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Analysis of correlating factors: Social media addiction in Shanghai's Generation Z

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ABSTRACT

In the current digital era, the way Generation Z interacts with social media, particularly in vibrant cities like Shanghai, is significant and varied. This study, influenced by Bandura's Social Cognitive Theory (SCT), investigates the detailed motivations behind Generation Z's online behavior and examines how these motivations might relate to the risk of becoming addicted to social media. We carefully gathered data from 318 participants, mainly aged 22 to 28, from various socio-cultural backgrounds in Shanghai. Using SPSS for detailed analysis, we applied descriptive statistics and Pearson correlation analyses to identify patterns and relationships. The initial results show that Generation Z in Shanghai is heavily involved in the digital world, and their social media use aligns with the principles of SCT, including observational learning, reciprocal determinism, and self-efficacy. This study adds to the growing body of research on digital behavior, emphasizing the importance of understanding the complex effects of social media on individual lives and society as a whole.

1. Introduction

In the rapidly advancing digital milieu of the 21st century, Generation Z delineated as those born between the mid-to-late 1990s and the early 2010s, has exhibited an intricate relationship with social media platforms (Hu et al., 2022). This dynamic is particularly amplified in metropolises such as Shanghai, where the city's melding of historical legacies with modern vigor augments the digital experiences of its inhabitants. These platforms, while acting as channels for communication, information dissemination, and social network cultivation, have become arenas of scholarly interest, primarily due to the emergent phenomenon of "social media addiction." Drawing parallels with established behavioral addictions, this form of digital dependence has garnered attention and concern in contemporary research (Turel et al., 2018).

The factors contributing to social media addiction are varied and intricately linked, encompassing psychological traits, social influences, and the addictive design of the platforms themselves (Vieira et al., 2023). Individuals with a heightened need for social validation and belonging are particularly susceptible, as the instantaneous feedback and sense of connection provided by social media directly feed into these desires. Although a number of scholars have performed research on this topic, relatively few studies have focused on Generation Z.

The motivations steering Generation Z towards these platforms are multifaceted (Król and Zdonek, 2021). While segments of this cohort are intrinsically motivated by knowledge acquisition, others are magnetically drawn by the allure of community, entertainment, and digital interactions (Matni and Shah, 2014; Bandalović et al., 2022). To distill these varied motivations and their subsequent implications, it is imperative to adopt robust theoretical frameworks. Bandura's (1986) Social Cognitive Theory (SCT), with its foundational constructs of Observational Learning, Reciprocal Determinism, and Self-efficacy, emerges as a pertinent paradigm. Past scholarly ventures have underlined the relevance of SCT in offering insights into the nuanced dynamics between digital engagement behaviors and their likelihood of gravitating toward addiction (Brevers and Turel, 2019). Positioned within this theoretical framework, our research is designed to dissect the motivations and behaviors of Generation Z as they navigate social media within Shanghai's unique urban context. Consequently, the research objectives have been meticulously curated. First, we map and comprehend

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the intricacies of Generation Z's social media engagement in the cultural and digital landscape of Shanghai. Second, we investigated the correlations between their motivations for social media utilization and the principles elucidated by SCT. Third, to probe the potential nexus between these motivations, when interpreted through the SCT lens, and tendencies towards addictive digital behaviors.

To actualize these objectives, our research methodology encompasses a quantitative approach. Utilizing structured questionnaires distributed to a representative sample of Generation Z in Shanghai, we aim to glean insights and patterns related to their digital interactions. Statistical analyses, facilitated by software tools such as SPSS, will aid in interpreting correlations, thereby offering empirical validity to the study's inquiries.

This study meticulously investigates social media addiction within Generation Z, utilizing SCT as its foundational framework. By doing so, it not only seeks to validate and extend the applications of this established theory but also strives to identify key motivational factors crucial in mitigating addictive behaviors. The research is poised to offer significant insights, contributing to both the academic discourse on digital engagement of younger demographics and the development of effective prevention strategies for social media addiction. A rigorous methodology and innovative approach underscores the study's novelty and potential impact on creating a balanced digital landscape for Generation Z.

