

BARRIERS OF HIGHER EDUCATION INSTITUTION TO DEVELOPING 21ST-CENTURY SKILLS: A PHENOMENOLOGICAL INQUIRY

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Abstract: *Acquiring 21st-century skills has become essential for university students to succeed academically, professionally, and personally. However, many educators are unsure how to develop these skills in students, resulting in a gap between the critical skills that students possess and those that industry expects of them. To address this issue, the study aimed to explore the barriers that hinder university students from acquiring 21st-century skills during their tertiary education. It used an interpretative phenomenological analysis (IPA) research design to examine students' experiences and perceptions of challenges in acquiring these skills. The study identified several categories of barriers, including attitude barriers, technological distractions, pedagogical obstacles, and perceptual barriers. Attitude barriers included fear of failure, a fixed mindset, procrastination, negative self-doubt, a lack of assurance, and peer pressure. Technological distractions included social media, video games, internet surfing, multiple digital tools, and instant messaging. Pedagogical obstacles encompassed traditional teaching methods, inadequate instructor training, limited access to technology, external collaborative learning, limited experiential learning opportunities, and standardised assessments. Perceptual barriers included stereotyping, self-doubt, and negative peer pressure. The study concludes that developing effective strategies to overcome these barriers and promote the development of 21st-century skills among university students requires a multi-faceted approach, including rethinking traditional teaching methods, providing adequate training for instructors, leveraging technology to support learning, and creating opportunities for collaborative and experiential learning. Further research is necessary to explore these strategies and evaluate their effectiveness.*

Keywords: *21st century skills, qualitative, higher education institutions.*

Introduction

The skills required for success in today's fast-paced, technology-focused world are known as 21st century skills. This set of competencies includes a blend of academic, technical, and social-emotional skills (Geisinger, 2016). They are often called soft skills, non-cognitive skills, or transferable skills, highlighting the significance of qualities like critical thinking, creativity, communication, collaboration, and problem-solving (Voogt and Roblin, 2010). These skills are crucial for success in contemporary society but are not always explicitly taught in traditional educational settings. Other names used to describe these abilities are life skills, employability skills, and personal skills (Rotherham and Willingham, 2010). The importance of these skills is not limited to individual success but also extends to the prosperity of organisations and societies in the global economy. As technology and globalisation continue to transform the world, 21st-century skills will become increasingly vital for individuals and communities to remain competitive and achieve success.

21st-century skills are vital for university students as they prepare to enter a dynamic and increasingly global job market. Graduates need to have technical knowledge and soft skills that enable them to adapt and flourish in a constantly changing landscape. These skills can improve employability, promote lifelong learning, encourage innovation and creativity, and prepare students for global citizenship (Larson and Miller, 2011). Possessing 21st-century skills can help university students succeed academically, professionally, and personally, while also contributing to the growth and success of their communities and society. Despite the widespread recognition of their importance, many educators are uncertain about how to teach and develop these skills in students. This gap has created a discrepancy between the critical skills that students possess and those that the industry expects of them (Radermacher and Walia, 2013).

Numerous studies have been conducted about 21st century skills in higher education, exploring their significance, implementation, and effects (Saavedra and Opfer, 2012; Van Laar et. al, 2020; Farrow et. al, 2022). The Partnership for 21st Century Learning conducted a study in which college faculty and employers agreed on the importance of critical thinking, communication, and problem-solving as the most critical skills for college graduates (Lai et. el., 2017). Another study by the Association of American Colleges and Universities found that teamwork, critical thinking, and problem-solving were the top priority skills for employers hiring college graduates (Fox, 2018). The National Centre for Higher Education Management Systems also discovered that integrating 21st century skills into the curriculum can result in increased student engagement and improved outcomes in areas like critical thinking and problem-solving (OECD, 2018). Additionally, skills such as creativity, communication, and teamwork are positively correlated with job performance among employees (Horton et. el., 2017). These studies emphasise the importance of 21st-century skills in higher education and their impact on student success in the workforce. As a result, many universities are incorporating these skills into their curricula to better prepare their students for the challenges of the 21st century.

