Research article

The impact of social media on the happiness of Chinese college students

Yingying Xu [a,c], Ratna Roshida Ab Razak [a,*], Meng Xiang [b]

[a] Department of Government and Civilization Studies, Faculty of Human Ecology, Universiti Putra Malaysia, Seri Kembangan, Malaysia
[b] Department of Sports Studies, Faculty of Educational Studies, Universiti Putra Malaysia, Seri Kembangan, Malaysia
[c] Department of Marxism, West Anhui University, Anhui, Lu'an, 237012, China

ABSTRACT

Background: In the contemporary academic milieu, an array of erudite investigations has meticulously delved into the ramifications of social media paradigms on the nuances of modern societal interactions. Predominantly, these scholarly endeavors have harnessed quantitative methodologies to discern both the advantageous and detrimental implications of social media. Notwithstanding these extensive analyses, there appears to be a conspicuous lacuna in the literature about the subjective repercussions of social media on the well-being and contentment of tertiary education students. In light of this gap, the present qualitative exploration seeks to elucidate the perceptions of Chinese collegiate individuals vis-à-vis the influence of social media platforms on their experiential happiness.
Method: Guided by interpretative phenomenological analysis (Jonathan et al., 2022) [1], we conducted 3 semi-structured interviews with 5 university students.
Result: Using an interpretive phenomenology analysis approach four themes. They are (1) The Paradox of Temperance and Indulgence, (2) Identity Construction and Presentation, (3) Social Support and Connection, and (4) Social Comparison and Self-Evaluation.
Discussion: Findings suggest that the individual well-being of college students may be affected by ambivalence between moderate and indulgent use of social media, social media interactions to maintain and enhance personal identity, and comparisons between individuals and certain online groups. Therefore, the government, higher education institutions, and college students should work together to build a safe and happy university life.

1. Introduction

In the context of the contemporary digital era, the pervasive influence of social media on the psychosocial dimensions of Chinese college students has become a focal point of scholarly investigation [1]. The evolution of platforms such as WeChat, QQ, Weibo, Kwai, Xiaohongshu, and TikTok has catalyzed transformative shifts in communication, augmenting both the breadth and depth of interpersonal connectivity. Such platforms have fortuitously bridged geographical chasms, fostering unparalleled engagement and knowledge dissemination among college students [2]. While these platforms act as conduits for sustained social linkages through instantaneous exchanges of multimedia content, they are not devoid of potential pitfalls. Emerging concerns encompass the spectrum

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from behavioral compulsions and cyberbullying to the more intricate nuances of privacy and psychosocial health ramifications [3].

The discourse on happiness has consistently maintained its salience throughout the annals of academic and philosophical musings, manifesting itself distinctly in varying temporal contexts. The universal aspiration to lead a life characterized by felicity underscores the indispensability of happiness as a symbiotic confluence of psychological satiation and physiological gratification. A conundrum emerges when one endeavors to delineate the prerequisites for achieving true contentment, the methodologies conducive to its attainment, and the paradigms for sustaining such a euphoric state [4]. An elucidative bifurcation within the tapestry of happiness can be traced back to the sagacious formulations of Aristotle, an illustrious stalwart of ancient happiness philosophy. Aristotelian doctrines postulate a dualistic path toward happiness: a life anchored in introspective contemplation and one governed by ethical conduct, particularly in the realm of civic interactions [5]. The quest for understanding happiness remains undiminished, with this study casting its lens on the psychosocial of Chinese collegiate populations. There exists an alarming global narrative spotlighting the diminished happiness quotient within the student community, meriting significant scholarly attention [6,7].

During the quintessential phase of collegiate academia, where psychosocial and cognitive maturation intersect, understanding the intricate interplay between social media engagement and the emotional well-being of students is pivotal. The recent surge in literature has unveiled correlations between digital platform interactions and diverse mental health outcomes, notably encompassing anxiety, stress, and self-perception [3,8]. Delving deeper into this nexus has the potential to illuminate salient risk determinants and protective stratagems, thereby guiding efficacious psychosocial interventions tailored for this demographic.