2. Literature review

2.1. The ubiquity of social media and its addictive concerns

In today's digitalized era, social media platforms have profoundly embedded themselves in the fabric of interpersonal communication and information sharing, effectively reshaping human interaction patterns. As these platforms burgeon, so does apprehension about their addictive dimensions. Comprehensive studies, such as those by Perrin and Anderson (2019), have demarcated social media's extensive reach, illuminating both its communicative prowess and potential pitfalls. Delving into the neurological realm, Turel et al. (2018) unearthed neurobiological associations with social media addiction, hinting at the profound implications of this modern challenge. Furthermore, intricate motivations, as illuminated by Matni and Shah (2014) and Bandalović et al. (2022), underscore the range of reasons individuals engage with these platforms and how such engagements could flirt with overindulgence or even addiction.

2.2. The cornerstone of SCT and its relevance in deciphering digital engagements

SCT championed an innovative approach to comprehending human behavior, emphasizing the reciprocity between individuals and their environments (Woods et al., 2020). Central to SCT is the concept of "triadic reciprocality," which interweaves personal factors, behaviors, and environmental influences in a continuous feedback loop (Okoli, 2021). This dynamic interplay forms the crux of observational learning, self-efficacy, and reciprocal determinism.

When mapping SCT onto the terrain of media consumption, its relevance becomes palpable. The theory's emphasis on observational learning resonates strongly in a media-rich age, where platforms such as social media not only present behaviors for observation but also facilitate immediate emulation. The notion of self-efficacy, which Bandura (1997) highlighted, has profound implications for understanding how confidence in digital navigation influences online behaviors, patterns, and potential vulnerabilities.

2.3. The nexus between SCT and media: Historical to digital progression

Historical integration of SCT in media research is paramount, exemplified by Bandura's iconic "Bobo doll" experiments, which showcased the media's undeniable influence on behavioral modeling. As we transition into the digital age, platforms such as Facebook and Twitter emerge as modern amphitheaters for observational learning. Contemporary research, such as that of Tsay-Vogel et al. (2018), captures this evolution, highlighting the digital intricacies of online behavior influenced by virtual observations. Furthermore, the construct of self-efficacy, beyond its traditional realm, finds robust applicability in today's digital behaviors, determining the breadth and depth of online engagements (Eastin and LaRose, 2000).

2.4. Identifying the gap: SCT's uncharted application to social media addiction

While an extensive body of research demarcates the contours of social media engagement and potentially addictive behaviors, an intricate application of SCT to these behaviors appears to be a relatively unexplored frontier (Wei, 2023). The existing knowledge landscape predominantly situates SCT within the boundaries of traditional media. However, the volatile and interactive nature of social media, where users concurrently assume the roles of both consumers and creators, demands a nuanced SCT interpretation.

This study seeks to venture into this underresearched territory, aiming to leverage SCT's constructs to decode the cognitive mechanics underpinning social media addiction. By bridging this knowledge gap, the endeavor not only seeks to enrich the academic milieu but also aspires to inform practical strategies, aiding stakeholders in understanding and potentially curtailing the risks linked to social media addiction.

3. Theoretical framework

SCT offers a key perspective for understanding the motivations and behaviors associated with social media use. This theory, which integrates thoughts, actions, and environmental factors, plays a crucial role in examining the potential relationship with social media addiction (Bandura, 1986). Our study focuses on three main concepts of SCT: Observational Learning, Reciprocal Determinism, and Self-efficacy, using Social Media Addiction as the main point of interest.

Observational Learning: This construct elucidates the manner in which individuals acquire behaviors and attitudes through observation. Within the social media landscape, users not only consume content but also often assimilate engagement behaviors they discern, whether from peers or influencers. As Bandura et al. (1963) indicated, the media has a long-standing history of influencing behavioral adaptations, a notion further amplified in today's digital ecosystem.

Reciprocal Determinism: Rooted in the continuous interplay between an individual's beliefs, consequent behaviors, and the encompassing environment, this construct is particularly salient in digital platforms. Here, user actions and underlying beliefs are incessantly influenced by the digital experiences they encounter. Tsay-Vogel et al. (2018) provided empirical validation for this intricate dance, reinforcing the dynamic interrelation inherent in digital spaces.

Self-efficacy: Capturing an individual's belief in their capability to undertake tasks and achieve desired outcomes, this construct, when transposed onto the social media domain, pertains to a user's confidence in their digital engagement competencies. Eastin and LaRose (2000) highlighted the significant correlation between a robust sense of digital self-efficacy and heightened engagement on online platforms.

