## Exploring Cultural and Behavioral Variances Among Generation Z Students with High Short Video Application (SVA) Usage: A Focus on Academic Success and Struggle

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#### Abstract:

Gen Z's identity as digital natives is largely defined by their relationship with ubiquitous computing, primarily facilitated by smartphones [2]. Their preference for dynamic and concise digital content is evident in the widespread adoption of short video applications (SVAs) [24]. This inclination towards SVAs is driven by Gen Z's desire for instant access to information and a preference for visually engaging and interactive content, which aligns with the characteristics of SVAs. The popularity of SVAs among this demographic can be attributed to the platform's ability to deliver content in a concise and engaging manner, resonating with Gen Z's digital consumption habits and preferences [24].

Our literature review will revolve around three main themes. Firstly, we will explore the impact of SVA on cognitive functions and attention spans. Secondly, we will delve into Gen Z's preference for multi-modal learning. Lastly, we will examine the role of user-generated content in promoting social learning and community building. By doing so, we hope to gain a better understanding of the changing dynamics of educational content consumption among digital natives and provide insights into which educational methodologies and engagement strategies are most effective in catering to the unique preferences of Generation Z. Ultimately building on the insights from our literature review, our proposal seeks to explore the complex relationship between Screen Viewing Activities (SVAs), cognitive functions, and academic performance among Gen Z students. Despite the existing literature highlighting the detrimental effects of SVAs on cognition, our study aims to examine the uncharted territory by investigating the impact of extensive SVA usage on students with high and low academic performance.

### **Theme 1: Cognitive and Attentional Shift**

#### **Key takeaways:**

Research on SVA such as TikTok has shed light on its impact on Generation Z, highlighting potential effects on cognitive functioning and attention. Exposure to personalized content and instant gratification through SVAs affects delay of gratification, prospective memory, and academic delay of gratification (ADOG) [24]. In this section, we will explore how the use

of social media and media consumption patterns in Gen Z is leading to a cognitive and attentional shift within this generation.

#### 1. Gen Z: The ubiquity of smartphones and the affordance of social media

The term "digital natives" has been commonly used to describe Generation Z, who spend a significant amount of time online and have smartphones as a constant presence [2]. For this generation, technology has been an integral part of their upbringing, with the younger half never having experienced a world without smartphones, social media, and the internet [2]. As Mark Weiser aptly put it, "The constant background presence of these products of 'literacy technology' does not require active attention, but the information to be transmitted is ready for use at a glance. It is difficult to imagine modern life otherwise" [22]. Consequently, the constant connectivity has molded this generation to thrive on instant access to a myriad of content where they prefer streaming services, social media, and personalized content over traditional media [2]. Likewise, smartphones and internet accessibility have led to the rise of short-format video platforms like Snapchat, TikTok, and Instagram [14,18]. And when it comes to social media, social media offers a plethora of features that allow users to engage in various activities. These features, commonly known as affordances, include but are not limited to communication, content sharing, networking, content discovery, information consumption, expression of approval/disapproval, live interaction, collaboration, and privacy controls [2]. In other words, Generation Z has grown up in a digital world where their everyday behaviors are easily dictated by the accessibility of smartphones and social media.

#### 2. Media Consumption Patterns of Generation Z

The rise of short-format videos has become a prominent feature of Gen Z's media consumption. Seemiller and Grace [17] conducted a study that found that Gen Z students are engaged online for at least one hour daily, with 75% accessing the internet within the first hour of waking up. This highlights the pervasive impact of the internet on younger generations and its transformative role in shaping how individuals interact and communicate with others. [17] Furthermore, other studies have found that over 80% of Generation Z users engage in the production, interaction, and consumption of photos and videos on social media using their smartphones, and 50% of Generation Z spend more than nine hours a day on their smartphones and the other half around three to eight hours [20]. However, while studies show that Generation Z spends a great deal of time on social media, some studies have characterized Generation Z to be curious and creative by nature and lifelong learners.

#### 3. Impact of SVA (short video application) on Generation Z

Conversely, other studies highlight that SVAs, a major consumption platform for Generation Z negatively impact academic performance. A study conducted in China [24] found that high

usage of SVA among Gen Z adolescents is associated with negative impacts on cognitive functioning, including working memory impairment and verbal ability, particularly for the younger cohort (12-13 years old). Heavy SVA use is also a negative predictor of adolescent users' cognitive functioning and negatively correlates with academic delay of gratification (ADOG) and self-regulation. Additionally, verbal abilities may be impaired due to a decline in traditional literacy activities, and obsessive SVA users tend to spend less time on afterschool study and sleep, leading to a reduced concentration on learning tasks and academic underperformance [24]. It's clear that the media consumption habits of Generation Z, coupled with their reliance on social media and smartphones, are having an impact on their cognitive and attention abilities. This raises questions about how Generation Z learns and absorbs information, particularly in academic settings. Given their preference for SVAs on social media, there is potential for these tools to be utilized in educational contexts

#### Theme 2: Gen Z and Multimodal Learning Preferences

#### Key takeaways:

The multimodal learning approach acknowledges that students have different learning styles and preferences. It involves using multiple sensory channels or modes of input to learn and understand information. Members of Generation Z are quick learners who prefer hands-on, practical experiences, engaging directly with tangible aspects and individuals. They excel at summarizing information swiftly through emojis and concise language. Their interest lies in utilizing social media platforms such as TikTok, Instagram, and YouTube as sources for learning and digital references[6]. When it comes to educational materials, they lean towards digital platforms due to their ease of access across various devices, both large and small. This digital approach not only grants swift accessibility but also fosters collaboration, idea-sharing, and rapid learning among them[12].

