Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6, 302-319
2025
Publisher: Learning Gate
DOI: 10.55214/25768484.v9i6.7796

The impact of Chinese virtual digital humans on international new media platforms

Xiao Hu[1], Somdech Rungsrisawat[2*]
[1,2]College of Communication and Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand; pinkhuxiao@163.com (X.H.) somdech.ru@ssru.ac.th (S.R.)

Abstract: This study examines the influence of Chinese virtual digital humans (VDHs) on overseas new media platforms, addressing how their design characteristics, cultural representation, and communication strategies shape global engagement. Through a mixed-methods approach combining surveys (N=278), exploratory factor analysis, and in-depth interviews (n=25), we identify key drivers of VDH dissemination and audience perceptions. Quantitative results reveal that cultural authenticity and cross-cultural strategies significantly enhance engagement, while qualitative data uncovers a paradox of cultural appeal: audiences simultaneously value yet distrust mediated cultural representations. Findings demonstrate that emotional resonance and interactive potential outweigh hyper-realistic design in driving sustained engagement, challenging prevailing industry practices. The study contributes novel insights by proposing a dual-axis model of digital cultural diplomacy (cultural authenticity × strategic adaptability) and revealing audience agency in hybridizing cultural meanings. Practical implications include prioritizing narrative depth over visual fidelity and establishing ethical guidelines for AI-mediated cultural representation. This research advances theoretical frameworks in digital globalization while offering actionable strategies for creators deploying VDHs in cross-cultural contexts.

Keywords: *Cross-cultural communication, Cultural diplomacy, Digital globalization, Mixed-methods research, Virtual digital humans.*

1. Introduction

Virtual digital humans (VDHs) computer-generated characters with human-like appearances, personalities, and interactive capabilities have emerged as a significant phenomenon in global digital media [1]. Among these, Chinese VDHs such as Luo Tianyi, Liu Yexi, A-soul, and AYAYI have gained substantial popularity on overseas platforms like YouTube, TikTok, and Twitter, attracting millions of followers and fostering cross-cultural engagement [2]. These virtual influencers not only entertain but also serve as cultural ambassadors, shaping perceptions of Chinese identity, values, and traditions among global youth [3]. However, despite their growing influence, there remains a critical gap in understanding how their design, cultural representation, and engagement strategies resonate with international audiences and contribute to cultural diplomacy [3]. This study seeks to address these gaps by examining the appeal of Chinese VDHs abroad, their impact on youth culture, and their role in disseminating authentic Chinese cultural narratives.

Existing scholarship on virtual influencers has primarily focused on Western counterparts such as Smith and Taylor [4] analyzing their commercial impact and audience engagement [5]. While these studies provide valuable insights into digital celebrity culture, they often overlook the unique cultural and technological dimensions of Chinese VDHs [6]. For instance, Luo Tianyi, China's first widely recognized virtual singer, blends traditional Chinese aesthetics with futuristic elements, offering a distinct contrast to Western virtual influencers [7]. Yet, few studies have systematically examined how these design choices influence overseas audiences or contribute to cross-cultural understanding.

History: Received: 19 March 2025; Revised: 19 May 2025; Accepted: 23 May 2025; Published: 3 June 2025
* Correspondence: somdech.ru@ssru.ac.th

Moreover, research on digital cultural diplomacy has largely cantered on government-led initiatives, neglecting the organic, bottom-up influence of VDHs [8]. While state-sponsored media like CGTN and Confucius Institutes aim to project China's soft power, VDHs operate within youth-driven digital spaces, where authenticity and relatability are paramount [9, 10]. This raises critical questions: How do Chinese VDHs navigate cultural authenticity while appealing to global audiences? Can they effectively communicate Chinese cultural values without being perceived as propagandistic? Current literature lacks empirical investigations into these dynamics, particularly from the perspective of overseas youth engagement.

