosphere. On top of that, the inclusion of gamification elements in learning enhances both learning outcomes and enjoyment for students (Yang & Wu, 2021). Students who could use these interactive activities are more motivated and happier in their learning (Oktavia & Lestari, 2022). Ultimately, they are found to have a high sense of belonging to the university. They can better appreciate their role as students and feel a sense of belonging to the university. The sense of belonging refers to the extent to which students feel connected, valued, and identified with the university, educators, and peers. The use of interactive virtual walls can foster a sense of cooperation and belonging among students. Students with a sense of belonging are more engaged in the learning process, have positive attitudes toward school or institution, and have better mental health (Wang et al.,2019w; Ryan & Patrick, 2001; Jetten et al.,2012; Osterman, 2000).

Digital learning empowers students to develop a range of valuable soft skills. While some may associate computer and internet use with gadget addiction in teenagers, balanced and positive use of digital platforms can enhance students' skills. Through digital learning, students can explore new platforms, becoming proficient in handling each tool and applying it to their studies and daily lives. Digital tools also foster teamwork, as Generation Z students work collaboratively on tasks, producing compelling assignments that draw on a diverse range of sources, such as in the Wikipedia project. This healthy competition and cooperation motivate students to strive for excellence within their respective groups. Feeling connected to others is important for an individual's well-being (Seligman, 2011). In terms of creativity, digital tools are invaluable in helping students prepare imaginative and innovative assignments, enhancing their subjective well-being (Tamannaeifar & Motaghedifard, 2014), and building their creativity. Learning approaches that require creativity can have a positive impact on building students' skills in this area (Yasin& Yunus, 2014). Digital learning also fosters interpersonal skills, as students build close relationships with their classmates. Interactive virtual walls, such as Padlet, are highly effective in building connections between students especially during pandemic where students did not meet physically. Spending time, gaining experience, and training together on digital platforms enable students to learn from one another and develop communication, interpersonal, and decision-making skills (Lindsey, & Rice, 2015; Álvarez et al.,2009). Overall, digital learning provides numerous opportunities for students to acquire and strengthen their soft skills, preparing them for success in both their academic and personal lives.

5. Strength and Limitation

This study involved a small group of students (n=50), which limits the results to be generalized to a bigger population. We recommend future research to further expand the coverage of the study involving a diverse population, and additional variables, to include psychological and counseling aspects into teaching and learning. The implementation of psychological aspects in teaching and learning can help educators to design more effective learning and assessment strategies to meet current demands

6. Conclusion

It is undeniable that digital learning has become a necessity to fulfill today's students' learning needs, especially in higher education settings. Integrating the elements of positive emotion, engagement, relationships, meaning, and achievement and the digital tools into teaching and learning can increase motivation, enthusiasm, and good communication skills among students. Besides helping students to acquire the course contents, it also builds competencies in other soft skills areas while maintaining more effective human interaction. Therefore, educators or instructors need to be more open to new ideas and creative in designing assignments while ensuring the alignment with the goals of the courses. Generation Z has unique characteristics. The discrepancies in the age of the educators or instructors and the Gen Z students may sometimes lead to some misunderstanding between both parties. For example, the unmatched style

of teaching by the instructors and the style of learning of students may lead to some stressful events. Therefore, mutual understanding of both parties is very crucial. Creating an enjoyable teaching and learning environment will benefit not only the instructors or educators and students but also the university administration.

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