Research Article https://doi.org/10.12973/eu-jer.13.1.29



European Journal of Educational Research

Volume 13, Issue 1, 29 - 41.

ISSN: 2165-8714 http://www.eu-jer.com/

The Resilience of University Youth While Undergoing Digital Learning During the COVID-19 Pandemic

Nur Amirrah Yusrisham

Yusrisham Universiti Malaysia Terengganu 21030 Kuala Nerus, MALAYSIA Siti Hajar Kamaruddin*

Universiti Malaysia Terengganu 21030 Kuala Nerus, MALAYSIA Siti Munirah Mauzud

Universiti Malaysia Terengganu 21030 Kuala Nerus, MALAYSIA Roslina Ismail

Universiti Malaysia Terengganu 21030 Kuala Nerus, MALAYSIA

Received: November 3, 2022 • Revised: February 11, 2023 • Accepted: June 13, 2023

Abstract: The outbreak of COVID-19 has affected the educational sector globally. One of the impacts of this outbreak is observed in the implementation of digital learning, which involves problems such as poor internet connection and a lack of information technology facilities. However, university youth could be seen as resilient if they could keep up with good academic performance despite going through various challenges of digital learning. Thus, this research would like to explore the resilience of university youth while undergoing the challenges of digital learning during the COVID-19 pandemic. This research adopted a qualitative approach, and data were collected through semi-structured interviews. Purposive sampling was used, where five respondents among the University Malaysia Terengganu (UMT) youth with a cumulative grade point average (CGPA) of 3.50 and above were selected in this research. The research found that the challenges faced by the majority of the respondents during digital learning were the non-conducive learning environment and the poor internet connection. In addition, findings also found two protective factors that helped the respondents be resilient, identified as the internal factor (i.e., self-concept and cultural sensitivity) and the external factor (i.e., parents' support and positive peer relationships). The research findings showed that the university youth also need support and help from various parties alongside their own efforts in academics in order to face any kinds of risky situations and grow as resilient youth.

Keywords: Digital learning, pandemic, resilience, university youth.

To cite this article: Yusrisham, N. A., Kamaruddin, S. H., Mauzud, S. M., & Ismail, R. (2024). The resilience of university youth while undergoing digital learning during the COVID-19 pandemic. *European Journal of Educational Research*, *13*(1), 29-41. https://doi.org/10.12973/eu-jer.13.1.29

Introduction

In 2019, the world was shocked by the outbreak of Coronavirus disease (COVID-19), which was reported to originate in Wuhan City, China, in December 2019 (Lee, 2020). The COVID-19 outbreak has been an extraordinary phenomenon for the global community that has impacted us in many ways. The impacts of COVID-19 have changed the landscape of people's lives around the world. People are advised to keep their distance one another and to travel as little as possible. To date, the COVID-19 disease still prevails within the community despite the various efforts that have been made to combat the outbreak. For instance, China, which has hundreds of millions of people, has approved many restrictions such as tight quarantine and the closure of the main entrance of its big cities (Abdullah, 2022).

Many sectors are taking precautions to combat the COVID-19 outbreak, including the education sector. This outbreak has impacted the education sector (Schleicher, 2020) both in developing and developed countries (Thomas, 2020). In Korea, when the first COVID-19 case was recorded, the Korean Ministry of Education had deferred the start of school registration and carried out digital learning (Fatoni et al., 2020). A similar approach was taken in China, where most of its universities decided to cancel physical classes and carry out digital learning for students' safety (Wang et al., 2020). Malaysia was also not excluded when the Malaysian government ordered that all teaching and learning activities must be done digitally during the Movement Control Order (MCO) period.

Indeed, the transformation process of applying progressive and continuous digital learning is not an easy journey, primarily in the higher education system (Fidalgo et al., 2020). In addition, digital learning is the new norm for all students during this pandemic period. Singh et al. (2020) argue that university youth are prone to having mental and psychological issues during a pandemic, which can affect their physical, mental, and emotional wellbeing while also

Siti Hajar Kamaruddin, Universiti Malaysia Terengganu 21030 Kuala Nerus, Terengganu, Malaysia. 🖂 s.hajar@umt.edu.my



^{*} Corresponding author:

impacting their educational development. Nevertheless, it is observed that some university youth successfully overcame challenges when they faced any changes, which is reflected in their good academic achievement (Gürsul & Keser, 2009), although we often hear of the negative issues experienced by the university youth about digital learning (Putri et al., 2020).

The adaptability to move to digital learning has caused worries among university youth (Moore et al., 2020). For example, they were concerned about their inability to use technology efficiently, as well as their inability to minimise the problem of the internet connection and the issue of two-way communication. Thus, many of them are affected and have adverse psychological effects. Other studies also found that this COVID-19 outbreak has caused mental health problems such as depression (Ye et al., 2020).

The pressure caused by this outbreak could be felt by all nations, especially in developing countries like Malaysia, as they face limitations in terms of basic facilities (i.e., electricity and internet). Hamid (2021) argues that the internet coverage in the area of Kampung Setol in Yan, Kedah is unsatisfactory, and she is afraid that it could affect the digital learning process of the students at home. The lack of the parent's income to support the needs of the children to study digitally at home has also caused this pressure (Brown & Salmi, 2020). Individuals in Malaysia with an average monthly household income of MYR 4,360 or less are classified as belonging to the B40 category (Bottom 40% of the income share) (Haron, 2020).

Moreover, the low-income and poor population always find it hard to perform well in academics, thus making it quite challenging for them to break their poverty cycle (Rasyid & Samat, 2018). However, studies show that there is a positive correlation among the university youth in the B40 category in terms of their resilience to self-development (Ibrahim et al., 2018). Despite the COVID-19 outbreak that has impacted the country's education system, students and university youth are capable of coping with and managing the effects of this outbreak (Abu Hassan et al., 2021), which shows that this unprecedented situation is not a hurdle for our youth to move forward.

Many of the previous studies around resilience have adopted a quantitative approach (Eri et al., 2021; Ovaska-Stafford et al., 2019; Ye et al., 2020) based on the youth context in Western countries (Appolloni et al., 2021; Brammer, 2020; Román-Mata et al., 2020). There is a lack of qualitative research on the aspects of youth resilience in keeping up with good academic performance during this pandemic period. Therefore, to understand deeper the process of developing resilience among the university youth in Malaysia, there is a need for new research through a qualitative approach (Ungar, 2004), due to the limited research conducted within this particular demographic (Ibrahim et al., 2018).