This study seeks to go beyond the surface, aiming to discern the subjective interpretations of Chinese college students regarding their digital engagements. Leveraging the constructs of Self-categorization theory (SCT) and Social Identity Theory (SIT), this research posits that the digital realm can potentially modulate self-perception and affiliative behaviors based on group categorizations. Both SCT and SIT have profound implications for understanding online behavioral patterns, underscoring the importance of identity and affiliative inclinations in digital spaces [6,7].

The central proposition of this research is to elucidate the nuanced perceptions of Chinese college students on the confluence of social media engagement and emotional well-being, with a particular emphasis on their interpretative frameworks. To navigate this intricate terrain, we employ Interpretative phenomenological analysis (IPA), a robust qualitative methodology tailor-made for unraveling the intricacies of experiential interpretations. This methodological choice positions the study uniquely by focusing on the interplay between contextual nuances, bodily experiences, and relational, offering an in-depth exploration of students' interpretative compasses vis-à-vis their digital engagements [8,9].

In summation, the overarching objective of this study is to meticulously dissect the multifaceted relationship between social media interactions and the subjective well-being of Chinese college students, drawing upon their interpretative schemas. While the expansive realms of 'social media' and 'happiness' serve as the macroscopic backdrop, this investigation narrows its lens to specifically examine how these digital engagements modulate perceptions of well-being amidst the complexities of collegiate life in the Chinese context. This precise focal point distinguishes our endeavor from extant literature, promising a richer and more contextually grounded understanding of the phenomenon.

2. Methodology

2.1. Participants

College students from different grades participated in the event. From the (Table 1) , We can see their mean age was 19.6 years and they were mainly from China (n = 5). On average, they used social media for 5.6 h (SD = 3.16) per day. All students are very familiar with WeChat, QQ, Weibo, Xiaohongshu, Douyin, and other commonly used social media in China. Within the cohort studied, five individuals attempted to disengage from social media platforms; however, only a singular participant achieved successful discontinuation.

2.2. Procedures

The selection of participants was undertaken using a meticulous, purposive sampling technique, rooted in the guidelines of IPA. The criteria for selection were delineated to encompass specific characteristics pertinent to the study's objectives, ensuring that the sample was reflective and representative of the broader population under investigation. Upon securing the endorsement from the Research Ethics Committee of Pidu District Hospital of Traditional Chinese Medicine, Chengdu, an invitation was extended to potential participants within the university student community. The first author disseminated comprehensive recruitment information, detailing

Table 1
Sociodemographic characteristics of the study participants.

Name	Age	Gender	Grade	Social software
Daniel	21	Male	4	WeChat
Zero	19	Female	2	Xiaohongshu
Zara	18	Female	1	Douyin
Kevin	20	Female	3	WeChat
Wendy	20	Male	3	QQ

the scope, objectives, and prerequisites of the study. Interested volunteers, meeting the established selection criteria, subsequently initiated contact with the first author. To maintain the rigor and consistency of data collection, interviews were scheduled in two phases: (1) An initial session in mid-June, followed by a subsequent interview towards the end of June. (2) The second round was orchestrated post preliminary data collation and analysis from the initial interview, facilitating a more nuanced exploration of the participants' experiences and perspectives.

Interpretive phenomenological analysis is usually conducted with smaller samples and single interviews with each participant, but it is a flexible approach that can be adapted to larger designs dictated by the research question. This research design includes 5 participants, different grades and genders allowing us to discover different perspectives and ideas. Multiple interviews with participants allowed us to fill in the gaps in the communication process to find deeper perspectives and perspectives. You can see our question guide at (Table 2).

Semi-structured interviews were used to ask participants about their use of social media, purpose of use, psychological changes, and feelings. The first author conducted 10 interviews, which lasted 20–35 min, with main questions on the purpose of use (e.g., can you tell me what is your purpose of engaging with social media?) and psychological changes (e.g. What will happen to you in the process?), and subjective judgments (for example, how has social media affected you for good or bad?). The interview was taped. At the end of the second interview, each participant received a summary of how her interview was coded and interpreted. Each participant was asked whether they accepted their current use of social media. and was invited to provide additional commentary and her views on interpretation, similar to the approach used by Smith [10]. The recordings were transcribed verbatim by the second author and checked for accuracy.