Guided by the SCT lens, our objective is to meticulously probe how these constructs interact with and potentially influence user behaviors on social media platforms, especially with regard to social media addiction.

With this theoretical grounding, the ensuing segment will elucidate the hypotheses formulated to inspect correlations between our chosen SCT constructs and Social Media Addiction, encapsulated visually in Fig. 1.

The hypotheses of this study are as follows:

H1: There is a significant correlation between observational learning on social media platforms and social media addiction among Generation Z in Shanghai.

H2: A significant correlation exists between reciprocal determinism on social media and social media addiction among Generation Z in Shanghai.

H3: Self-efficacy in navigating and interacting on social media significantly correlates with Generation Z's susceptibility to social media addiction in Shanghai.

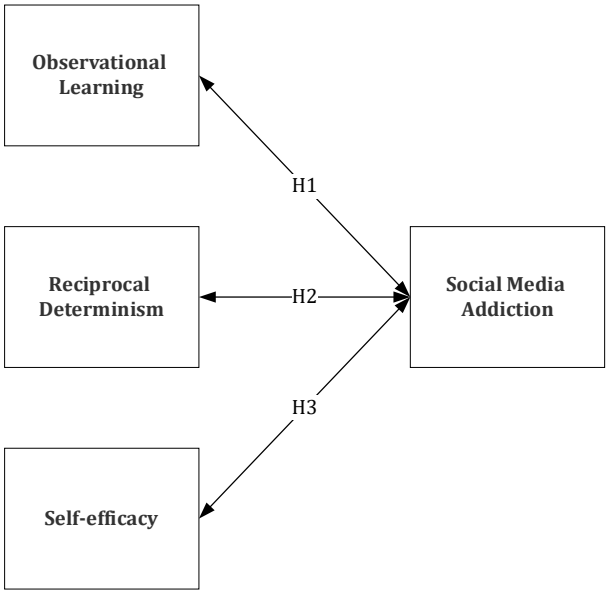

Fig. 1: Research modeling and hypothesis development

4. Methodology

This section outlines the methodology adopted for the current study, detailing the research design, population, sampling strategy, data collection, and data analysis procedures.

4.1. Research design

The intricate dynamics between social media interactions and potential resultant addictive behaviors necessitate a robust and insightful research framework. To adhere to this fundamental principle, the research utilizes a cross-sectional design that relies on questionnaires (Spector, 2019). The questionnaire in Appendix A is specifically designed to capture a momentary representation of existing behaviors, attitudes, and perceptions.

This cross-sectional approach enables the research to map the present state of affairs without the longitudinal challenges of tracking changes over time, making it feasible and efficient, particularly given the ever-evolving nature of social media platforms and user behaviors. By harnessing the strengths of the questionnaire method, the design also ensures standardization of data collection, enhancing the reliability of responses and facilitating systematic analysis (Alshami et al., 2023).

Central to this study's design is its theoretical anchorage in the SCT. By examining critical components of SCT, observational learning, reciprocal determinism, and self-efficacy, this research seeks to unravel the cognitive mechanisms driving social media interactions and subsequent susceptibility to addictive behaviors.

Simultaneously, the study strongly emphasizes the Generation Z cohort, precisely those born between the mid-to-late 1990s and the early 2010s (Sriprom et al., 2019). This cohort's choice is by no

means serendipitous. Often dubbed 'digital natives,' Generation Z has grown in an era where digital technology, especially social media, is not an adjunct but an integral part of their lives. Their interactions, often nuanced and multifaceted, with the digital realm, provide a fertile ground for understanding the interplay between SCT components and potential addiction pathways.

Overall, the cross-sectional questionnaire-based design, underpinned by the SCT and targeted at Generation Z, promises a rigorous, comprehensive, and contextually relevant exploration of social media engagement and addiction.

4.2. Population and sampling

As one of China's most dynamic cities, Shanghai presents a diverse landscape of digital interactions, particularly among its Generation Z populace. For our research focusing on this cohort, the targeted population is defined as the members of Generation Z residing in Shanghai. Born into the digital age, this demographic offers invaluable insights into social media engagement shaped by their unique sociocultural experiences.