Nevertheless, various studies have indicated that university students might not have sufficient 21st-century skills (Baird et. al., 2019; Tang, 2019). For instance, a survey conducted by the American Association of Colleges and Universities revealed that only 23% of employers believed that recent college graduates were well-prepared in areas such as written communication, problem-solving, and critical thinking (Bauer-Wolf, 2018). Another study by the Association of American Colleges and Universities reported that only 26% of employers believed that college graduates had strong ethical decision-making abilities, intercultural skills,

and global knowledge (SHRM, 2019). Furthermore, university students in Malaysia exhibited low levels of critical thinking, creativity, and communication skills (Nurafeffa et. al., 2022), while another study in the United Arab Emirates found that university students had limited problem-solving and critical thinking abilities (Al-Mahrooqi et. al, 2022). These findings imply that there might be a discrepancy between the skills possessed by university students and those required in the workforce, underscoring the importance of incorporating 21st century skills into university curricula to better equip students for success in the contemporary workforce.

This article is part of a larger research project that seeks feedback from final-year undergraduate students in a business faculty about the challenges they faced while attempting to develop their skills in the classroom. The study uses a focus group to gather the opinions of the participants.

Literature Review

Academics and industries are focusing on 21st century skills because they are considered crucial for success in today's rapidly changing world. The 21st century is characterized by a globalized economy, rapid advances in technology, and an ever-increasing pace of change. As a result, the skills required to thrive in this environment are different from those that were required in the past. 21st century skills are often referred to as soft skills or non-cognitive skills, and they include things like critical thinking, communication, collaboration, creativity, and problem-solving. These skills are not only essential for success in the workforce but also for personal and social development. For example, communication skills are necessary for building strong relationships, while critical thinking skills are essential for making informed decisions. Moreover, 21st century skills are increasingly important in a world where automation and artificial intelligence are becoming more prevalent in many industries. These skills are more difficult to automate and are therefore becoming more valuable to employers. In summary, the focus on 21st century skills reflect the changing demands of the modern world and the need for individuals to possess a range of skills that can enable them to thrive in today's rapidly evolving society (Begum et. al, 2018).

There have been several studies on 21st century skills among university students published in academic journals. It was found that online collaborative learning can enhance 21st century skills such as communication, collaboration, and critical thinking among university students (Vlachopoulos et. el, 2017). Another study stated that creativity, communication, and teamwork are positively associated with job performance among employees (Sanyal et. al., 2018). Research found that university students in Pakistan lack 21st century skills such as critical thinking, problem-solving, and communication (Muhammad Din, 2020). An examination into incorporating project-based learning into the curriculum can help develop 21st century skills such as critical thinking, problem-solving, and creativity among university students (Talat et. al, 2014). An inquiry on technology-based instructional strategies confirmed that it can enhance 21st century skills such as collaboration, communication, and problem-solving among university students (Shadiev et.al, 2022).

These studies suggest that there are various approaches that universities can take to enhance 21st-century skills among their students. These approaches include online collaborative learning, project-based learning, and technology-based instructional strategies. The findings also highlight the need for continued research on this topic to better understand how universities can effectively develop 21st-century skills among their students.

Factors that may influence students' contemporary skills.

The development of 21st-century skills in students is highly dependent on the educational environment in which they learn (Dileckci et. al, 2023). Although traditional lecture-style classrooms may be effective at imparting technical knowledge, they may not be enough to foster the skills required for success in the modern workforce (Karia et. al, 2015). Instead, classrooms that offer opportunities for collaboration, critical thinking, creativity, and problem-solving are better suited for developing these skills. Through activities such as group projects, discussions, and hands-on learning experiences, students can practise and enhance their 21st century skills. These kinds of classrooms can also encourage students to take responsibility for their own learning, which can increase their engagement and motivation. Ultimately, creating an environment that supports the development of 21st-century skills can help students prepare for success in their future careers and in society as a whole.