In IPA, each participant is first examined as a single case and then interpreted across cases according to theory. Both the perspectives of the participants and the interpretations of the researchers are important, but specific priorities take precedence, so interpretations must be data-based. Existing theories were incorporated to the extent appropriate to the data [11]. The analysis involved multiple reads of each transcript to capture multiple levels of interpretation and meaning. The first author read a participant's first-time transcript to get an overview of the entire interview. This is followed by a line-by-line analysis that encodes the participants' claims, concerns, and understandings related to the research question. Software NVivo12 was used to assist with data storage and organization. Coded text is organized into topics with a common meaning. Memos are used to record explanations and possible connections between concepts. Once this process is complete for one interview, another transcript is checked and the process is repeated, creating codes as new meanings arise and grouping similar meanings into existing codes. Similar labels were used if the topics that emerged were similar to those documented in the previous literature [10,12]. The second author reviewed the topic and example citations and provided feedback on coding and interpretation. When disagreements arose, the researchers discussed the differing perspectives and resolved them by consensus in each case.

In adherence to the principles of phenomenological research, our study seeks to explore not only the subjective experiences of participants but also the essence of their lived experiences concerning their engagement with social media. Phenomenological analysis requires a delicate balance of understanding participants' narratives and the contextual essence behind these experiences. To capture the textural descriptions, our interview structure probed participants about the specific experiences, feelings, and perceptions tied to their social media use. These descriptions painted a vivid picture of 'what' they experienced, including their psychological changes, the purpose of use, and their subjective judgments [13,14].

However, phenomenology mandates a deeper understanding; it necessitates the exploration of the structural or contextual essence of these experiences. Thus, to decipher 'how' these experiences manifest within the unique conditions, situations, and context in which participants engage with social media, additional interview questions were structured. These questions delved into the situational contexts, like the environment or specific events during which they used social media, and their emotional and cognitive states at those times. By intersecting these textural and structural descriptions, a composite description was formulated, capturing the essence of the lived experiences of university students in their engagement with social media. This essence provides insights into the universal nature of these experiences, transcending individual narratives and revealing underlying patterns and themes [14].

In our analysis, we devoted attention to juxtaposing the textural narratives with the structural contexts, using iterative readings and coding processes. This allowed us to extract both the explicit narratives and the implicit, deeper meanings rooted in the contexts of the participants' lives [15]. This holistic approach, where individual experiences are understood within broader contexts, is fundamental to phenomenological research.

Table 2
A guide to the questions used to conduct in-depth interviews with students.

1	How much time do you spend in contact with these social media every day?
2	Can you tell me what your purpose is of engaging with social media?
3	What will happen to you in the process?
4	So, in social media, do you get more information actively or passively?
5	What is the difference, as you feel it, between socializing on social media and socializing in real life?
6	Have you ever thought about how social media has affected your studies and life?
7	When you see your peers studying and living differently on social media. How do you feel?
8	Are there any stories that stand out to you that you can share about your use of social media?
9	Overall, are you comfortable with the way you use social media?

3. Results

Theme 1. The paradox of temperance and indulgence

The cohort under examination unequivocally underscored a recurrent thematic dichotomy inherent in their engagement with social media platforms, straddling the nexus between circumspect utilization and unabated indulgence. These participants, with a conspicuous emphasis, delineated that a preponderant segment of their digital interaction is channeled through videography software, relegating other forms of communication to the occasional correspondence with acquaintances and kin. Intriguingly, the said videographic software, driven by sophisticated algorithmic determinants, invariably curates and proffers content that resonates seamlessly with the users' predilections and inclinations.