While it is tempting to consider a large sample to capture the richness of experiences, it is essential to recognize the constraints and challenges associated with extensive data collection, especially when aiming for detailed and nuanced results. Larger samples can be cumbersome, and the quality of responses may vary, leading to potential inaccuracies (Dillman et al., 2014). Moreover, given the specific focus of the study—understanding the dynamics between components of social cognitive theory and social media addiction—it is critical that respondents understand and reflect upon their social media behaviors. This depth of engagement is more likely achieved with a manageable sample size.

Adopting the stratified random sampling technique, we delineated the larger Generation Z population in Shanghai into distinct subgroups based on the following:

1. Educational Institutions: Sampling students from diverse academic disciplines in Shanghai.
2. Workplaces: Young professionals across various sectors to capture the nuances of digital engagement.
3. Residential Areas: Capturing various experiences from different parts of the city.

Considering the focus on depth and quality of responses, a sample size of 300 respondents was deemed appropriate. This size is statistically significant for the study's requirements and manageable for ensuring quality and consistency in the data (Mohd Thas Thaker, 2020). Distributing the questionnaire online ensures that we effectively tap into Generation Z's digital nature. The chosen size, combined with the distribution method, aims to provide a representative and comprehensive understanding of social media behaviors among Shanghai's Generation Z while balancing feasibility and the quality of insights.

4.3. Data collection

To resonate with Generation Z's digital orientation, data were collected via the Wenjuanxing platform (https://www.wjx.cn/), a leading online survey tool in China. A structured questionnaire was developed utilizing validated scales to measure key constructs: observational learning, reciprocal determinism, self-efficacy, and social media addiction. A 5-point Likert scale, ranging from "strongly disagree" to "strongly agree," was employed to capture detailed responses. Furthermore, demographic data, such as age, gender, and occupation, were gathered to offer richer context and control for potential variables.

4.4. Data analysis

After data collection, each response underwent systematic coding before being entered into SPSS statistical software for detailed analysis. Initially, descriptive statistics, including means and standard deviations, were generated for all primary variables, offering insight into the data's central tendencies and distributions. The primary focus then shifted towards gauging the reliability and validity of the questionnaire items, a crucial step to ensure the integrity and consistency of the instrument used. Reliability, often represented by Cronbach's alpha, assessed the internal consistency of the items. At the same time, the KMO test and Bartlett's test of sphericity ascertained the validity and appropriateness of performing factor analyses.

Next, Pearson correlation analyses were employed, clearly representing the strength and direction of linear relationships between variables. This established the nature of the correlations and highlighted any significant associations among the variables under study. While the research refrained from using multiple regression analyses in this instance, the methods above were apt for investigating the relationships between the three foundational constructs (Observational Learning, Reciprocal Determinism, and Self-efficacy) and the phenomenon of Social Media Addiction. A significance level of 0.05 was consistently adhered to throughout the analysis, ensuring statistical rigor.

Conclusively, these analytical stages aimed to validate the proposed hypotheses, shedding light on how elements of social cognitive theory might underpin tendencies toward social media addiction among Shanghai's Generation Z population.

5. Results

5.1. Demographic profile

The data provide a comprehensive demographic profile of the respondents involved in the study.

Regarding age distribution, most participants fall within the 22-28 age range, as shown in Table 1, cumulatively accounting for 72.33% of the sample. This suggests that the findings may be especially indicative of the behavior and sentiments of young adults in their mid to late twenties. In contrast, younger teens (aged 10-17) represent a smaller portion, constituting approximately 22.95% of the sample.

Table 1: Demographic profile

Attribute	Categories	Frequency	Percentage (%)
Age	10-13	34	10.69
	14-17	39	12.26
	18-21	15	4.72
	22-25	114	35.85
	26-28	116	36.48
Gender	Male	156	49.06
	Female	162	50.94
	prefer not to say	0	0
Occupation/ Educational Status	Student	88	27.67
	Employed	230	72.33
	Unemployed	0	0

With nearly an even distribution in gender, the sample comprised 49.06% males and 50.94% females, ensuring a balanced gender perspective in the results. None of the participants chose the "Prefer not to say" option, indicating transparency in sharing gender details.

Regarding occupation or educational status, a striking majority (72.33%) of respondents identified as being employed, while students accounted for 27.67%. The absence of unemployed respondents in the data may necessitate a careful interpretation, as this demographic is not represented in the findings.