Technology has become an essential component of daily life, and it plays a crucial role in the development of 21st-century skills among students. In the classroom, technology can help students practise and develop critical skills like communication, collaboration, and problem-solving. By utilising tools like video conferencing, online discussion forums, and collaboration platforms, students can work together on projects and assignments, broadening their understanding of different cultures and ways of thinking. Furthermore, technology provides access to vast amounts of information and resources, which can help students develop research and analytical skills. However, it is essential to teach students how to use technology effectively and responsibly. Educators can incorporate technology into their teaching to equip students with the necessary skills for success in today's world.

The design of a curriculum is an integral part of education, and it can significantly impact the acquisition and development of 21st-century skills in students (González-Pérez et. al. , 2022). A well-designed curriculum that prioritizes the development of these skills can provide students with a more effective way of acquiring them. This can be accomplished by creating a learning environment that emphasizes key skills such as critical thinking, problem-solving, collaboration, and creativity. For instance, a curriculum that incorporates project-based learning can offer students opportunities to work on real-world problems that require the application of 21st-century skills. Such projects encourage students to analyze information, identify patterns, and develop solutions collaboratively, which helps them develop their critical thinking and problem-solving abilities. Moreover, a curriculum that fosters creativity can promote innovation by giving students the freedom to express themselves and explore new ideas. By placing a strong emphasis on the development of 21st-century skills in the curriculum, students are better prepared to succeed in the workforce and tackle the challenges of modern society.

Effective teaching strategies are crucial for developing 21st century skills in students, in addition to technology (Ramaila et. al, 2022). Active learning, inquiry-based learning, and problem-based learning promote the acquisition of these skills. Active learning engages students in interactive discussions and activities to foster critical thinking and communication skills. Inquiry-based learning allows students to independently explore solutions to problems, promoting research and problem-solving skills. Problem-based learning requires collaboration and applying multiple subject areas to solve real-world problems, promoting teamwork and problem-solving skills. Using these strategies, teachers equip students with the tools and skills needed to thrive in the modern world.

Cultural factors are significant in the development of 21st century skills in students, with societal expectations, family values, and economic pressures all playing a role (Asbari et al. 2020). In individualistic cultures, students may be more likely to develop creativity and critical thinking, while students in collectivistic cultures may emphasise collaboration and teamwork. Economic pressures can also encourage the development of skills such as problem-solving, critical thinking, and creativity (Froy et al. 2012). Educators must consider these cultural influences when designing teaching strategies to help students acquire and develop the skills necessary for success in a globalised world.

Experiential learning opportunities, such as internships, service learning, and project-based learning, offer students practical experience in their desired fields (Collins-Nelsen et. al. 2022). Internships allow students to work with professionals, applying classroom knowledge and skills to real-world situations, which helps develop critical thinking, problem-solving, communication, teamwork, collaboration, and leadership abilities. Service learning engages students in community service activities, which help develop problem-solving, critical thinking, and communication skills. For example, students may participate in food drives, clean-up campaigns, or volunteer at local shelters, putting their skills to meaningful use. Project-based learning requires the integration of multiple subject areas and collaboration to solve complex problems, developing critical thinking, problem-solving, communication, teamwork, and leadership skills. Engaging in these experiential learning opportunities enables students to develop practical skills, knowledge, and 21st-century skills that prepare them to succeed in their chosen fields.

Personal motivation is crucial for the development of 21st-century skills (MacDonald et. al, 2011) . Intrinsically motivated students are more likely to actively engage in the learning process, take ownership of their learning, and persist through challenges. Students can be motivated by a variety of factors, such as career goals, passion for learning, or personal satisfaction in acquiring new skills. Educators play a crucial role in fostering and nurturing personal motivation by providing opportunities for students to set their own learning goals, offering feedback focused on growth rather than grades, and creating a safe environment that encourages risk-taking and exploration. In summary, personal motivation is not solely the responsibility of the student, and educators must create a supportive learning environment to help students develop 21st century skills.

