

Technology and Resilience: Navigating the Digital Age among the Generation Z

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Abstract

According to American Psychological Association (APA) (2014) resilience is defined as “the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress (para. 4).” Digital technology has become an integral part of our daily lives, making it easy to contact people and make the world smaller. The rapid evolution of digital media has made us constantly on and available, leading to addiction and a loss of pleasure in simple things. The study investigates how technology enhances psychological resilience in Generation Z, focusing on social connections and community support during the transition from childhood to maturity, highlighting the importance of resilience in coping with stress. This study also explores the benefits and drawbacks of technology in fostering resilience among Generation Z teenagers. Advantages include easy communication, community-building, and access to educational materials. However, disadvantages include increased vulnerability to online harassment, cyberbullying, and psychological effects of social media pressure. Overuse can lead to digital addiction, negatively impacting sleep habits, mental health, and overall wellbeing. The study emphasizes the complex relationship between technology and psychosocial concerns, emphasizing the need for a balanced approach to digital involvement to help adolescents develop resilience in the digital age. This post millennials mostly use technology to save time when studying and in their free time. They are concerned about several ethical dilemmas of using technology, such as their privacy and spending time with their family and friends. The study is based on exploratory and descriptive methodology. This study explores technology usage for Gen Z's resilience, highlighting its relevance for HR managers, developers, and marketing strategists to understand their behaviour in professional and private settings. The social implication of this study can be beneficial for the academicians too in identifying different learning methods that are useful for their students.

Keywords: Resilience, Gen Z, Technology, Ethical dilemma, Community support, Harassment.

Introduction

Humans might develop and thrive in difficult circumstances, but they might not know or understand how they were able to overcome these difficulties. Inner resilience is a crucial resource for success in the outer world and a foundation for good mental health, as highlighted by Neenan (2018). Resilience is the ability to return to its original state after being bent or stretched, as seen in bridges and flowers. It involves remaining flexible in thoughts, feelings, and behaviours during life disruptions, resulting in strength and wisdom. (Pemberton, 2015,). Resilience in technology refers to an information system's capacity to operate despite adverse conditions, maintain operational capabilities, and recover to an effective

operational posture within a specified timeframe. (NIST SP 800-39 under Information System Resilience). Studies show that a variety of factors, including our innate qualities, the environment we live in, and experience-based learning, can affect resilience. (Pemberton, 2015). Stress can negatively impact our psychological, emotional, and physical wellbeing, but psychological resilience can help individuals protect themselves and regain control of their lives. (Southwick & Charney, 2018) Resilience is a multi-faceted concept encompassing the ability to handle difficult times and respond flexibly, with three essential factors identified by researchers (Boniwell & Tunariu, 2019).

- Recovery: restoring routine or the level of functioning prior to the stressor.
- Resistance: little to no indications of disruption after the traumatic event.
- Reconfiguration: adjusting to the changing conditions by finding new stability and returning to an alternate balance.

Gen Z, born between the 1990s and 2010s, is the first generation to fully embrace the digital revolution. They navigate quick information access and a rapidly shifting global environment, shaping their traits, aspirations, and goals. Despite challenges in the labor market and a growing interest in entrepreneurship, they are adaptable, resilient, and promoting diversity and inclusion.

Information, communication, and technology (ICT) like smart TV, Watch, Mobile etc is widely utilised in the digital age by both individuals and organisations, although its adoption is still influenced by demographic factors including age, gender, income, and education. Among different demographic variables, generation has attracted some scholarly attention (e.g., Bailey & Ngwenyama, 2010; Cherrez-Ojeda et al., 2020; Metallo & Agrifoglio, 2015; Padayachee, 2018; Prensky, 2001; van Volkom et al., 2013) in different disciplines, such as communication, information, generational studies, and marketing. Based on the intergenerational communication perspective, technology use can either benefit or create barriers for intergenerational interactions (Bailey & Ngwenyama, 2010). A dynamic process of constructive adjustment in the face of adversity, resilience is put to the test by situations like COVID-19, trauma, and natural catastrophes. Understanding how different generations utilise ICTs is essential to building resilience because it allows for efficient intergenerational communication in a variety of settings.