To fill up the gap, this current research will delve deeply into exploring the challenges faced by university youth while undergoing digital learning. This research will also explore the youth development assets that contribute to their resilience in terms of the internal and external protective factors that help them to keep a good academic record during this pandemic period. Resilience is viewed as a strength that every youth requires in order to positively grow in all endeavours that they undertake in order to produce good quality university youth (both mentally and physically) when confronted with any risky situation such as this COVID-19 outbreak. The objectives of this research are as follows:

- i. To identify challenges faced by university youth while undergoing digital learning during the pandemic period.
- ii. To explore internal protective factors that support resilience among university youth in keeping up with good academic performance while undergoing digital learning during the pandemic period.
- iii. To explain the external protective factors that support resilience among university youth in keeping up with good academic performance while undergoing digital learning during the pandemic period.

Literature Review

Research around youth is getting more attention from researchers and academicians. A study conducted by Latif et al. (2021) explored the issues around academic performance as the main thing for a bright future development of the youth so as they can have better lives in the future. It is also seen that youth are easily exposed to problems and challenges during the transition period into adulthood, where the process is usually influenced by many factors such as the environment, family, community, and so forth (Roth & Brooks-Gunn, 2003). Therefore, in this research context, youth, especially university youth, need to be resilient so that they can overcome any kinds of challenges better, primarily in the teaching and learning activities, despite being conducted either physically or digitally.

A good teaching and learning process could produce individuals that can shape the country's future. Academic performance is always connected to an individual's resilience. Individuals with higher academic qualifications are seen to be more resilient and always move forward during their study courses (Román-Mata et al., 2020). It is consistent with the findings of Orkaizagirre-Gómara et al. (2020), who discovered that resiliency among university youth increased when they maintained good results every semester.

In addition, digital learning is also seen as supporting the learning process of university youth. The use of technology in the learning process has shown a positive result, and through it, youth have become more interested in involving themselves and participating actively in the process (Pinto & Leite, 2020). A previous study also found that the youth's

efficiency in digitalization during the pandemic period has helped them maintain good academic performance (Arora et al., 2020). However, challenges still exist in the digital learning process (Eri et al., 2021). For example, the process will be harder when there are problems with internet connectivity and a non-conducive learning environment. Previous research indicate that digital learning does, in fact, expose today's university students to challenges (Appolloni et al., 2021; Yahaya & Adnan, 2021). This is because the digital learning system is a new norm for them, and thus, they have to adapt to these challenges to be able to continue their studies consistently (Rahat & Ilhan, 2016; Skovholt & Ronnestad, 2003).

For psychologists, the common concept of resilience consists of three things: making good improvements despite being in risky situations, being continuously efficient under pressure, and recovering from trauma (Werner, 1995). Nowadays, resilience is usually defined as the positive adaptation of any individual during hardships (Luthar, 2015). Resilience helps individuals be able to adapt to any kind of challenging situation (Hicks et al., 2005). Academically, resilience is seen as the ability of the students to face the challenging academic situations that have been the main hurdles to their academics (Martin & Marsh, 2009).

Developing resiliency among students could lead to peace in the mental, spiritual, physical, cultural, and social states of mind (Omar & Abdullah, 2020). Previous research also shows that resiliency could help students with communication and improve their quality of life (Tyre et al., 2016). In this study, resilience among the university youth is measured by good time management, which has been categorised as the self-concept and the support received from family and friends (Brammer, 2020; Kamaruddin et al., 2016). Not only that, during this pandemic period, university youth have also shown their resiliency in terms of their spiritual values, self-belief (self-efficacy), and self-esteem (Maheshwari & Jutta, 2020).

This current research will give attention to two protective factors known as the internal and external factors that contribute to the resiliency of university youth. External factors consist of the construction of the strength for selfdevelopment that could be obtained through connections with families, friends, schools, or communities (Ledesma, 2014; Selamat et al., 2022; O'Leary, 2010; Ovaska-Stafford et al., 2019; Resiliency Initiatives, 2003). Meanwhile, internal factors consist of behaviour, self-control, self-concept, cultural sensitivity, and social sensitivity (Beardslee, 1989; Ledesma, 2014; O'Leary, 2010; Resiliency Initiatives, 2003; Ungar, 2004).

The resilience theory (Rutter, 2006) explains that individual differences in the resilient context could be different due to genetic effects that made some individuals more or less exposed to environmental changes. This theory also states that any individual can be resilient when facing any risks. However, different risks and environmental changes could cause individuals to be more or less resilient at different times (Rutter, 2006). This is because people cannot be resilient at all times (Luthar et al., 2015). While numerous studies have delved into this subject, there is a scarcity of available information pertaining to the obstacle's youth face and the specific tactics they employ to surmount them (Barrot et al., 2021).

Methodology

Research Design

This study adopted a qualitative descriptive approach through semi-structured interviews as the researchers explored the challenges faced by university youth while undergoing digital learning and identified the protective factors that contributed to their resilience in overcoming the challenges. This approach is chosen to provide an understanding and give a detailed explanation of the research context based on the experiences and perspectives of the respondents, and it does not generalise the findings (Merriam, 2009).

For sampling, a few strategies can be used, and this study has chosen purposive sampling (Bailey, 2007). This means that the researchers had chosen the potential respondents based on the criteria that could help answer the research questions (Patton, 2002). Respondents were chosen based on the criteria that met the research context, which was the final-year university students from UMT who scored well in their academics with a CGPA of at least 3.50 and above. The sample size has been considered, and it is acknowledged that a small sample size is common in any descriptive qualitative approach (Ritchie et al., 2013). The number of respondents interviewed depends on data saturation (i.e., a situation when respondents are no longer providing new information from the following interviews) (Mason, 2010). Five respondents were involved in this research once the collected data reached saturation.

For ethical considerations, researchers made sure that all respondents were given an information sheet that contained an explanation of the procedures of this research, and they were also given consent forms to be signed before the interview was conducted. Researchers also obtained permission to record the interviews with a voice recorder and to make personal notes of the interviews. Only related data (based on the respondents' answers) will be placed in the written report.