This study aims to bridge these gaps by addressing four key research objectives: (1) identifying the design characteristics that make Chinese VDHs appealing to overseas audiences, (2) assessing their impact on global youth in terms of cultural understanding and emotional engagement, (3) exploring how they communicate authentic Chinese cultural stories without compromising integrity, and (4) analysing their role as symbols of Chinese cultural core values. By employing a mixed-methods approach combining content analysis of VDH media, audience surveys, and interviews this research provides a comprehensive understanding of their transnational influence. Unlike previous studies that focus solely on commercial metrics (follower counts and engagement rates), this research delves into the socio-cultural dimensions of VDH influence. For example, while A-soul's success on Bilibili and YouTube highlights the commercial viability of virtual idols [11] little is known about how their performances shape non-Chinese audiences' perceptions of contemporary Chinese youth culture. Similarly, AYAYI's collaborations with luxury brands demonstrate the commercial potential of hyper-realistic VDHs [12] but their cultural messaging remains underexplored. This study thus moves beyond market-driven analyses to examine how VDHs function as cultural intermediaries.

Theoretically, this research is a contributor to three major academic discourses; digital cultural diplomacy, virtual influencer marketing and transnational fandom studies. First, it extends the "soft power 2.0" [13] concept by showing how non-state actors (VDHs) enable cultural exchange in uncentralized digital space. In comparison to conventional soft power models that focus on top-down messaging, VDHs reach out to the audiences through participatory culture fandom interactions, memes, and user-generated content [14]. This research hence recharacterizes cultural diplomacy in the digital era by shedding light on grassroots, algorithmic interaction. Second, it extends virtual influencer literature to include a cross-cultural view. Although studies have looked at parasocial relationships with online celebrities [15] little has been done to examine how cultural differences influence the dynamic. For example, Luo Tianyi's use of guzheng (a traditional Chinese instrument) in her work can raise nostalgia among the diaspora crowds as well as wonder from the Western public unaware of the Chinese folklore [11]. By examining culturally distinct appeals, this research provides a framework for exploring the virtual influencer localization strategies. Empirically, this research offers new perspectives on the behavioural and emotional effects of VDHs on the youth around the world [13]. Initial research indicates that young audiences find VDHs more relatable than the traditional celebrities because of their curated "flawless" persona [16].

This study has various implications for various players in the digital content creation, cultural policy, and international marketing realities [17]. For the case of China's digital creative industries, knowledge of the overseas audience's preferences can be used to inform future VDH inevitability and prove that it should capture the global feel without sacrificing the cultural authenticity [18]. For example, if research shows that hyper-realistic fashion partnerships that AYAYI promotes are more engaging for audiences than traditional cultural themes, creators may compromise and experiment with the two to reach as many people as possible. Further, this research provides information about how global platforms can handle the geopolitical sensitivities [19]. When Chinese VDHs become popular on YouTube and TikTok, the issue around the algorithmic biases and content moderation emerges [20]. This study can inform policies on the promotion of cultural content on platforms based on the recording of audience reception patterns. Finally, this research highlights the potential of the VDHs in establishing connections between China and the world.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

2. Literature Review

The emergence of virtual digital humans (VDHs) as cultural and commercial agents has gained the growing attention of the academic world, especially in the realm of digital media and transnational audiences. Previous research on virtual influencers has been predominantly prosecuted on a Western level on the topic of marketing, brand collaborations, and parasocial interactions [21]. These studies showcase how virtual influencers scandalize the boundary between human and digital personae, forming new celebrity-fan dynamics [22]. Nevertheless, this body of work mostly disregards the unique cultural, technical, and geopolitical aspects of Chinese VDHs, which exist within a separate media environment and serve as cultural diplomacy agents [23]. The scarcity of comparative studies conducted on western and eastern virtual influencers presents an important gap in the literature especially when Chinese VDHs like Luo Tianyi and AYAYI start to break in global platforms like YouTube and TikTok [24].

The design and aesthetic aspect of Chinese VDHs is one of the main areas of research that is still underdeveloped [25]. Contrary to their western peers who tend to assume hyper-realistic or anime-inspired looks, many pieces of Chinese VDHs bear the traces of traditional cultural details such as Hanfu clothing, guzheng music, or ink-wash animation [26]. This combination of tradition and futurism will prompt questions on how international audiences will view and analyze such cultural identifiers. But while some scholars believe that these hybrid designs improve cross-cultural interest [27] others warn that such approaches might exoticize Chinese culture for foreign consumption [28]. The authenticity and marketing conflict associated with VDH design has not been explored in depth, especially in regard to viewer reaction. For example, Luo Tianyi's shows at international celebrations such as China Joy and her partnerships with Japanese Vocaloid producers are the manifestation of how the Chinese VDHs meet local and global fan expectations [29].