Research and Methodology

Research design

This research applied an interpretative phenomenological analysis (IPA) research design, as outlined by Smith (1996). Interpretive phenomenology focuses on the individual's subjective interpretation of their experiences. This approach aims to uncover the meaning behind the individual's experiences and how they make sense of them. The researcher in this approach assumes that people have a unique perspective on the world that is shaped by their experiences and cultural context. Many researchers have applied IPA to understand university students' interpretations of their experiences. (Pepin, 2022; Cooper, 2012; Rivituso, 2014). This approach aims to uncover the meaning behind the individual's experiences and how they make sense of them. The researcher in this approach assumes that people have a unique perspective on the world that is shaped by their experiences and cultural context. The application of IPA was hence considered appropriate in this research. Furthermore, the researcher received the necessary ethical approval that was needed for the study.

Data collection

Focus groups are also used in IPA to obtain data for qualitative studies (Love et. al, 2020; Eze et. al, 2022). The purpose of the focus group discussion was to uncover from the students the barriers to critical thinking in the classroom. The focus group consisted of 30 final-year students, 10 from each business management department, who were enrolled in an undergraduate programme. These respondents were selected for this research based on their academic registration for the year 2020. They are graduating in October 2023. Moreover, the study participants were identified through class advisers and criteria to guarantee their common characteristics.

Kruger (2008) recommended a focus group size of 8 to 20 participants but acknowledged that groups of less than 11 did not represent a serious threat to the reliability of the study. Nyumba et. al. (2018) emphasized that a focus group must have four to twelve participants. Therefore, the groups' sizes that were chosen for this study were found to be adequate.

In February 2023, the IPA focus groups were held. An independent facilitator conducted all the focus groups. The focus groups began with brainstorming processes in which participants were encouraged to think about and then write down their original perspectives on note cards about the study's question. The interviews were carefully recorded using a voice recorder.

The researchers provided a letter of consent to the participants for the interview, as they are between the ages of 21 and 23 years old. They made certain that any information used in this study was legal. The participants underwent a series of interviews and observations using a focus group approach. The interviewee's response was transcribed to ensure that no data was manipulated.

Analysis and Findings

The study used thematic analysis in analysing the data. The possible themes were manually coded by the researchers, who then collected and refined them, collapsing some into larger themes and breaking others down into smaller ones. A thematic map was used to aid in visualising the associations between the themes during the refinement process, ultimately resulting in the creation of a thematic map of the data. The researchers examined each theme and its description to identify the themes. Once the themes were revised and finalised, a final thematic map was produced.

Relevant theme 1: Attitude barrier towards developing new skills.

An attitude barrier can be defined as an obstruction that arises from one's psychological or emotional state and hinders the development of new skills or the execution of actions that are required for progress and advancement. This type of barrier is typically connected to an individual's mindset, beliefs, and attitudes towards learning, transformation, and personal growth. Firstly, the fear of failure, an emotional and psychological state, can be a barrier for individuals as it stops them from taking risks, achieving their objectives, or acquiring new abilities. This fear arises from being apprehensive and anxious about the potential for failing in a particular undertaking or task. Top of Form

"I feel hesitant to develop new skills because I am afraid of failure. I may worry about being judged or criticised by others if I don't perform well. This fear can lead me to a lack of motivation to learn new skills" (P1, P4, and P30).

Secondly, the students tend to have a fixed mindset. "I believe that my intelligence and abilities are fixed traits that cannot be improved. Due to this belief, I may avoid developing new skills because I believe I am not capable of improving in that area" (P5 and P27). Third, they have a lack of interest in upskilling themselves. "I am not motivated to develop new skills if I am not interested in the subject matter. I may view the skill as irrelevant or not useful to my career goals" (P9 and P11).

Fourth, students tend to procrastinate due to situational pressure. "I procrastinate [in developing new skills] due to a lack of discipline or time management skills. I may prioritise other activities or feel overwhelmed by my workload, leading me to delay skill development. I held many positions in campus clubs and societies, so I just learn whatever skills I need to learn when I need to learn" (P15 and P13).