To gather comprehensive information from respondents, semi-structured interviews were employed which revolve around three key questions aligned with the research objectives. The construction of the semi-structured interview guide draws upon an integrative literature review conducted prior to this study. The use of the semi-structured interviewing method is acknowledged for its effectiveness in capturing interviewees' perspectives and the meaning they attribute to

a particular phenomenon (Kvale, 1996). Sample questions included (1) Upon learning about the implementation of digital learning, what was your response? (2) How are you preparing yourself for digital learning? (3) What disparities do you perceive between digital learning and traditional face-to-face learning? (4) Are there any challenges or limitations you encounter while engaging in digital learning? Although interview guidelines are in place, the interview process adjusts to accommodate the unique characteristics and circumstances of each research respondent.

Research Respondents

Five university students in their final year with a CGPA of 3.50 and above were involved in this research. They consisted of one female and four males. Table 1 shows a summary of their demographic background. The research respondents came from various family income statuses that were in the B40, M40 (Middle 40% of income share), and T20 (Top 20% of income share) categories. All of them were 23 years old, and they were involved in digital learning during the outbreak of the COVID-19 pandemic.

Respondent	Age	Gender	Family Income Status
A	23	F	M40
В	23	M	B40
С	23	M	B40
D	23	M	T20
Е	23	M	B40

Table 1. Demographic Summary of the Respondents

Analysis of Data

The data analysis process was done manually through thematic analysis, and it was done with the help of Microsoft Word computer software. Thematic analysis was used to categorise the data into themes that match the research questions. The transcripts were meticulously examined, and inductive, open codes were assigned. Through iterative refinement of codes and categories, themes and sub-themes were established by two researchers and a research assistant to ensure intercoder reliability and consistency (Julien & Dookwah, 2020). Recurring, emerging, and contrasting perspectives were identified and organized into thematic categories, with direct quotes from the interview sessions utilized as supporting evidence for the identified themes. Reliability in qualitative research signifies that the researcher's approach remains consistent when applied by different researchers and in different projects (Gibbs, 2007). To ensure the reliability of data analysis in this research, the researcher used the member-checking approach, which involves the respondents in the study to validate the accuracy and reliability of the analysis. Member checking is a method used to assess the accuracy of qualitative findings by presenting the final report, specific descriptions, or themes to the participants and gauging their perception of their accuracy (Creswell, 2014). This approach can help to ensure that the findings accurately reflect the perspectives and experiences of the respondents, as stated by Ary et al. (2010) and Merriam (2009).

Findings / Results

For the first research objective, the findings found two main challenges that were faced by university youth while undergoing digital learning, which are the non-conducive learning environment and weak internet connectivity. For the second and third objectives, the findings identified the internal protective factors that have influenced resiliency among university youth as self-efficacy and cultural sensitivity. Meanwhile, the external protective factors have been identified as the support received from families and positive relationships with peers (see Figure 1).

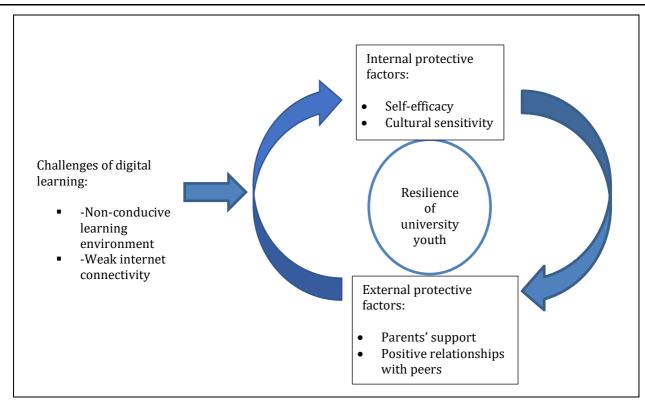


Figure 1. The Process of Resilience Development Among University Youth While Undergoing Digital Learning During The COVID-19 Pandemics

Challenges While Undergoing Digital Learning

The use of a new pedagogical normative during the COVID-19 pandemic has given big challenges to students, especially those that came from low- and middle-income families, as they need conducive learning facilities. Learning and evaluation processes that took place within digital platforms have been a new experience for university youth. The non-conducive learning environment and the weak internet connectivity have been big challenges for them.

a. Non-conducive Learning Environment

All five respondents agreed that the non-conducive environment while undergoing digital learning has been a challenge for them. They said that there were many disturbances that they went through, such as noisy situations, interruptions from family members, and limited space to learn. These disturbances have made it hard for them to stay focused during lectures that took place digitally.

During the learning session, it was very noisy because my neighbour was doing house renovation. Also, my parents and other family members were also at home, and I lost focus to learn. Not only that, sometimes it was the sound of the television.

(Respondent 1)

At home, there were many things that disturbed my learning, well, sometimes it was not only the place to learn, but it was the people, I mean, when we received guests when the neighbours came, so, it was hard to give a 100% focus.

(Respondent 4)

My mother and grandmother always disturbed me, well, it was not a disturbance actually, but they always called me for a while to do this and that, asked this and that, like that.

(Respondent 5)

The quotes above show that it is quite a challenging situation for the university youth while undergoing their digital learning during the COVID-19 pandemic, as the non-conducive learning environment has affected their learning focus.

b. Weak Internet Connectivity

Three out of five respondents admitted that weak internet connectivity in some areas has also been a challenge while undergoing digital learning during the COVID-19 pandemic. Some of the respondents' houses are located in rural areas where internet connectivity is weak. It is more challenging for those that came from the B40 category because they have

to spend a lot to get a high-speed internet connection, which causes them a burden. Some of them reported that the internet plans are expensive, but they still have to subscribe to participate in digital learning. The type of internet plan influences the speed of the connection.

I stay in a village and internet networks (all network providers) here are quite bad. I subscribed on my own and did not receive any funds to pay for the internet subscription. Actually, the data that I subscribed to was quite expensive, around MYR 100 and I used my savings for that purpose.

(Respondent 2)

The internet was okay, but the speed was not strong enough to support applications like Webex because Webex needed a lot of data. Whether I like it or not, I had to spend more to make sure I can follow my studies well.

(Respondent 3)

Sometimes, the *Umobile* internet caused problems and it made me a bit panic.

(Respondent 5)

The finding shows that weak internet connectivity is one of the challenges in the application of digital learning. This problem is not only happening in Malaysia because other countries like China also have a similar problem, as researched by Eri et al. (2021). In addition, students who study digitally are always worried about access issues when they are having digital examinations or quizzes due to weak internet connectivity (Yahaya & Adnan, 2021).