Review of Literature

This literature review explores how Generation Z utilizes technology to enhance resilience and address contemporary issues. It highlights the importance of understanding this generation's interaction with technology for educators, psychologists, policymakers, and parents. Several research studies show increased technology use among Generation Z leads to increased anxiety, despair, low self-esteem, sleep issues and loneliness, as well as negative mental health outcomes like low self-esteem. (Twenge and Campbell (2018) Odgers et al. (2018)). Technology offers social interaction and assistance, promoting resilience in Generation Z through online communication platforms, according to a study by Ellison et al. (2019). According to Boyd and Hargittai (2013), members of Generation Z exhibit a high level of comfort and proficiency in using smartphones, social media, and other digital devices. Parental involvement significantly impacts children's technology use and resilience, with well-rounded mediation techniques promoting boundaries, open communication, and responsible technology use, leading to better psychological well-being and reduced technology addiction. (Coyne et al. (2020) and (Viner et al., 2021). Generation Z's digital fluency allows them to navigate the online world, but concerns about excessive screen time and cyberbullying persist. They use technology for self-care and self-expression, but ethical dilemmas remain. This literature explores the connection between technology and resilience among

Generation Z, emphasizing the need for critical reflection and ethical engagement to navigate the digital age with resilience and adaptability. According to resilience studies, each of the following can be used to both help and measure an individual's resilience (Boniwell & Tunariu, 2019; Neenan, 2018)-

- Reframing- Coping can be facilitated by viewing an issue or circumstance from a fresh, more beneficial angle.
- Making use of the strength of happy feelings - Emotions broaden perspectives, stimulate innovative problem-solving, and enhance our sense of accomplishment and purposeful life by fostering relationships with supportive individuals and groups.
- Engaging in physical exercises - Increased physical activity can boost confidence and self-esteem while managing and lessening the effects of stress.
- Positivity for the future- Optimistic thinking about the future can let us realise that obstacles are typically temporary and solvable, which increases our sense of hope and optimism for the future.

Rationale of the study and research questions

From the literature review, it is observed that the existing studies are focusing on the impact of technology on Generation 'Z' in broader perspective. More specifically the existing reviews did not include the area 'technology and resilience'; and its influence on the Generation Z.

Thus, after reviewing the literature the researcher framed the following questions,

1. How the Information, Communication and Technology ICT will influence on resilience among Generation Z?
2. What is the impact of technology on psychological resilience in the Generation Z?

Objectives of the study

The broader objective of the study is to investigate on 'Technology and Resilience; navigating the Digital Age among the Generation 'Z'.

The specific objectives are:

1. To describe the influence of ICT on resilience among the Zoomers'- Generation 'Z'.
2. To explore the impact of technology on psychological resilience in Generation – 'Z'.
3. To elucidate the pros and cons of technology for helping teens in Generation 'Z'.

Methodology

This study is based on exploratory and descriptive in nature focused on conceptual framework on technology and resilience to the Generation 'Z'. The variables identified for this framework are resilience and navigation the digital age among the Generation 'Z'. Generation 'Z' is overloaded with the emerging technologies and they got maximum exposure and satisfaction using or adopting technology. The study is relevant to incorporate empirical studies in future in this content of research.

Discussion Identifies

The study reveals both positive and negative impacts of technology on Generation Z's resilience.

Positive Impact of ICT on Gen Z	Access to information and resource
	Social connectivity

Negative Impact of ICT on Gen Z	Creative expression
	Reduced face -to face interaction (Twenge, 2017)
	Increased comparison and cyber bullying (Kowalski et al., 2014)
	Increased digital distraction
	Decreased attention span and impatience (Rosen, 2018).
	Dependency on technology for coping mechanism (Reinecke et al., 2016).
	Impaired problem-solving skill (Carrier et al., 2015)
	Social comparison and FOMO (Fear of missing out)

The following are some of the main adverse effects including increased stress, anxiety, and depression.