#### 1. Digital literacy and informal learning for creative expression

Gen Z is utilizing social media platforms such as TikTok and Instagram Reels in transformative ways that extend beyond mere entertainment[6]. These platforms serve as dynamic arenas where young individuals can cultivate their digital literacy and showcase their creativity. In fact, what might seem like casual scrolling through entertaining clips involves a deeper engagement that requires mastering the art of storytelling through shortform videos, understanding intricate editing tools, and decoding audience preferences through engagement metrics. All of this happens organically within their daily online routines, providing these individuals with a hands-on digital literacy crash course.

#### 2. Utilization and interaction with digital assets

Upon reviewing the literature, it is intriguing to observe the reading and library engagement patterns of Generation Z. Notably, the extensive usage of digital library collections stands out, although the methodology for accessing these resources presents a knowledge gap

[13]. Most non-users of digital collections say they don't fully understand how to access digital library resources [12]. Meanwhile, among the active users, millennials show a higher tolerance for long wait times for digital library resources than Gen Z [13]. Among 1 in 3 Gen Zers and millennials in the survey, buy books based on recommendations from social media ads. But at the same time, a concerning statistic reveals that 32% of Gen Z and millennials obtain books from an unlicensed source [13].

Additionally, It's worth noting that the younger generation is not reading less as many assume. Both Gen Z and millennials actively participate in reading books. They purchase an average of one ebook, one audiobook, and two print books per month and read the same amount across these formats, including subscriptions [13]. Interestingly, Gen Z outperforms millennials in both book acquisition and reading across all formats.[13]. Furthermore, the same study found that if presented with an option, 59% of Gen Z and millennials would prefer to read a graphic/manga version of a story over a book that only contains text [13]. -> implying that Genz likes to learn from visual elements

# Theme 3: User-Generated Content for Social Learning and Community Building

#### Key takeaways:

Generation Z uses TikTok for social learning and community building through bite-sized content, creative engagement, and diverse educational material. With features like challenges, hashtags, comments, and discussions, users can explore and interact with a supportive community. These platforms offer a versatile tool for informal and peer-driven learning, aligning with Gen Z's preferences for interactive and visually engaging content [2]. In this section, we will explore how SVA (short video application) platforms have promoted interactive educational content and social awareness, thus creating an environment for social learning, community building, and engagement.

#### 1. Education and social learning

The emergence of user-generated content (UGC) has proven to be a potent tool in promoting education and fostering social learning [2]. Platforms such as TikTok and YouTube have empowered individuals to share their knowledge and skills through UGC, thereby democratizing knowledge sharing and creating a vibrant online community where users actively contribute to the learning experiences of others [6,24]. This trend is particularly popular among Gen Z, who gravitate towards UGC for educational purposes, engaging in do-it-yourself (DIY) content [2]. UGC has become a valuable resource for informal learning and skill acquisition, reflecting a shift towards collaborative and peer-driven educational approaches, which is a positive development.

#### 2. Social awareness and consciousness

TikTok and other short video platforms have become powerful catalysts for building communities, activism, and discussions among Generation Z [2]. The format of these platforms aligns with Gen Z's observational engagement on social media, emphasizing observing others' lives and empowering anyone to become an influencer, fostering authenticity and relatability within the TikTok landscape [2, 14]. Gen Z's social consciousness drives a preference for purpose-driven content, making these platforms a space for addressing societal issues, and brands that address social and environmental concerns resonate with Gen Z [2]. Social media, especially TikTok, is pivotal in shaping discussions and amplifying movements like #BlackLivesMatter, catalyzing real-world change. Essentially, these platforms provide Gen Z with spaces for creative expression, community, and meaningful dialogue, making them powerful tools for social change.[2]

#### **Future research:**

While some studies have suggested that SVAs can have a negative impact on the cognition and academic performance of Generation Z students, these studies have not considered students with high academic performance and high SVA usage. Furthermore, many of the studies we reviewed were conducted in different regions such as China, Sweden, and South Africa, raising questions about how cultural differences may vary across regions.

Interestingly, we found that some of our findings on the impact of SVAs on Generation Z were contradictory, with some studies highlighting negative effects and others focusing on the positive effects. This raises the question of what Generation Z is watching on SVAs and how this may impact their academic performance. Additionally, we are curious about how cultural and behavioral variances among Generation Z students with high SVA usage can impact academic performance.

Ultimately we seek to answer the following questions:

- What is Generation Z watching on SVAs and how may this contribute to academic performance?
- What are the cultural and behavioral differences between academically successful and struggling Generation Z students who frequently use SVAs?
- How are SVAs being used by academically excelling students?

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