The quotes above also show that there are university students who take the initiative to subscribe to internet plans so that they can study smoothly, which has resulted in them spending far more than they anticipated. If they stay on campus, they do not have to pay for the internet because it is already available as one of the basic facilities. These three respondents were all from B40 families, and this internet connectivity issue caused them a burden (Adnan & Anwar, 2020; Yahaya & Adnan, 2021), as they had to pay high price for a good connection. It is also known that not all university youth are from well-off families (Rathakrishnan, 2020).

Internal Protective Factors That Support Resilience

Internal protective factors that support resilience are factors occupied by any individual or their personality factors. These factors will significantly influence the way that the university youth understand and face any challenges while undergoing digital learning in order to keep up with their academic performance. Self-efficacy and cultural sensitivity are the factors used by these university youth.

a. Self-efficacy

According to Bandura (1997), self-efficacy is defined as the belief in one's ability to effectively plan and carry out the necessary actions to achieve specific goals. This self-efficacy show that respondents have the skills for planning and making decisions because they believe in themselves and have high self-esteem (Resiliency Initiatives, 2003). Selfefficacy also consists of how individuals take their own action to achieve their goals or handle stressful situations (Karademas, 2006). To ensure that they could follow the digital learning smoothly, all respondents took the initiative in the planning and decision-making processes. For planning, they prepared themselves for the learning process and managed their time wisely. For examples:

I will divide my time, I mean, I start to do the assignment at eight o'clock and when it's ten o'clock, I will take a rest for a while, I will watch movies, or eat and then I will get back to work.

(Respondent 1)

I make a lot of self-preparation as I will always change my mindset so that I can be more open-minded.

(Respondent 2)

Firstly, what I will do is that I will set up my study table because by doing that, it can avoid me from being lazy.

(Respondent 4)

Respondents were asked about their own initiatives taken while undergoing digital learning, and these findings are consistent with the previous study conducted by Ibrahim and Hussin (2016), who found that the present university youth are resilient in managing their time and work and that they can also plan their daily schedules in an orderly manner. The initiatives taken have helped the respondents excel academically. In contrast, if university youth are weak in time management, it will affect their ability to do all their work properly, and this group of students will usually fail to complete any given task on time (Othman et al., 2020). This situation shows that good time management can help students be proficient in making plans for their studies in line with the goals that they want to achieve.

b. Cultural Sensitivity

The second internal protective factor that supports resilience is cultural sensitivity. Cultural sensitivity refers to the cultural diversity that presents within communities and includes cultural awareness, cultural acceptance, and spirituality, all of which contribute youth resiliency (Resiliency Initiatives, 2003). This study found that all five respondents have cultural sensitivity factors that have helped them in their digital learning. Spirituality and cultural aspects like respecting the elderly have been applied by the respondents because they believed that this value has a role to help them consistently achieve good results in their studies. The examples are as follows:

Every Thursday (night), I will always recite Quran and specifically, *Yassin* for myself.

(Respondent 1)

Respecting parents and asking for their blessings like when I was going to sit for the examination or when to do something.

(Respondent 4)

I perform prayers, I go to the temple because I believe in God.

(Respondent 5)

Every religion has its own belief, but those with a high level of spirituality will have a better quality of physical health (Jim et al., 2015). Religion and spirituality are important in daily life aspects. That is why the respondents were concerned about spirituality aspects because it can positively influence their quality of life, life satisfaction, and adaptation (Jones et al., 2016) while undergoing their digital learning smoothly and achieving good results in their studies. Meanwhile, being respectful is a value in all religions and everyone is encouraged to do so.

External Protective Factors That Support Resilience

External protective factors that support resilience found in this study are known as family support and positive relationships with peers. These external factors can help individuals to stay resilient in overcoming any kind of challenge. The availability of this support system has strengthened the ability of university youth to face the challenges of digital learning.

a. Support from Families

Family support is one of the external protective factors mentioned by respondents during interviews. This factor has contributed to forming resiliency among university youth during the implementation of digital learning and they had successfully kept up with the good academic record. The respondents were asked about which type of support they received the most while undergoing digital learning. Almost all of them responded that they received the most support from their families and the support is in the form of good communication and the love received.

My family help me a lot, like for example, I have to do a lot of assignments and sometimes I do not have time to eat. So, my mother always prepares food for me.

(Respondent 1)

I always communicate with my parents, I share many things with them like when I have problems with my studies, I will talk a lot to explain to them about the problems that I have so that they can understand especially about this digital learning.

(Respondent 2)

At first, I cried, then after that, I always share what I go through with my mother, and she always motivates me.

(Respondent 5)

The quotes above show that family involvement plays an important role to the respondents in the implementation of digital learning. For this factor, the respondents sought help from their parents to assist with their daily activities as most of them stay at home due to the pandemic and the help received has helped them to face the digital learning challenges better. Communication with family members could lessen pressure (Lompoliu & Pasoreh, 2015) among university youth because they can share their problems with others. Therefore, having a good relationship and the involvement of family members, especially the parents, could lead to the improvement in academic performance among university youth (Lee, 2012). Those quotes above are consistent with the study conducted by Chung and Ho (2016), who argued that having a good and friendly relationship can form stronger resiliency in any individual because families are the closest people to everyone.

b. Positive Relationships with Peers

Respondents also mentioned that having a positive relationship with peers is another external protective factor that helped them to keep a good academic record during the pandemic. Through this positive relationship, respondents can share their knowledge with their peers and also motivate each other so that they can all stay enthusiastic to face any challenges while undergoing digital learning.

I can't say much, but I am very grateful because I have friends who can teach me.

(Respondent 3)

I get support from my friends because in my course group, what do people call that...some of them always share motivational quotes in the WhatsApp group and it makes me feel that we all go through this process together and if God wills it, we all can graduate together, and this really motivates me.

(Respondent 4)

Peers or friends are a group of people who are close to and influential in the lives of youth (Shahruddin et al., 2018). Usually, youth will turn to their peers as guides to appraise their abilities, such as their attitudes, personalities, skills, and strengths. Whatever is done by their peers will be a reference and guide for them. Therefore, choosing good and positive peers can lead youth to excellence (Hamzah et al., 2013). The finding is consistent with recent research done by Selamat et al. (2022), who found that social support received from friends is an important element that has helped homestay operators stay resilient in running their businesses during the COVID-19 pandemic.