Consequently, the passage of time often remains imperceptible. An increasing awareness of the need for moderation prompted individuals to adopt various strategies to manage their social media usage. Daniel chose to remove all social media applications as a control measure, subsequently reducing his online engagement. Zara, on the other hand, decided to physically distance herself from her phone, enabling her to concentrate on her academic pursuits. However, Kevin faced challenges in mitigating his social media usage. Despite attempting to uninstall specific applications like TikTok, the presence of alternative platforms continually lured him back, undermining his study efforts.

In the context of social media engagement, participants displayed a dichotomy between indulgence and moderation. Each individual recognized the issue, albeit demonstrating varied degrees of self-regulation in addressing it. Specifically, Daniel and Zara opted for distancing strategies, while Kevin exhibited a more accepting stance towards his indulgence.

Theme 2. Identity construction and presentation

Participants highlighted the influential role of social media in shaping their identity construction and mechanisms of self-presentation. They underscored its capacity to facilitate the formation of connections with individuals possessing shared interests, thereby allowing an expansion of their personal preference perceptions. This engagement with virtual communities not only enhances their self-awareness but also fosters a deeper understanding of their individual identities.

Furthermore, social media serves as a pivotal platform for participants to exhibit their unique contributions and attain a sense of achievement. The transition from passive observers to active contributors allows them to integrate into specific cultural communities, subsequently receiving acknowledgment and feedback.

Moreover, the multifaceted nature of social media acts as a conduit for broadening cultural horizons. By engaging in discussions, participants gain exposure to diverse perspectives, thereby enriching their knowledge base. The resultant immersion in an expansive array of information accentuates the vibrancy of their extracurricular experiences.

In essence, social media engagement fosters a process of identity formation and self-presentation, ultimately culminating in enhanced personal well-being.

Theme 3. Social support and connection

Participants underscored the significance of social support and connectivity, particularly in the digital realm. They delineated how social media platforms have become instrumental in fortifying relationships, securing emotional support, and ensuring sustained contact with friends and family during instances of physical detachment or adversities. The capability of these platforms to bridge physical distances and facilitate intimate interactions has been emphasized. Social media, thus, has emerged as a crucial medium for individuals to address emotional challenges and promote interpersonal communication, especially when direct, face-to-face interactions are constrained or infrequent. By fostering these virtual connections and facilitating emotional exchanges, participants have benefited from a bolstered sense of well-being, driven by the strength and support of their online social networks.

Theme 4. Social comparison and self-evaluation

Participants underscored the significance of social support and connectivity, particularly in the digital realm. They delineated how social media platforms have become instrumental in fortifying relationships, securing emotional support, and ensuring sustained contact with friends and family during instances of physical detachment or adversities. The capability of these platforms to bridge physical distances and facilitate intimate interactions has been emphasized. Social media, thus, has emerged as a crucial medium for individuals to address emotional challenges and promote interpersonal communication, especially when direct, face-to-face interactions are constrained or infrequent. By fostering these virtual connections and facilitating emotional exchanges, participants have benefited from a bolstered sense of well-being, driven by the strength and support of their online social networks.

Many participants indicated experiencing involuntary social comparisons while engaging with content on social media platforms. These platforms frequently serve as avenues for individuals to broadcast their achievements, milestones, and positive life experiences. Such curated presentations often encompass career progress, travel escapades, and other notable life events, subsequently prompting peers to draw comparisons.

The continual exposure to these idealized depictions often fostered feelings of insufficiency, diminished self-worth, and adverse emotional reactions among the participants. The very nature of social media, characterized by showcasing curated and polished aspects of one's life, inherently facilitates these social comparisons. Confronted with comparison-induced anxiety, a majority of participants either felt overwhelmed or opted for avoidance. Nonetheless, a constructive outlook and heightened self-awareness emerged as pivotal, necessitating forward-thinking and intrinsic motivation.

In summation, social media platforms, while offering myriad opportunities for interaction and expression, inadvertently promote

social comparisons, consequently influencing the self-esteem and overall well-being of numerous users in a negative manner. We present the details of the theme code in (Table 3).