- Reduced face-to-face interaction- The overindulgence in technological communication has resulted in a reduction of in-person encounters for Generation Z, impeding their ability to cultivate robust interpersonal abilities and efficient coping strategies. (Twenge, 2017).
- Increased comparison and cyber bullying- Social media platforms encourage continuous comparison with others, which makes Gen Z feel more inadequate and down on themselves. Furthermore, the prevalence of cyberbullying on digital platforms can seriously compromise their mental health and resilience. (Kowalski et al., 2014).
- Increased digital distraction - Overuse of technology, particularly mobiles and social media, can hinder productivity, procrastination, and sleep patterns in Gen Z, making it difficult to concentrate on tasks and achieve objectives.
- Decreased attention span and impatience - Gen Z's shortened attention spans due to fast-paced digital content hinder their ability to focus on long-term jobs, potentially hindering their perseverance in the face of challenges. (Rosen, 2018).
- Dependency on technology for coping mechanism - Technology, such as social media and video games, is widely used by Generation Z as a stress-reduction technique. However, this can worsen feelings of loneliness and impede good coping mechanisms. (Reinecke et al., 2016).
- Impaired problem-solving skill - Gen Z's excessive reliance on technology may hinder their ability to develop critical thinking and problem-solving skills, potentially reducing their resilience to unexpected challenges. (Carrier et al., 2015).
- Social comparison and FOMO (Fear of missing out)- Social media's idealized depictions of life can lead Gen Z users to make irrational comparisons, causing FOMO, anxiety, and reduced resilience.

The positive impact of technology on resilience of the Generation Z are as follows-

- Access to information and resource- According to technology, Gen Z has instant access to a wealth of knowledge and learning materials, which encourages self-directed learning and skill development and helps them overcome obstacles.
- Social Connectivity – social media and digital communication platforms facilitate connections with peers, mentors, and support networks, fostering community and social support, promoting resilience and encouragement.
- Creative expression - Technology enables Gen Z to express themselves creatively through digital art,

music, videos, and writing. Engaging in creative activities can serve as a coping mechanism during times of stress and adversity, enhancing emotional resilience.

When the researcher compares the positives and negatives of technology and resilience among generation Z, the positive side is lesser than the negative side.

Suggestions

After evaluating the pros and cons of the impact of technology on the resilience of Generation Z, here are some suggestions –

1. Gen Z should receive comprehensive digital literacy education, focusing on critical thinking, online safety practices, and responsible digital navigation to understand the advantages and disadvantages of technology.
2. To avoid negative impacts like shorter attention spans and mental health problems, Gen Z should balance their usage of technology with regular breaks and offline activities.
3. Gen Z should be encouraged to engage in resilience-boosting activities like volunteering, sports, hobbies, and mindfulness exercises to develop coping strategies and flexibility for overcoming obstacles.
4. Gen Z should prioritize face-to-face interactions with friends and family over digital communication to foster strong bonds, enhance social skills, and foster emotional resilience.
5. Create Gen Z support networks with peers, mentors, and mental health specialists to offer direction, inspiration, and tools to help them overcome obstacles and cultivate resilience.
6. For Generation Z to develop resilience and prosper in a digital age, they should be taught self-care techniques including physical activity, a balanced diet, getting enough sleep, and managing stress.
7. For Generation Z to develop resilience and prosper in a digital age, they should be taught self-care techniques including physical activity, a balanced diet, getting enough sleep, and managing stress.
8. Adults and authority figures can serve as role models for Gen Z, promoting responsible technology use by setting screen time boundaries and promoting moderation and balance.
9. Encouraging Generation Z to take on obstacles on their own and look for innovative solutions helps them develop problem-solving abilities, gain confidence, and adjust to the rapidly evolving technology scene.

Implementing these suggestions can help Gen Z utilize technology's advantages and foster resilience to tackle digital challenges.

Conclusion

Technology has an impact on Gen Z's resilience by providing chances for education and self-expression but also by posing problems like cyberbullying. In order to equip Gen Z to navigate the digital landscape and improve resilience, it is important to emphasise the necessity of parental mediation and evidence-based treatments. These strategies include promoting digital literacy, balanced screen time, and offline relationships. The study explores Gen Z's use of technology for resilience, emphasizing the importance of understanding their behaviour in public and private domains for effective teaching strategies.

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