Discussion

Data analysis revealed that there are challenges that university students face while participating in digital learning. The non-conducive learning environment has been the main challenge for them because digital learning commonly involves uncomfortable noises because the space and area where the learning process takes place are not conceptualised for learning. The previous research conducted by Yahaya and Adnan (2021) supports the current study, as they discovered that uncomfortable situations disrupted students' focus on their studies and presented challenges in online learning within Malaysian public higher education institutions. Moreover, this finding aligns with a study conducted by Kumi-Yeboah et al. (2020), which identified numerous drawbacks of long-distance and digital learning in relation to the challenging home environment.

Meanwhile, weak internet connectivity was seen as another challenge by the youth while undergoing digital learning. The previous study conducted by Eri et al. (2021) supports this finding, as they identified internet connectivity issues as one of the challenges faced in digital learning within higher education settings in Cambodia, China, India, and Malaysia because this issue has been a common problem in developing countries. A study conducted by Bessette et al. (2020) is also consistent with this research finding, as it found that not all students have access to technology or high-speed internet. If these university youth do not participate in digital learning, they will be left out, and it will also be hard for them to interact with their peers because there were times when they had to do group assignments.

Therefore, both the non-conducive learning environment and internet connectivity issues can cause conflict for students. Fatoni et al. (2020) discovered that the primary concern raised by students often relates to the imperative need for improving network stability. This is significant because the digital learning environment can impact students' academic performance (Fatoni et al., 2020; Yahaya & Adnan, 2021), emphasizing the importance of addressing this issue. Moreover, during this pandemic period, university youth are also affected financially (Khalid, 2022). Nevertheless, based on the respondents' statements, the government and university also provided aid in monetary form and provided free data to university youth. Although the aid received could not fully cover the cost, it had at least helped the university youth ease a bit of their burden.

Despite the challenges of digital learning, these university youth managed to keep up with their good academic performance, which was geared up by the internal and external protective factors that support resilience among them. Self-efficacy and cultural sensitivity are identified as the internal protective factors. The respondents were taking their own initiative by developing good time management, and it is known that this initiative can help students be proficient in making plans for their studies in line with the goals that they want to achieve. This finding aligns with previous research (see Ibrahim & Hussin, 2016; Othman et al., 2020), which revealed that tertiary education students who cultivated effective time management skills performed well academically due to increased discipline in the studies.

In addition, it is commonly acknowledged that religion and spirituality are important aspects of life; the respondents have a high level of sensitivity towards these aspects, and they believe that being religious also helps them succeed. Looking through a sociological lens, it is plausible to suggest that personal religious devotion and practices can influence individual behavior in a supportive manner. This argument stems from the belief that religion serves as a moral framework for its adherents and exhibits a positive correlation between religious knowledge, religious practices, and individuals' attitudes as found in the previous research by Mydin et al. (2020) that supports the current study. This occurs because religions promote a variety of religious values (such as effective time management) that can impact individuals' behaviors and societal norms, thereby assisting them in achieving excellence in academics.

On the other hand, the external protective factors that support resilience are identified as the support received from families and positive relationships with peers. The respondents revealed that they have received good social and emotional support from their families, especially from their parents. This study's findings are consistent with the study conducted by Chung and Ho (2016), who argued that having a good and friendly relationship can form stronger resiliency in any individual because families are the closest people to everyone. Ferreira et al. (2020) also emphasized the significance of family and neighbours in fostering resilience in the context of online digital learning. In addition, peers can also help students to level up their academic performance (Alsagoff, 1986). When some of them were experiencing problems with their studies, they usually liked to join group studies and study together with their peers. The advantage of group study is that it can help increase the students' passion and motivation to learn and reduce the feeling of laziness, while also creating a sense of responsibility among them to help each other within their group. Based on these identified protective factors, findings showed that the respondents had established higher social resilience than economic resilience, which is consistent with the previous research (Anua et al., 2021).

Conclusion

To conclude, this study has found that university youth were resilient while undergoing digital learning during COVID-19 pandemic. The findings contribute to the literature on resiliency and digital learning within the Malaysian context. This finding aligns with resilience theory, which posits that individuals can demonstrate resilience when confronted with various risks. These challenges make it difficult for them to consistently keep up their good academic performance. Therefore, it is hoped that the government could give more attention to the issues faced by university youth by providing more aid, especially to those that come from the B40 group. Through the aids, it can help university youth to participate in digital learning smoothly, which can lead to more university youth scoring good academic results. In addition, university youth are the country's assets and hope for the future. Moreover, internal and external protective factors that support resilience among university youth have been explored. Self-concept and cultural sensitivity as internal protective factors have significantly influenced the way someone handles a crisis. Meanwhile, the external protective factors that help respondents remain resilient are family and friend support.

Recommendations

For future research, it is suggested that other researchers could widen the research scope to a wider population of university youth by adopting a quantitative approach or using a mixed-method approach. Future researchers can also compare how resiliency is built among the university youth that come from diverse backgrounds and socioeconomic statuses in other Malaysian universities. To support university students facing challenges in digital learning during the pandemic, practitioners should provide access to technology, offer training and support, create a sense of community, provide opportunities for feedback, and be flexible and adaptable. It is also strongly recommended to develop and implement primary prevention programs in higher education institutions that aim to promote well-being and resilience, particularly during times of adversity as suggested by Hatzichristou et al. (2021). These recommendations can help ensure that all students have the opportunity to succeed in their academic pursuits.

Limitations

This research is limited to the experiences of five university students from the University Malaysia Terengganu (UMT), and the sampling strategy did not represent all university youth in Malaysia because it adopted a qualitative approach. Therefore, the findings should be qualified accordingly as neither the findings can be generalised to all UMT's students nor all the university students in Malaysia. This research can only be related to and understood by university youth that have the same criteria and experiences as the respondents. Also, the sample size may have limited the diversity of the gathered data, and there are some more potential avenues for future research, as recommended earlier.