Fifth, students tend to have negative self-doubt when they engage in negative, critical, or self-defeating internal dialogue. "I sometimes struggle with negative self-talk, which involves telling myself that I am not good enough or capable of succeeding. This kind of thinking can hold me back from taking action to develop new skills, as I may feel discouraged or doubt my abilities" (P17). Sixth, students are influenced by their surroundings to behave or act in a certain manner. "I feel pressure from my peers to conform to certain expectations, which may not align with my goals or desires to develop new skills. I may avoid skill development to fit in with my social group" (P2 and P20). Lastly, they lack the assurance in their skills, talents, and knowledge that allows them to take risks, overcome challenges, and pursue their goals with a positive outlook. "I lack the confidence to develop new skills. I think I have low self-esteem. At times, I may feel inadequate or insecure, which can prevent me from taking risks and trying new things. Perhaps because I am an introvert" (P22, and P8).

The Self-Determination Theory (SDT) can be applied to understand and address the issue of attitude barriers. According to SDT, individuals have innate psychological needs for autonomy, competence, and relatedness, which drive their motivation and engagement in learning and skill development (Ryan, 2000). Attitude barriers can hinder these needs, leading to reduced motivation, engagement, and achievement. For example, the fear of failure, lack of interest, and negative self-talk can all undermine an individual's sense of competence and autonomy, leading to decreased motivation and engagement in skill development. Similarly, social pressure to conform and a lack of confidence can hinder an individual's sense of relatedness, leading to decreased motivation and engagement.

By understanding and addressing these attitude barriers through the lens of SDT, educators and trainers can help individuals develop a more autonomous, competent, and related mindset towards skill development. This can be achieved by providing opportunities for choice and control, fostering a sense of belonging and connection, and promoting the development of skills and abilities that align with individuals' interests and values.

Relevant theme 2: Technological distractions to learning new skills.

Technological distractions refer to the interruptions or disturbances caused by technology devices or tools, such as smartphones, tablets, laptops, and other electronic gadgets, that divert an individual's attention from their intended task or activity. The social media allow users to communicate, connect, and interact with each other in various ways, including messaging, posting, commenting, and sharing. "As someone who has experienced it first-hand, I can confirm that social media platforms' constant notifications and updates can significantly distract

me when I am attempting to acquire new skills. The desire to check the phone or browse social media can shift my attention from the primary objective, leading to decreased productivity and concentration" (P2, P29, and P24).

Next, play video games or computer games, either on a dedicated gaming console, a computer, or a mobile device. "In my experience, video games and online gaming platforms can prove to be a major distraction for students who are looking to acquire new skills. The engaging and immersive experience of games can make it challenging for students to detach themselves from the virtual world and concentrate on real-world activities and tasks" (P6 and P25).

Another activity is Internet surfing. "The internet is a double-edged sword, offering both advantages and disadvantages to students seeking to develop new skills. While it provides a wealth of resources and learning opportunities, it can also be a significant source of distraction. The vast amount of available content can be overwhelming, leading to a tendency to deviate from the primary objective and explore unrelated topics. To avoid this pitfall, it's crucial to establish clear guidelines and stick to a specific plan for research and learning. This is easier said than done; I failed all the time [laughing]" (P10 and P12).

The practice of performing multiple tasks or activities simultaneously by utilizing various digital devices, applications, or tools can be a hindrance for quality learning among students. "I have personally experienced using multiple digital devices and applications simultaneously, which can be a tempting distraction for students who are striving to acquire new skills. Unfortunately, multitasking can have negative impacts on my focus, attention, and ability to retain information. To enhance productivity and achieve better results, I want to concentrate on one task at a time" (P14 and P16).

In addition, instant messaging enables real-time text-based conversations between two or more individuals via the internet. "Frequent notifications and the pressure to respond promptly on instant messaging apps such as WhatsApp and Messenger can create significant difficulties for students trying to acquire new skills. As someone who has faced this situation, I can confirm that it can result in reduced productivity and focus. Additionally, excessive use of these applications can impede concentration and hinder the learning process" (P18, P16, P28, and P20).

The concept of attentional control theory can be utilised to comprehend and address the problem of technological distractions (Derakshan et. al. 2009). This theory suggests that attention is a finite resource, and our capability to concentrate on a task is influenced by both internal and external factors. Internal factors include our interests, goals, and motivation, while external factors include disruptions, noise, and other stimuli in the environment.