Given this demographic composition, the study's results offer a nuanced understanding of Generation Z, primarily representing the viewpoints of young adults in Shanghai. The nearly equal representation of genders ensures the inclusivity of both male and female perspectives. At the same time, the dominance of employed individuals may hint at the role of occupational engagement in influencing their social media interactions and perceptions.

5.2. Reliability and validity

These two analyses allowed us to know whether the questionnaire design was sound and whether the data in question were credible for the study.

As shown in Table 2, Cronbach's alpha value of 0.974 is exceptionally high, suggesting that the items in the questionnaire are highly interrelated and that there is solid internal consistency among the items. A Cronbach's alpha value above 0.7 is generally considered acceptable in academic research, while anything above 0.9 is outstanding. Therefore, with a value of 0.974, the reliability of the questionnaire used for the study is extremely high. This robust reliability underscores the trustworthiness of the data and supports the validity of the constructs under investigation. As shown in Table 3, the KMO value was 0.984, which is commendably high. In academic contexts, a KMO measure exceeding 0.6 is typically deemed adequate for factor analysis, with values ranging towards one considered exemplary. This observed value of 0.984 underscores the aptness of the dataset for the impending factor analysis. In addition, the present data yielded a chi-square value of 4450.679 with 78 degrees of freedom from Bartlett's test. The associated p-value was registered at 0.000. Given this p value's stark contrast to the conventional alpha level of 0.05, the test is statistically significant. This underscores that the correlation matrix under study is not an identity matrix, validating its suitability for factor analysis.

Table 2: Cronbach alpha

No. of items	n	Cronbach α
13	318	0.974

Table 3: KMO and Bartlett's test

KMO		0.984
Bartlett's Test of Sphericity	Chi-Square	4450.679
	df	78
	p	0.000

5.3. Average analysis

The findings from this study help us understand how the people surveyed feel and think about each question. As shown in Fig. 2, when we look closely at the average scores, we notice that they are very similar for all questions. The average scores are around the middle 3s, showing that the responses are somewhat positive. Specifically, the questions numbered 7.1 and 7.4 have the highest average scores at 3.670, indicating they are viewed a bit more favorably than the others. On the other end, question 6.3 has the lowest average score of 3.509, making it the question with the least positive view among those asked. In summary, the data show that Shanghai's Generation Z has a generally positive view of the questions asked, as seen by average scores in the middle 3s.

5.4. Pearson correlation analysis

Exploring the complex relationship between learning by observation on social media and its ability to encourage addictive behaviors, Pearson correlation analysis is essential in revealing these trends, especially among Generation Z in Shanghai.

Table 4 elucidates the relationships between items in the 4.x series and the 7.x series. The most notable correlation observed is between items 7.2 and 4.3, registering a coefficient of 0.777, indicating a profound linear relationship. This suggests a synchronous increase in one variable when the other variable increases. Conversely, the correlation between items 7.3 and 4.2, although strong, is slightly lower, standing at 0.722. Based on these findings, it can be deduced that observational learning on social media platforms, as signified by the 4.x series, correlates significantly with social media addiction, represented by the 7.x series, among Generation Z in Shanghai. This insight lends empirical weight to the first hypothesis.