References

Abdullah, S. R. A. (2022, January 8). Strategi China cegah COVID-19 [China's strategies in combating COVID-19]. My Metro. https://rb.gy/i9y71

Abu Hassan, S. A., Zainol Abidin, S. B., & Hassan, Z. B. (2021). Keberkesanan pembelajaran dan pengajaran dalam talian (e-pembelajaran) terhadap pembelajaran pelajar di Kolej Komuniti Hulu Langat [The effectiveness of online learning and teaching (e-learning) on student learning at Hulu Langat Community College]. International Journal of Humanities Technology and Civilization, 6(S2), 1-8. https://bit.ly/30FjqcZ

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students perspectives. Journal of Pedagogical Sociology and Psychology, 2(1), 45-51. https://doi.org/10.33902/jpsp.2020261309

- Alsagoff, S. A. (1986). Psikologi pembelajaran dan kognitif, bimbingan dan kaunseling [Learning and cognitive psychology, guidance and counseling]. Heinemann.
- Anua, N., Tan, M. L., & Chan, N. W. (2021). Daya tahan komuniti menghadapi banjir 2014: Kajian kes di Kampung Manek Urai Lama, Kuala Krai, Kelantan [Community resilience to the 2014 flood: A case study in the Kampung Manek Urai Lama, Kuala Krai, Kelantan]. Malaysian Journal of Society and Space, 17(1), 196-210. https://doi.org/10.17576/geo-2021-1701-15
- Appolloni, A., Colasanti, N., Fantauzzi, C., Fiorani, G., & Frondizi, R. (2021). Distance learning as a resilience strategy during COVID-19: An analysis the Italian context. Sustainability, 13(3), Article https://doi.org/10.3390/su13031388
- Arora, M., Goyal, L. M., Chintalapudi, N., & Mittal, M. (2020). Factors affecting digital education during COVID-19: A statistical modeling approach. In 2020 5th International Conference on Computing, Communication and Security (ICCCS) (pp. 1-5). IEEE. https://doi.org/10.1109/ICCCS49678.2020.9277370
- Ary, D., Jacobs, L. C., & Sorensen, C. (2010). Introduction to research in education (8th ed.). Cengage Learning.
- Bailey, C. A. (2007). A guide to qualitative field research (2nd ed.). SAGE Publications, Inc. https://doi.org/10.4135/9781412983204
- Bandura, A. (1997). Self-efficacy: The exercise of control. W H Freeman/Times Books/ Henry Holt & Co.
- Barrot, J. S., Llenares, I. I., & Rosario, L. S. D. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*, *26*, 7321-7338. https://doi.org/10.1007/s10639-021-10589-x
- Beardslee, W. R. (1989). The role of self-understanding in resilient individuals: The development of a perspective. American Journal of Orthopsychiatry, 59(2), 266-278. https://doi.org/10.1111/j.1939-0025.1989.tb01659.x
- Bessette, L. S., Chick, N., & Friberg, J. C. (2020, May 1). 5 myths about remote teaching in the COVID-19 crisis. The Chronicle of Higher Education. https://tinyurl.com/3i85vadh
- Brammer, M. S. (2020). Student resilience and COVID-19. First Look: Social Sciences and Humanities Open. https://doi.org/10.2139/ssrn.3637824
- Brown, C., & Salmi, J. (2020, April 18). Putting fairness at the heart of higher education. University World News. https://tinyurl.com/33e4w37w
- Chung, H., & Ho, R. (2016). Impact of parental involvement, teacher-student relationship, and resilience on academic performance among middle school students in Kang Won Province, in South Korea. Scholar: Human Sciences, 8(2),122-129. https://rb.gy/wgmkh
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications, Inc.
- Eri, R., Gudimetla, P., Star, S., Rowlands, J., Girgla, A., To, L., Li, F., Sochea, N., & Bindal, U. (2021). Digital resilience in higher education in response to COVID-19 pandemic: Student perceptions from Asia and Australia. Journal of University *Teaching & Learning Practice*, 18(5), Article 7. https://doi.org/10.53761/1.18.5.7
- Fatoni, Arifiati, N., Nurkhayati, E., Nurdiawati, E., Fidziah, Pamungkas, G., Adha, S., Irawan, Purwanto, A., Julyanto, O., & Azizi, E. (2020). University students online learning system during COVID-19 pandemic: Advantages, constraints and solutions. Systematic Reviews in Pharmacy, 11(7), 570-576. https://rb.gy/gohuv
- Ferreira, R. J., Buttell, F., & Cannon, C. (2020). COVID-19: Immediate predictors of individual resilience. Sustainability, 12(16), Article 6495. https://doi.org/10.3390/su12166495
- Fidalgo, P., Thormann, J., Kulyk, O., & Lencastre, J. A. (2020). Students' perceptions on distance education: A multinational study. International Journal of Educational Technology in Higher Education, 17(1), Article https://doi.org/10.1186/s41239-020-00194-2
- Gibbs, G. R. (2007). Analyzing qualitative data. In U. Flick (Ed.), The Sage qualitative research kit. SAGE Publications, Inc. https://doi.org/10.4135/9781849208574
- Gürsul, F., & Keser, H. (2009). The effects of online and face to face problem-based learning environments in mathematics education on student's academic achievement. Procedia - Social and Behavioral Sciences, 1(1), 2817-2824. https://doi.org/10.1016/j.sbspro.2009.01.501
- Hamid, N. H. (2021, July 11). Capaian internet jadi isu, dikhuatiri beri kesan kepada pelajar [The issue of internet access is an issue that is feared to affect students]. Sinar Harian. https://tinyurl.com/mwuemrid