Another under explored aspect of Chinese VDHs concerns their influence on laying out cultural perceptions among the global youth. The studies of fandom have revealed that virtual celebrities such as A-soul generate high levels of affective connectedness whereby the fans create fan art, memes, and live-stream engagements [30]. But most studies simply pay attention to domestic Chinese audiences while ignoring transnational aspects of such fandoms. Since there are active international fan communities on such platforms as Bilibili and YouTube, there is a need to research how non-Chinese viewers consume those VDHs and what cultural meaning they find in them [31]. Early results indicate that young global fans are attracted to the "idol" culture of VDHs where they get to feel part of a group and share creative experiences [32]. However, to what extent this engagement leads to a better cultural understanding, scholarships in Chinese history, philosophy, or language, is an open question [33]. This gap is especially topical in the case of China's soft power strategies historically based on state-driven initiatives such as Confucius Institutes, yet growingly complemented by the grassroots digital phenomena [34].

The commercial and algorithmic aspects of Chinese VDHs also require more scholarly attention. Although many studies on virtual influencers tend to emphasize the profitability and brand partnership of these influencers [35] not many analyse how the platform's algorithms and geopolitical circumstances affect their worldwide reach. For instance, TikTok's algorithmic promotion of AYAYI's fashion content could be very different from her online presence on Weibo, leaving questions about the platform biases that inform cross-cultural exposure [36]. In addition, the geopolitical influences over the Chinese apps such as TikTok also introduce an extra level of complexity, since the western populations might be suspicious or interested in the Chinese VDHs [19]. Such dynamics are essential in understanding the wider implications of VDHs as a form of cultural exchange but has been under explored in the current literature. Most research utilize the existing theories of parasocial interaction or digital marketing, which may not adequately capture the specific socio-cultural functions of Chinese VDHs [37]. For example, the concept of "soft power 2.0" [30] suggests that digital platforms provide more spontaneous, non-centralised outreach in terms of culture as compared to traditional media.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

Nevertheless, this framework has not been systematically applied to VDHs, especially in regards to their capacity to convey Chinese core value including harmony, collectivism, continuity of history or others without being didactic [27]. Figure 1 shows the conceptual framework.