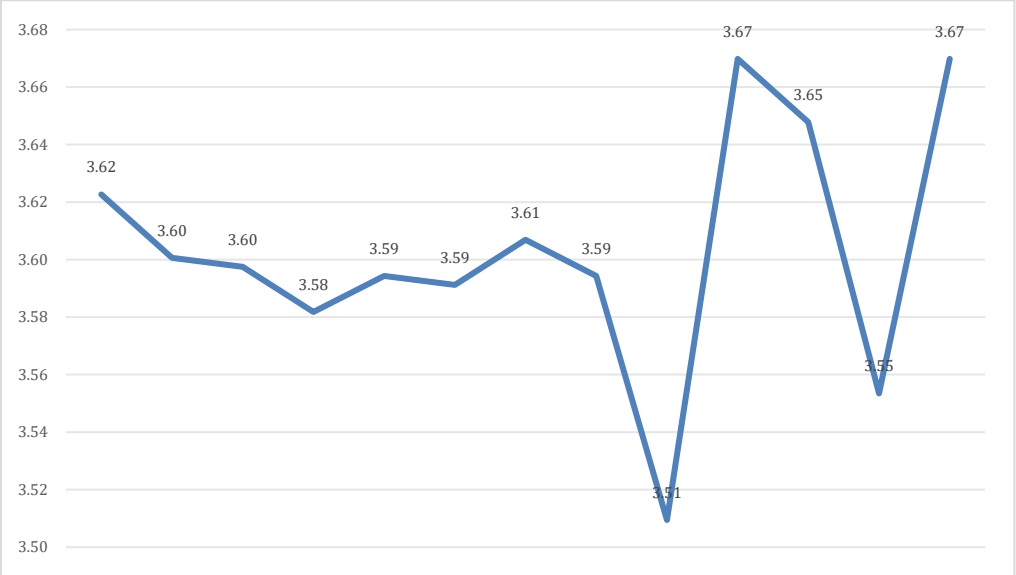

Fig. 2: Average scores of questionnaire items

Table 4: Pearson correlation-1

	4.1	4.2	4.3
7.1	0.752**	0.738**	0.753**
7.2	0.745**	0.762**	0.777**
7.3	0.744**	0.722**	0.736**
7.4	0.765**	0.733**	0.767**

**: p<0.01

Table 5 transitions to explore correlations between items in the 5.x and 7.x series. The association between items 7.4 and 5.2 emerges as the strongest, denoted by a coefficient of 0.772, suggesting a robust linear connection between the two. In contrast, a slightly milder yet significant correlation is observed between items 7.3 and 5.3, with a coefficient value of 0.728. These findings indicate that reciprocal determinism on social media platforms, represented by the 5.x series, significantly correlates with symptoms of social media addiction among Generation Z in Shanghai, as epitomized by the 7.x series. Such correlations resonate strongly with the second hypothesis.

Table 5: Pearson correlation-2

	5.1	5.2	5.3
7.1	0.758**	0.751**	0.764**
7.2	0.752**	0.758**	0.760**
7.3	0.748**	0.759**	0.728**
7.4	0.764**	0.772**	0.760**

**: p<0.01

Table 6 delves into the relationship between items in the 6.x and 7.x series. The data showcases all the relationships as being potently positive, with the correlation between items 7.4 and 6.3 as the most pronounced, standing at 0.765. Conversely, items 7.3 and 6.3 showcase a correlation coefficient of 0.704, representing the least robust relationship in Table 6, although it is still significantly strong. Drawing from these data, it can be surmised that Self-efficacy in navigating and interacting on social media platforms, denoted by the 6.x series, significantly influences Generation Z's vulnerability to Social Media Addiction in Shanghai. This interpretation aligns with and substantiates the third hypothesis.

Table 6: Pearson correlation-3

	6.1	6.2	6.3
7.1	0.730**	0.748**	0.731**
7.2	0.710**	0.745**	0.757**
7.3	0.719**	0.749**	0.704**
7.4	0.734**	0.755**	0.765**

**: p<0.01

Collectively, the data from Tables 4, 5, and 6 robustly underscore the hypotheses, highlighting the intricate roles played by elements of social cognitive theory in molding social media behaviors and their subsequent addiction propensities among Generation Z in Shanghai.

6. Conclusion

6.1. Correlation between observational learning and social media addiction

The principle of observational learning, a crucial component of Bandura's SCT, is intriguingly intertwined with the behaviors of Generation Z on social media platforms.

Our findings demonstrate that the extent to which this demographic observes learns from, and subsequently emulates behaviors on these platforms is deeply influential in determining their overall engagement levels. As users constantly view content and perceive behaviors, especially from peers and influencers, they inadvertently shape their digital interactions, potentially steering them towards overindulgence. Reinforcing our first hypothesis, this research underlines the weight of observational learning as a significant precursor to the growing concerns of social media addiction among Shanghai's youth.

6.2. Correlation between reciprocal determinism and symptoms of social media addiction

Venturing into the construct of reciprocal determinism, our study sheds light on the profound bidirectional relationship between an individual's

beliefs, actions, and digital environment. Our findings elucidate that Generation Z users in Shanghai are not only influenced but are also influenced by their online milieu.