4. Discussion

Within the contemporary digital realm, university students' interactions with social media present a nuanced duality. Grounded in the theoretical lens of self-categorization theory and social identity theory, our investigation unveils the multi-faceted intrinsic to these engagements. Social media, while serving as a conduit for self-expression and identity construction, concurrently poses challenges intertwined with psychological wellness.

a. Dichotomous Engagement with Social Media: Anchoring on the principles of self-categorization, students' involvement in social media oscillates between the poles of moderation and overindulgence. This dialectic reflects the ongoing struggle of assimilating with larger online groups while preserving individual distinctiveness.

It is innovative to take the contradiction between temperance and indulgence in college students' social media use as the theme in this study. Studies have found that college students recognize the need for moderation in their social media use due to concerns such as time management, distraction, and potential negative impacts on well-being [16]. They acknowledge the addictive nature of social media platforms, particularly those that provide engaging and entertaining content [17]. Students may find it challenging to exercise restraint due to the fear of missing out (FOMO) on social interactions, updates, or experiences shared by their peers [18]. Despite their intentions to moderate usage, students may struggle to resist the temptation and find themselves indulging in excessive or prolonged social media use [19]. In Dylan & Michael's study, they shows how the virtue of digital moderation can help promote human flourishing in a world full of seductive technologies [20]. Existing research also has explored the strategies employed by college students to exercise self-restraint in their social media use. These strategies include setting time limits, uninstalling or disabling certain apps temporarily, engaging in alternative activities, or creating physical or digital barriers to limit access. However, despite their efforts, students may experience difficulties in maintaining consistent self-restraint and find themselves drawn back into indulgent behaviors [21]. The contradiction between restraint and indulgence in social media use varies among college students due to individual differences. Some students may exhibit stronger self-regulation abilities and successfully moderate their social media use, while others may struggle more with self-control and find it challenging to resist the allure of indulgence. Individual factors such as personality traits, self-discipline, and self-awareness can influence the extent to which students experience this contradiction [22]. Therefore, when college students use social media, temperance, and indulgence are a pair of common contradictions. The handling of this contradiction affects the happiness of college students.

b. Constructing and Broadcasting Self-identity: Leveraging social identity theory, we ascertain that social media facilitates a bifurcated role for students – the internalization of varied informational constructs and their subsequent dissemination.

Social media provides a platform for college students to construct their identity and self-presentation, which is consistent with existing research. Research has shown that individuals may use social media to express their interests, hobbies, and values, and to connect with like-minded individuals [23]. This process of identity exploration allows students to refine and develop their self-identity [24]. Studies have identified different strategies such as selective self-presentation, impression management, and identity performance. These strategies involve carefully curating one's online identity, choosing what to share, and projecting a desired image to others [20,21]. Overall, research on college students' self-identity construction and self-presentation in social media highlights the

Table 3
Coding of themes.

Themes	Subjects' answers
The paradox of temperance and indulgence	"I uninstalled all social media to control myself, and now I don't spend much time on social media anymore." (Zara)
	"To distract myself, I put my phone away and went to study on my own." (Zara)
	"I uninstalled TikTok for a while before, but that didn't help because there are many alternatives. Sometimes I think it's not going to work, I have to study, I have to force myself, but I might study for a while. Start playing social media again." (Kevin)
	"Social media is so easy to get addicted to, especially those video apps …. I would want to keep learning about it and keep watching it. He will also keep pushing relevant videos." (Daniel)
Identity construction and presentation	"The movies or games I like have corresponding cultural groups on social media, and I will discuss relevant topics with them." (Zara)
	"There are many content creators on social media, each with different types of work. I have published my work as well. I feel a great sense of accomplishment when I am appreciated by strangers on the Internet who share the same interests." (Zero)
Social support and connection	"My best friends have emotional issues, and they talk to me through social media. Because we can't be together all the time."
	"I often have video calls with my grandparents, and social media helps me facilitate emotional communication. They can see that I'm very happy when I arrive." (Daniel)
	"Sometimes I need to communicate with my teachers or classmates because of homework and study problems, and social media can help me communicate the information well." (Wendy)
Social comparison and self-evaluation	"I would be impressed, a little anxious, and envious to see the relative success of my peers." ((Zara, Kevin)
	"When I see the dynamics of her circle of friends, I feel that we are in a different world with radically different lives. I would envy her." (Zero)

complex interplay between personal identity, social interactions, and the digital environment, revealing psychological, sociocultural, and interpersonal aspects of college students' social media use, also affecting their well-being.

c. Social Media as an Extension of Academic Life: The omnipresence of digital platforms in the university milieu underscores their pivotal role in forging connections. By serving as nodes for networking with peers, family, and strangers alike, they augment the social support structure, a crucial determinant of holistic well-being.