- Hamzah, S. R., Suandi, T., Hamzah, A., & Tamam, E. (2013). Pengaruh rakan sebaya ke atas tingkah laku hedonistik belia IPT di Malaysia [Peers influence hedonistic behavior among youth in higher institutions in Malaysia]. Jurnal Teknologi, 63(1), 17-23. https://doi.org/10.11113/jt.v63.1656
- Haron, S. (2020). Pendapatan dan perbelanjaan isi rumah M40 dan B40 mengikut negeri [Income and expenditure of M40 and B40 households by state]. Jabatan Perangkaan Malaysia Newsletter. https://rb.gy/dzt03
- Hatzichristou, C., Lianos, P., Lampropoulou, A., Yfanti, T., & Athanasiou, D. (2021). WeCARE intervention program: An online multilevel international program for promoting well-being and resilience in the school community during unsettling times. European Journal of Psychology and **Educational** Research. 4(1). https://doi.org/10.12973/ejper.4.1.51
- Hicks, G. E., Simonsick, E. M., Harris, T. B., Newman, A. B., Weiner, D. K., Nevitt, M. A., & Tylavsky, F. A. (2005). Trunk muscle composition as a predictor of reduced functional capacity in the health, aging and body composition study: The moderating role of back pain. The Journals of Gerontology: Series A, *60*(11), 1420-1424. https://doi.org/10.1093/gerona/60.11.1420
- Ibrahim, F., Hassan, N., & Salim, W. W. A. (2018). Mengukur tahap ketahanan diri mahasiswa B40 dalam kalangan pelajar universiti [Measuring the self-resistance level of B40 students among university students]. Jurnal Personalia Pelajar, 21(1), 19-27. https://rb.gy/o5rak
- Ibrahim, I., & Hussin, M. (2016). Level of resilience amongst public university students in Malaysia and overseas. Jurnal Personalia Pelajar, 19(1), 75-85. https://rb.gv/2dqlw
- Jim, H. S., Pustejovsky, J. E., Park, C. L., Danhauer, S. C., Sherman, A. C., & Fitchett, G., Merluzzi, T. V., Munoz, A. R., George, L., Snyder, M. A., & Salsman, J. M. (2015). Religion, spirituality, and physical health in cancer patients: A metaanalysis. Cancer, 121(21), 3760-3768. https://doi.org/10.1002/cncr.29353
- Jones, K., Simpson, G. K., Briggs, L., & Dorsett, P. (2016). Does spirituality facilitate adjustment and resilience among 921-935. individuals and families after SCI? Disability and Rehabilitation, 38(10), https://doi.org/10.3109/09638288.2015.1066884
- Julien, G., & Dookwah, R. (2020). Students' transition from face to face learning to online learning at higher education: A study in Trinidad and Tobago. Educational Research and Reviews, 15(8), 487-494. https://doi.org/10.5897/ERR2020.4005
- Kamaruddin, S. H., Manap, J., Abdullah, H., & Suandi, T. (2016). Daya tahan belia: Pengaruh hubungan perapatan dalam institusi kekeluargaan [Youth resiliency: Attachment factor in familial institution]. Journal of Social Sciences and Humanities, (Spec. Iss. 2),160-172. https://bit.lv/43cHZmH
- Karademas, E. C. (2006). Self-efficacy, social support and well-being. The mediating role of optimism. Personality and Individual Differences, 40(6), 1281-1290. https://doi.org/10.1016/j.paid.2005.10.019
- Khalid, N. H. M. (2022, February 28). Pelajar kembali ke kampus demi kelestarian kualiti pendidikan tinggi [Students return to campus for the sustainability of higher education quality]. Berita Harian. https://rb.gy/32347
- Kumi-Yeboah, A., Dogbey, J., Yuan, G., & Smith, P. (2020). Cultural diversity in online education: An exploration of instructors' perceptions challenges. *Teachers* College Record, 122(7), and https://doi.org/10.1177/016146812012200708
- Kvale, S. (1996). InterViews: An introduction to qualitative research interviewing. SAGE Publications, Inc.
- Ledesma, J. (2014). Conceptual frameworks and research models on resilience in leadership. SAGE Open, 4(3), 1-8. https://doi.org/10.1177/2158244014545464
- Lee, A. (2020). Wuhan novel coronavirus (COVID-19): Why global control is challenging? Public Health, 179, A1-A2. https://doi.org/10.1016/j.puhe.2020.02.001
- Lee, S. H. (2012). Parental influence on children's achievement from Korea: Types of involvement, attributions, education, and income [Doctoral dissertation, The University of Arizona]. The University of Arizona. https://repository.arizona.edu/handle/10150/242411
- Lompoliu, R. A., & Pasoreh, Y. (2015). Peran komunikasi dalam menyelesaikan konflik diantara remaja di Desa Sendangan Kecamatan Kakas [The role of communication in resolving conflict among young people in Sendangan Village, Kakas District]. Acta Diurna Komunikasi, 4(3), 1-9. https://rb.gv/9bqaa
- Luthar, S. S. (2015). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), Developmental psychopathology (2nd ed., pp. 739-795). John https://doi.org/10.1002/9780470939406.ch20