This cyclical influence is intrinsic to their digital engagements, with every online experience shaping their future behaviors and perceptions and vice versa. Such dynamics, when incessantly reinforced, may pave the way for heightened immersion levels, bordering addiction. Validating our second hypothesis, the research emphasizes the centrality of reciprocal determinism in understanding the mechanics of social media addiction among Generation Z.

6.3. Correlation between self-efficacy and susceptibility to social media addiction

Self-efficacy in the realm of social media emerges as a compelling construct, with its influence manifested twofold. Our study discerns that while confidence in navigating social platforms equips Generation Z with the tools to maximize the benefits of these platforms, this very proficiency could be their Achilles heel. With elevated confidence, users tend to dive deeper into the digital domain, often blurring the lines between productive engagement and excessive immersion. This potentially exposes them to the risks of addictive behaviors, underscoring the paradox of empowerment and vulnerability. Corroborating our third hypothesis, the study unravels the nuanced role of self-efficacy in dictating the relationship between digital adeptness and susceptibility to addiction.

7. Discussion

This investigation, conducted amidst the unique and bustling environment of Shanghai, sheds light on the complex interactions of Generation Z with social media, contributing significantly to the literature. However, it is crucial to acknowledge certain limitations in the study's design. The cross-sectional nature of the research provides a snapshot of current behaviors but falls short of capturing the evolution of these behaviors over time. Additionally, Shanghai's distinct sociocultural context might limit the generalizability of the findings, warranting caution when applying these insights to different cultural settings.

Despite these limitations, the study stands as a comprehensive academic endeavor, unraveling Generation Z's intricate ties with social media through the lens of SCT. It sets the stage for future research, encouraging a broader demographic scope, deeper exploration of causative relationships, and the adoption of mixed-method approaches. As we navigate through the ever-changing digital landscapes, understanding the current patterns of interaction becomes crucial to anticipating future trends and cultivating a balanced digital ecosystem for the generations to come.

In benchmarking our findings against the literature, we observe congruencies and deviations that enrich the discourse on social media engagement. Our investigation into observational learning as a determinant of social media addiction aligns with previous studies emphasizing the impact of peer behaviors and influencer dynamics on young adults' social media usage. However, our research uniquely underscores the intensity of this phenomenon within Shanghai's Generation Z, adding a geographical nuance to the global understanding of social media addiction.

Exploring the realm of reciprocal determinism, our findings echo the sentiments of the literature, highlighting the symbiotic relationship between individual beliefs, actions, and the digital environment. This study contributes to this body of knowledge by specifically spotlighting how these dynamics manifest in the context of Shanghai's youthful population, further emphasizing the role of reciprocal determinism in the intricacies of social media addiction.

In addressing the relationship between self-efficacy and social media addiction, our research complements existing studies that draw connections between digital proficiency and the propensity for excessive online engagement. Our work innovatively delves into this paradox, illustrating how empowerment in digital navigation can simultaneously act as a vulnerability, particularly for Generation Z in Shanghai. This nuanced understanding of self-efficacy adds a critical layer to the global conversation on digital wellness and addiction prevention.

Appendix A. Social media usage and behavioral patterns questionnaire

Demographic details
1. Age
A.10-13
B.14-17
C.18-21
D.22-25
E.26-28
2. Gender
A. Male
B. Female
C. Prefer not to say
3. Current occupation/educational status
A. Student
B. Employed
C. Unemployed

For the following statements, please indicate your level of agreement using the 5-point scale
1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

4. Observational learning
4.1. I often observe my friends and acquaintances on social media to understand popular trends.

4.2. I modify my online behavior based on what I see successful people doing on social media.
4.3. Observing others on social media often influences my online activities.

5. Reciprocal determinism
5.1. My behavior on social media influences how others perceive me.
5.2. I believe my online behavior is a reflection of my interactions with others on social media.
5.3. The feedback I receive on social media plays a role in shaping my future online actions.

6. Self-efficacy
6.1. I am confident in my ability to navigate various social media platforms.
6.2. I can efficiently determine the reliability of information I come across on social media.
6.3. I believe I can effectively communicate and express myself on social media platforms.

7. Social media addiction
7.1. I feel restless or troubled when I cannot access my social media accounts.
7.2. I spend more time on social media than I intend to on most days.
7.3. I find it hard to stay away from social media for several hours.
7.4. My social media usage interferes with my daily responsibilities or tasks.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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