In the context of technological distractions, gadgets like smartphones and social media platforms create external stimuli that can divert our attention away from the intended task. To combat this issue, the Attentional Control Theory proposes that individuals can improve their ability to resist such distractions by developing their attentional control skills. These skills include the capacity to selectively focus on relevant information, ignore irrelevant information, and avoid distractions.

By using attentional control techniques, students can effectively manage their attention and reduce the impact of technological distractions on their learning. Methods such as time management, goal setting, using productivity tools, and creating a distraction-free study environment can help to enhance attentional control and minimize the effects of external distractions. Additionally, educators can create learning environments that reduce distractions and provide guidance on attentional control strategies to aid students in enhancing their focus and concentration.

Relevant theme 3: Pedagogical obstacles

Pedagogical obstacles refer to the challenges and difficulties that may arise in the process of teaching and learning. Firstly, traditional teaching methods have a rigid structure and place an emphasis on conformity and discipline. It has been widely used in formal educational settings, such as schools and universities, and is still prevalent in many parts of the world today. However, the younger generation finds these methods mind-numbing. "As a student, I have experienced classroom settings that still rely heavily on traditional teaching methods. These methods often involve lectures and memorization, which can hinder the development of 21st century skills such as critical thinking and problem-solving.

While lectures can be useful for introducing new concepts, they can be less effective for promoting deeper understanding and engagement with the material. Some lecturers are so boring—not all, but some" (P3, P28, and P25). This can be due to inadequate instructor training. "Many of our instructors lack expertise in modern technologies, making it challenging to integrate essential competencies into their curriculum. This discrepancy can hinder students' ability to meet the demands of the modern era. Educators need to have the knowledge and expertise to prepare students effectively for the fast-paced world we live in today" (P19).

Then, due to post-COVID-19, there has been increased use of digital technology to deliver educational content and facilitate learning. "Having experienced limited access to technology in the classroom, I can validate the challenges this can present when it comes to developing important skills like digital literacy and communication. Without access to technology, students may miss out on opportunities to learn about and use digital tools that are becoming increasingly important in the modern workforce. We have to use our own data to access the internet at times" (P7 and P29).

External collaborative learning is lacking in universities. It is the process of students working together with peers outside of their classroom or school to achieve a common learning goal. The goal of external collaborative learning is to provide students with opportunities to develop important skills like communication, problem-solving, and teamwork in a real-world context. By working with others who have different backgrounds and perspectives, students can broaden their understanding of different cultures and ideas while also building their own knowledge and skills. "External collaborative learning is becoming increasingly important in the modern workforce, as many jobs require working with colleagues and clients from different backgrounds and locations. However, some classroom settings do not provide enough opportunities for students to engage in external collaboration and develop this skill. Without these experiences, students may struggle to adapt to the collaborative nature of many workplaces and miss out on valuable learning opportunities. I want to know what students at other public universities are facing. Do they face the same challenges as us?" (P9, P11, and P25)

In addition, students have limited experiential learning opportunities. "I believe that experiential learning is crucial for 21st century skill development, but some classrooms don't prioritise it. Traditional methods like lectures and memorization limit critical thinking, problem-solving, and creativity. Without real-world applications, students may not grasp the practical relevance of subject matter" (P21, P27, and P28).

Universities are focusing too much on standardised assessment. "I have observed that some subjects put too much weight on standardised testing. For example, we have this one reading subject that has five quizzes and one final examination. Another has a common test, and then at the end of the semester, we have another final exam. This can cause a concentration on memorization rather than the growth of critical thinking and problem-solving skills. Similarly, memorization-based assessments can prioritise rote learning over the application of knowledge to real-world problems." (P16).

The constructivist theory of learning can be a suitable framework for addressing pedagogical obstacles highlighted in this article (Mogashoa, 2014). This theory emphasises the learner's active role in constructing their knowledge and meaning, which can address the limitations of traditional teaching methods and standardised assessments. By promoting active engagement and self-directed learning, learners can develop 21st-century skills such as critical thinking and problem-solving. Group work and collaborative learning can also address the lack of external collaborative learning opportunities. Finally, the constructivist theory encourages the use of technology and experiential learning to help learners apply their knowledge and skills in real-world contexts, which can overcome the limited experiential learning opportunities and limited access to technology.