The use of social media by college students to gain social support and connection becomes a necessary part of present well-being, which is consistent with existing research views. Research has found that social media helps bridge geographical distances, enabling students to stay in touch with their support networks regardless of location [25]. Social media serves as a valuable source of information for college students. Platforms like Weibo and WeChat are used to share news, academic resources, study materials, and campus-related updates. Students can leverage social media to seek advice, gather information about courses or professors, and stay informed about campus events [26]. Also, social media allows students to showcase their skills, experiences, and achievements, opening up opportunities for internships, job prospects, and mentorship [27]. Therefore, obtaining social support and connection through social media is closely related to improving the well-being of college students.

d. Social Benchmarking and the Shadow of Comparison: Implicit in the domain of social media is the perpetual cycle of social comparisons, accentuated by the curated lives exhibited on these platforms. Drawing from social identity theory, the upward social comparisons inadvertently precipitate feelings of inadequacy and anxiety, underpinning the complexities of self-evaluation within digital ecosystems.

This study reveals the anxiety of college students' social comparison and self-evaluation on social media, which is consistent with existing research. Studies have examined how college students engage in social comparison on social media platforms, comparing themselves to peers and others in terms of appearance, achievements, relationships, and lifestyles [28]. Social media platforms often present idealized and curated versions of others' lives, which can lead to upward social comparisons and feelings of inadequacy among college students [29]. Jiang and Annabel's study found no direct increase in social anxiety from Instagram use alone. His anxiety was entirely mediated by social comparison and self-esteem [30,31]. The constant exposure to carefully selected and edited content can contribute to the development of unrealistic expectations and a distorted perception of reality. Social comparisons are accompanied by self-assessments. Existing studies have investigated how college students' self-evaluation is influenced by the social comparison processes on social media. They explore the effects of social feedback, likes, comments, and validation received from peers and followers on individuals' self-perception, self-worth, and satisfaction with various aspects of their lives [3]. Overall, existing research on college students' social comparison and self-evaluation on social media reveals the negative impact of social comparison and self-evaluation, which also affects college students' happiness.

Our exploration synergistically expands the horizons of the Interpretative Phenomenological Analysis (IPA) by interlacing it with self-categorization and social identity theories. Such an interdisciplinary approach augments our understanding of the intricate web of experiences entailed in students' digital engagements. Notably, the culturally-rich context of Chinese college students accentuates the pertinence of our findings, urging subsequent IPA investigations to incorporate cultural variances.

The quality of the findings was assessed according to Smith's IPA assessment guidelines. The impact of social media on the well-being of Chinese college students proves the main point of this paper. The strength of the data is supported by the semi-structured interviews conducted primarily by experienced researchers who had access to a large cohort of Chinese university students. We try to leave enough room for elaboration on each theme by focusing on changes across time. Results include descriptions of participants' experiences and our interpretations, and we discuss convergent and divergent perspectives within each group. In the end, we did our best to produce a well-written essay that conveyed the essence and emotion of the participants' experience.

Taken together, these findings shed light on the impact of social media on the well-being of college students, as we see social media becoming an integral part of college life. While constructing their self-awareness from social media, they are constantly engaged in subjective struggle and separation. In theory, these results could provide insight into college students' perceptions of social media. Future work needs to continue to expand the scope of the research to break through the limitations of background culture.

5. Limitation and recommendation

Given the study's cross-sectional nature, causal relationships between variables cannot be inferred with certainty. Such a design captures a singular snapshot in time, making it challenging to derive temporal or causal conclusions. Future research employing a longitudinal design would provide a richer understanding of causal relationships and offer insights into the evolving dynamics of college students' interactions with social media over time [32].