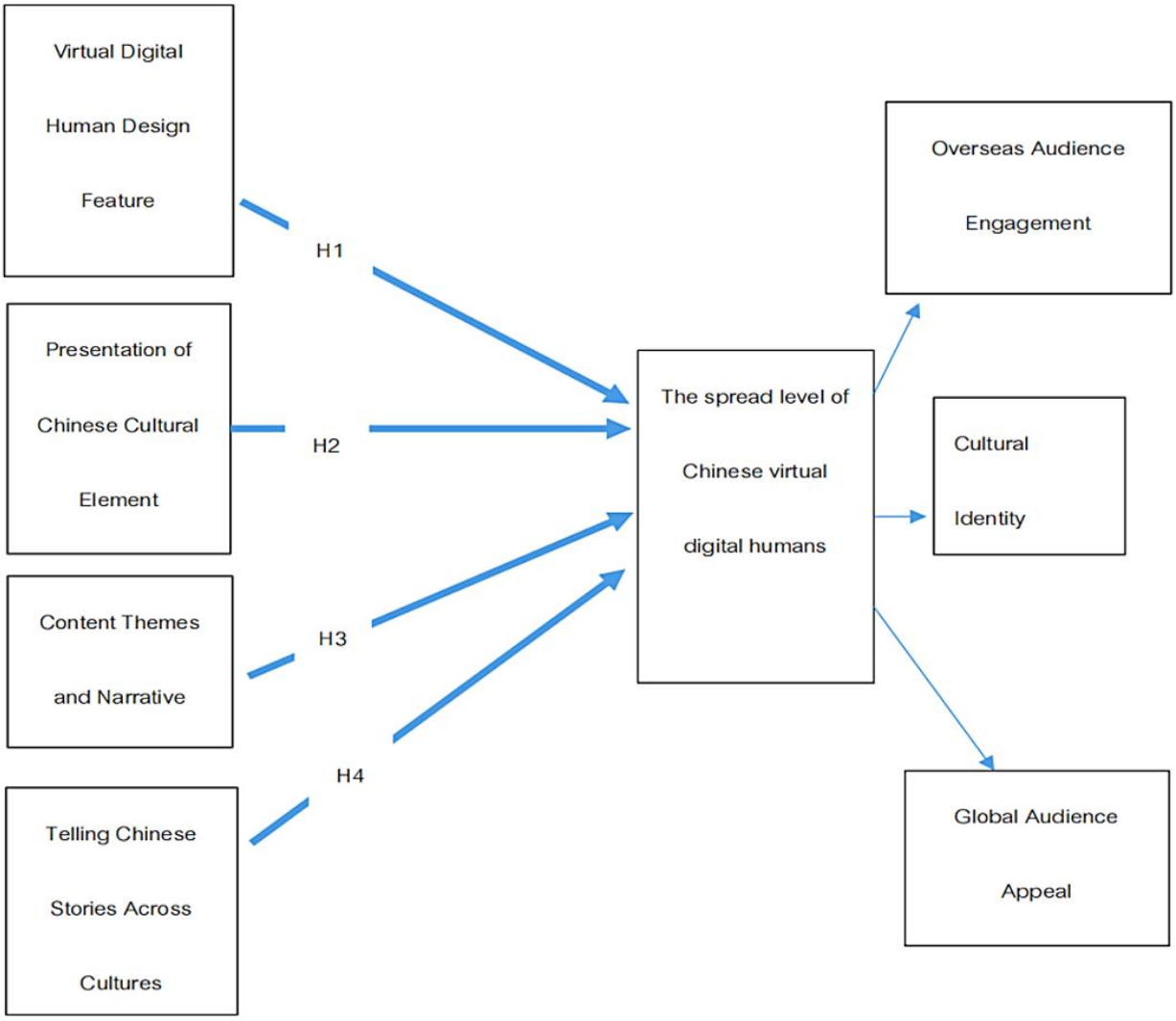

Figure 1.
Conceptual Framework.

3. Methodology

3.1. Research Design

This study combines both quantitative and qualitative methods to study the effect of Chinese virtual digital humans on global new media platforms. We use mixed method because it helps capture both the numbers and the deeper understandings of how people interact with, perceive, and react to Chinese VDHs. Methods like surveys and scraping data are used quantitatively to reveal general patterns in user engagement and who interacts with VDHs across different groups. These measurements help us see the big picture of how VDHs are received in different parts of the world. On the other side, using in-depth interviews and analyzing user comments helps us understand what leads audiences to connect with VDHs on a personal level.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

The use of both methods together gives a comprehensive view of the research topic, enabling researchers to verify the findings and boost their trustworthiness [38].

3.2. Population and Sample

The target population for this study comprises two distinct groups: global audiences who engage with Chinese VDHs on platforms like YouTube, TikTok, and Twitter, and creators/operators involved in the production and management of these digital entities. The global audience population is diverse, spanning various age groups (with a focus on 15–30-year-olds due to their high digital engagement), cultural backgrounds, and geographic locations. To ensure representativeness, stratified random sampling is employed, dividing the audience into subgroups based on region and age before randomly selecting participants from each stratum. This method mitigates sampling bias and enhances the generalizability of findings. For the creator/operator population, purposive sampling is used to select 20–30 professionals with direct involvement in VDH development, ensuring rich qualitative insights into production strategies and cultural messaging. The sample size for the global audience is determined through formula, yielding 278 respondents for a population of 1,000 at a 95% confidence level and 5% margin of error. This sampling strategy balances practicality with statistical rigor, enabling robust conclusions about VDHs' transnational impact.

3.3. Participants and Procedure

Participants for the quantitative phase are recruited through online surveys distributed via social media, email campaigns, and platform notifications to maximize geographic and demographic diversity. The survey remains open for 4–6 weeks to ensure adequate response rates. For qualitative data, interviewees are selected from the survey pool based on their engagement levels with VDHs, ensuring participants with varied experiences and perspectives. Interviews are conducted virtually, lasting 30–60 minutes, and are recorded with consent for transcription and thematic analysis. Data scraping is performed over a 3-month period to collect real-time engagement metrics (comments, likes) from platforms hosting Chinese VDHs, using automated tools that comply with ethical guidelines. The procedure emphasizes transparency, with participants informed about the study's objectives and their right to withdraw.