- Luthar, S. S., Crossman, E. J., & Small, P. J. (2015). Resilience and adversity. In R. M. Lerner & M. E. Lamb (Eds.), Handbook child psychology and developmental science, (pp.247-286). John Wiley & https://doi.org/10.1002/9781118963418.childpsv307
- Yahaya, M., & Adnan, W. H. (2021). Cabaran pelajar melalui kaedah pembelajaran atas talian: Kajian institusi pengajian tinggi awam Malaysia [Students' challenges through online learning: Study of the Malaysian public higher education institutions]. Journal of Media and Information Warfare, 14(1), 11-20. https://rb.gv/l4vu2
- Maheshwari, A., & Jutta, M. V. (2020). Study of relationship between optimism and resilience in the times of COVID-19 among university students. The International Journal of Indian Psychology, 8(3), 1539-1550. https://bit.ly/3KRXOIb
- Martin, A. J., & Marsh, H. W. (2009). Academic resilience and academic buoyancy: Multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs. Oxford Review of Education, 35(3), 353-370. https://doi.org/10.1080/03054980902934639
- Mason, M. (2010). Sample-Größe und Sättigung in PhD-Studien, in denen qualitative Interviews zum Einsatz kommen [Sample size and saturation in PhD studies using qualitative interviews]. Forum: Qualitative Social Research/Forum Qualitative Sozialforschung, 11(3), Article 8. https://doi.org/10.17169/fgs-11.3.1428
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation (3rd ed.). Josey-Bass.
- Moore, S. A., Faulkner, G., Rhodes, R. E., Brussoni, M., Chulak-Bozzer, T., Ferguson, L. J., Mitra, R., O'Reilly, N., Spence, J. C., Vanderloo, L. M., & Tremblay, M. S. (2020). Impact of the COVID-19 virus outbreak on movement and play behaviours of Canadian children and youth: A national survey. International Journal of Behavioral Nutrition and Physical Activity, 17, Article 85. https://doi.org/10.1186/s12966-020-00987-8
- Mydin, S. A. H., Shukri, A. S. M., & Razak, M. A. A. (2020). Peranan akhlak dalam kehidupan: Tinjauan wacana akhlak islam [The role of morality in life: Islamic discourse review]. Jurnal Islam Dan Masyarakat Kontemporari, 21(1), 38–54. https://doi.org/10.37231/jimk.2020.21.1.374
- Selamat, N. H., Khoo, S. L., Karupiah, P., & Azmi, Z. (2022). Resilience and sustainability strategies of Malaysian homestay program during COVID-19 pandemic. Malaysian Journal of Society and Space, 18(2), 223-235. https://doi.org/10.17576/geo-2022-1802-17
- Latif, N. A. A., Zulkifli, C. N., Desa, M., Berahim, R. R. R., & Nor, N. K. M. (2021). Perlaksanaan program latihan berasaskan teknologi kepada belia berprestasi rendah akademik dalam meningkatkan kualiti hidup [The implementation of technology-based training programmes for academically underperforming youth in improving the quality of life]. Jurnal Dunia Pendidikan, 3(3), 189-200. http://surl.li/hpxai
- O'Leary, V. E. (2010). Strength in the face of adversity: Individual and social thriving. *Journal of Social Issues*, 54(2), 425-446. https://doi.org/10.1111/j.1540-4560.1998.tb01228.x
- Omar, N. E., & Abdullah, M. N. (2020). Pengalaman daya tahan diri pelajar universiti: Keperluan kepada penyesuaian kehidupan di kampus [University students' resilience experience: The need for on-campus life adjustment]. Asia Pacific Journal of Educators and Education, 35(2), 109-129. https://doi.org/10.21315/apjee2020.35.2.7
- Orkaizagirre-Gómara, A., Sánchez De Miguel, M., Ortiz de Elguea, J., & Ortiz de Elguea, A. (2020). Testing general selfefficacy, perceived competence, resilience, and stress among nursing students: An integrator evaluation. Nursing & Health Sciences, 22(3), 529-538. https://doi.org/10.1111/nhs.12689
- Othman, M. H., Harun, Z., & Othman, N. (2020). Relationship between time management and academic achievement of vocational college students undergoing on-the job training. Malaysian Journal of Education/Jurnal Pendidikan Malaysia, 45(1), 1-8. https://doi.org/10.17576/JPEN-2020-45.01SI-01
- Ovaska-Stafford, N., Maltby, J., & Dale, M. (2019). Literature review: Psychological resilience factors in people with neurodegenerative diseases. Archives Clinical Neuropsychology. 36(2), 283-306. of https://doi.org/10.1093/arclin/acz063
- Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Sage Publications.
- Pinto, M., & Leite, C. (2020). Digital technologies in support of students learning in higher education: Literature review. Digital Education Review, (37), 343-360. https://doi.org/10.1344/der.2020.37.343-360
- Putri, R. S., Purwanto, A., Pramono, R., Asbari, M., Wijayanti, L. M., & Hyun, C. C. (2020). Impact of the COVID-19 pandemic on online home learning: An explorative study of primary schools in Indonesia. International Journal of Advanced Science and Technology, 29(5), 4809-4818. https://tinyurl.com/2p963xvh
- Rahat, E., & Ilhan, T. (2016). Coping styles, social support, relational self-construal, and resilience in predicting students' adjustment to university life. Educational Sciences: Theory & Practice, 16(1), 187–208.

- Rasyid, S. M. R. A., & Samat, N. (2018). Kemiskinan keluarga dan pengaruhnya terhadap tahap pendidikan rendah masyarakat luar bandar: Kajian kes di Jajahan Bachok, Kelantan [Family poverty and its influence on rural community low education: Case Study in Bachok District, Kelantan]. Journal of Social Sciences and Humanities, 15(2), 11-23.
- Rathakrishnan, M. (2020, July 14). COVID-19 ubah pengajaran dan pembelajaran dari rumah [COVID-19 changes the trend of teaching and learning from home]. Berita Harian Online. https://rb.gv/nxsw2
- Resiliency Initiatives. (2003). *Understanding the resiliency framework*. https://rb.gy/z9wwi
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). Qualitative research practice: A guide for social science students and researchers (2nd ed.). SAGE Publications Ltd.
- Román-Mata, S. S., Zurita-Ortega, F., Puertas-Molero, P., Badicu, G., & González-Valero, G. (2020). A predictive study of resilience and its relationship with academic and work dimensions during the COVID-19 Pandemic. Journal of Clinical Medicine, 9(10), Article 3258. https://doi.org/10.3390/jcm9103258
- Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. Applied Developmental Science, 7(2), 94-111. https://doi.org/10.1207/s1532480xads0702_6
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. Annals of The New York Academy of Sciences, 1094(1), 1-12. https://doi.org/10.1196/annals.1376.002
- Schleicher, A. (2020). The impact of COVID-19 on education: Insights from Education at a Glance 2020. OECD. https://rb.gv/il9oe
- Shahruddin, N. J., Mansor, M., Madon, Z., & Hamsan, H. H. (2018). Hubungan pengaruh rakan sebaya, estim diri dan lokus kawalan dengan sikap terhadap tingkah laku seksual [Relationship between peer influences, self-esteem and locus of control with attitude towards sexual behaviour]. Akademika, 88(2), 81-94. https://bit.ly/3slzicb
- Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. Psychiatry Research, 293, Article 113429. https://doi.org/10.1016/j.psychres.2020.113429
- Skovholt, T. M., & Ronnestad, M. H. (2003). Struggles of the novice counselor and therapist. Journal of Career Development, 30(1), 45-58. https://doi.org/10.1177/089484530303000103
- Thomas, C. J. (2020, April 13). *Coronavirus and challenging times for education in developing countries*. Brookings. https://bit.ly/3sotDSA
- Tyre, Y., Griffin, M., & Simmons, R. T. (2016). Building resiliency in counselors in training for counselors educators. Alabama Counselling Association Journal, 41(1), 25-44.
- Ungar, M. (2004). A Constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. Youth & Society, 35(3), 341-365. https://doi.org/10.1177/0044118x03257030
- Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. The Lancet, 395(10228), 945-947. https://doi.org/10.1016/s0140-6736(20)30547-x
- Werner, E. E. (1995). Resilience in development. Current Directions in Psychological Science, 4(3), 81-84. https://doi.org/10.1111/1467-8721.ep10772327
- Ye, B., Zhou, X., Im, H., Liu, M., Wang, X. Q., & Yang, Q. (2020). Epidemic rumination and resilience on college students' depressive symptoms during the COVID-19 pandemic: The mediating role of fatigue. Frontiers in Public Health, 8, Article 560983. https://doi.org/10.3389/fpubh.2020.560983