Relevant theme 4: Perceptual barriers

Perceptual barriers refer to the internal psychological factors that hinder individuals from interpreting and understanding messages accurately. It can cause individuals to misinterpret or ignore critical information, leading to misunderstandings and ineffective communication. One of the barriers is stereotyping, which means assuming certain characteristics or abilities based on a student's gender, race, ethnicity, religion, or other personal characteristics. It involves applying generalisations or preconceived notions about a particular group to an individual, rather than evaluating their abilities and potential based on their individual merit. "As someone who has observed this, I've noticed that some students may hold preconceived notions that certain skills are more appropriate for particular genders or ethnic groups. This stereotyping can dissuade them from pursuing those skills, leading to missed opportunities for personal growth and development" (P4, P7, and P27). Next is self-doubt, which is a feeling of uncertainty or hesitation about one's abilities, decisions, or actions. "As someone who has gone through this experience, I can attest that self-doubt can be a significant obstacle for students trying to learn new skills. A lack of confidence in one's abilities can lead to negative self-talk and diminished motivation to learn, ultimately hindering the learning process. It is essential to develop a growth mindset and practise self-compassion to overcome self-doubt and cultivate a positive attitude towards learning" (P3, P30).

Negative peer pressure can have a significant impact on an individual's social, emotional, and mental health, as well as their academic and personal goals. Negative peer pressure refers to the influence that peers can have on an individual to engage in harmful or undesirable behaviours, activities, or attitudes. "As someone who has experienced negative peer pressure during my academic years, I can attest to the detrimental effects it can have on learning. When I felt

pressured to conform to the expectations of my peers, it created a constant source of anxiety and stress that made it challenging to concentrate on my studies. Instead of focusing on my academic goals, I found myself preoccupied with fitting in and avoiding negative feedback from my peers. I don't have the energy to learn new skills" (P, 12, P14, P18, and P16).

This theme explores three main obstacles to learning and personal growth, namely stereotyping, self-doubt, and negative peer pressure. Stereotyping involves making assumptions about an individual's abilities based on their personal characteristics, which can limit their potential for growth. Self-doubt, characterised by uncertainty or hesitation about one's abilities, can decrease motivation to learn. Negative peer pressure, in which peers influence individuals to engage in harmful behaviour, can harm academic and personal goals. The article stresses the significance of developing a growth mindset and self-compassion to overcome these obstacles and foster a positive attitude towards learning.

The cognitive learning theory (Swann, 2013) would be the best theory to apply to this theme. The theory's focus on mental processes involved in learning, including attention, memory, and problem-solving, aligns with the cognitive processes involved in the perceptual barriers discussed in the theme. Additionally, the theory's emphasis on active participation and self-regulation in the learning process can help individuals overcome the barriers of stereotyping, self-doubt, and negative peer pressure and improve their learning outcomes. Therefore, the cognitive learning theory can provide a useful framework for addressing the perceptual barriers discussed in the article.

Conclusion

The study identified several categories of barriers that hindered students from acquiring 21st-century skills, including attitude barriers, technological distractions, pedagogical obstacles, and perceptual barriers. Attitude barriers included the fear of failure, a fixed mindset, procrastination, negative self-doubt, a lack of assurance, and peer pressure. Technological distractions encompassed social media, video games, internet surfing, multiple digital tools, and instant messaging. Pedagogical obstacles included traditional teaching methods, inadequate instructor training, limited access to technology, external collaborative learning, limited experiential learning opportunities, and standardised assessments. Perceptual barriers encompassed stereotyping, self-doubt, and negative peer pressure.

In conclusion, the study underscores the importance of developing effective strategies to overcome these barriers and improve the development of 21st-century skills among university students. This requires a multi-faceted approach that includes rethinking traditional teaching methods, providing adequate training for instructors, leveraging technology to support learning, and creating opportunities for collaborative and experiential learning. Future research is necessary to explore these strategies and evaluate their effectiveness in promoting the development of 21st-century skills among university students.

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