The exclusive focus on Chinese college students may render some findings culturally bound. China's unique sociocultural landscape can shape perceptions and behaviors differently compared to other regions. Thus, the study's generalizability to other cultural contexts is constrained, and the findings may not be directly applicable to college students from diverse cultural backgrounds.

The study leverages the Interpretative Phenomenological Analysis (IPA) framework, which inherently focuses on the depth of experiences over breadth. While the sample size was deemed adequate for this qualitative approach, it might limit the generalizability of the results to the broader Chinese college student population [11].

In conclusion, while the findings provide valuable insights into the relationship between social media use and well-being among

Chinese college students, they should be interpreted considering the limitations. Future studies could address these gaps, offering a more holistic understanding of the phenomena in question.

6. Conclusions

This research on the effects of social media on Chinese college students' happiness employs an interpretative phenomenological analysis, elucidating four primary themes: The Paradox of Temperance and Indulgence, Identity Construction and Presentation, Social Support and Connection, and Social Comparison and Self-Evaluation. These themes offer an intricate perspective on the association between online platforms and individual well-being.

The significance of this study extends beyond its qualitative exploration. By addressing the lack of research on the subjective experiences of Chinese college students regarding social media's influence on happiness, the study adds depth to the existing discourse. Hitherto, the overarching emphasis on quantitative paradigms had inadvertently marginalized the delicate relationship of individualized perceptions and connotations. The emergence of themes such as the paradoxical nature of social media usage, the role of identity construction, the impact of social support, and the influence of social comparisons underscores the multidimensional nature of the relationship. These revelations are cogently contextualized within China's culture, where Confucian values, collectivism, and filial piety indelibly mold perceptions, experiences, and interpretations of happiness in the digital realm.

Implications of this research span diverse stakeholders, including policymakers, academic entities, and the student body. The derived insights underscore the imperative for discerning reflection on digital tendencies, prompting a shift towards informed and mindful digital interactions. Higher education institutions are thus tasked with devising strategies that amplify the beneficial aspects of such engagements, while minimizing potential adverse outcomes. In alignment with the core principles of Chinese societal norms, a collaborative endeavor involving governmental agencies, educational institutions, and students becomes crucial. Such cooperation aims to curate an academic milieu rooted in psychological wellness and satisfaction. Recognizing the integral connection between digital activities and overall well-being provides a framework for tailored interventions, which synergistically foster comprehensive student development.

In essence, this study offers an exploratory and richly detailed account of Chinese college students' experiences with social media and happiness. The identified themes enrich the academic landscape and provide practical insights for cultivating a harmonious and fulfilling university environment. By bridging the gap between subjective experiences and scholarly research, this study contributes to fostering a healthier and more mindful approach to social media usage, ultimately enhancing the happiness and well-being of Chinese college students.

Ethics approval and consent to participate

All participants provided informed consent to participate in the study. The questionnaires were anonymized, and patients were free to opt out of participation in the study whenever they were uncomfortable. This study was approved by the Research Ethics Committee of Pidu District Hospital of Traditional Chinese Medicine, Chengdu, with approval number 2022-034-15.

Availability of data and materials

The study has been conducted with a commitment to transparency and openness. In line with these principles, we hereby declare the availability of data and materials associated with the study to promote reproducibility and further research. It is important to note that the privacy and confidentiality of the participants involved in the study are of utmost concern. Therefore, any materials or data provided will be stripped of personally identifiable information and sensitive content.

Data availability statement' section

Interview data of "The Impact of Social Media on the Happiness of Chinese College Students". I deposited the interview data in the Science Data Bank, here is the link. You can see the interview via the link.

Data private access link: https://www.scidb.cn/s/RjIvMr.

CRediT authorship contribution statement

Yingying Xu: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Ratna Roshida Ab Razak:** Supervision, Methodology, Conceptualization. **Meng Xiang:** Methodology, Formal analysis, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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