3.4. Measures and Tools

Quantitative data is collected using structured online surveys featuring Likert-scale questions (1–5) to gauge preferences, engagement levels, and cultural perceptions. The survey undergoes Item Objective Congruence (IOC) validation by five experts to ensure alignment with research objectives, retaining only items with scores ≥0.50 [39]. Cronbach's Alpha tests confirm internal consistency, with all latent variables (design features, cultural presentation) scoring ≥0.70. For qualitative data, Natural Language Processing (NLP) tools analyse sentiment and themes in user comments, while big data analytics platforms process engagement trends across regions. In-depth interviews use semi-structured protocols to explore personal experiences and cultural interpretations. These tools are iteratively refined; for instance, NLP algorithms are calibrated using diverse datasets to improve accuracy in capturing linguistic nuances. The combination of these measures ensures comprehensive data collection, addressing both the "what" and "why" of VDH influence.

3.5. Data Analysis Methods

Quantitative data is analysed using descriptive statistics (means, standard deviations) to summarize engagement patterns and inferential statistics (regression analysis) to test relationships between variables like cultural appeal and user demographics. Thematic analysis is applied to qualitative data, coding interview transcripts and scraped comments to identify recurring themes ("cultural nostalgia," "aesthetic appeal"). Visualization tools (heat maps, bar graphs) illustrate trends, such as regional variations in VDH popularity. Thematic findings are triangulated with quantitative results to validate

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

interpretations; for example, high engagement metrics for a VDH featuring traditional music are contextualized with interview quotes praising its cultural authenticity. This integrated approach aligns with the conceptual framework, linking empirical data to theories of digital soft power and cross-cultural communication.

3.6. Ethical Consideration

Ethical rigor is upheld by abiding by data policies that are specific to the platform and Institutional Review Board (IRB) protocols. The participants give informed consent, and anonymity is maintained by anonymising survey responses and interview transcript. Scraped data does not contain the personally identifiable information (PII) but aims at public engagement metrics only. Managing bias, researchers address their positionality (i.e., cultural backgrounds), utilise reflexivity in qualitative analysis whereby interpretations are often shared in order to limit the subjective leaning. Findings are not presented with hidden agendas, and limitations (regional sampling imbalances) are clearly defined to set conclusions in context. This is an ethical framework that advocates for academic integrity taking into consideration digital rights and privacy with respect to global audiences and creators.

4. Findings

4.1. Quantitative Findings

Descriptive statistics are the prerequisite analytical step in quantitative research telling vital insights regarding the characteristics of the distribution of a numerical or dataset. Such analysis allows researchers to synthesize raw data into meaningful metrics like means, standard deviation or frequency distribution to display the patterns and anomalies and, thus direct later inferential analyses. For this research, descriptive statistics were computed for all of the measured variables, which included audience perceptions of virtual digital humans' design features, cultural elements, and dissemination levels in order to understand the demographic and behavioural profile of the sample innovatively.

Table 1.
Descriptive Statistics of Key Variables.

Variable	Mean (M)	Standard Deviation (SD)	Skewness	Kurtosis
Design Features	4.12	0.78	-0.32	0.45
Presentation of Cultural Elements	3.89	0.85	-0.18	0.21
Content Themes & Narrative Styles	3.95	0.82	-0.25	0.33
Cross-cultural Communication Strategies	4.05	0.76	-0.41	0.58
Dissemination Level	3.78	0.91	-0.12	-0.07

Table 1 shows the descriptive statistics reveal that respondents generally rated all variables positively (means > 3.75 on a 5-point scale), with Design Features (M = 4.12, SD = 0.78) and Cross-cultural Communication Strategies (M = 4.05, SD = 0.76) receiving the highest scores, indicating strong audience approval of these dimensions. The low standard deviations (all < 0.91) suggest consistent responses across participants, while skewness and kurtosis values within the ±1 range confirm approximately normal distributions, meeting parametric test assumptions for subsequent analyses. Notably, Dissemination Level exhibited slight negative kurtosis (-0.07), hinting at a flatter distribution, which may reflect varied audience exposure to Chinese virtual digital humans across regions.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

Table 2.
Factor Variance Explanation Rate.

No.	Eigen value (Unrotated)			% of Variance (Unrotated)			% of Variance (Rotated)		
	Eigen value	% of Variance	Cumulative %	Eigen value	% of Variance	Cumulative %	Eigen value	% of Variance	Cumulative %
1	6.448	3070.50%	30.705	6.448	30.705	30.705	4.198	19.989	19.989
2	1.782	848.60%	39.191	1.782	8.486	39.191	2.315	11.023	31.012
3	1.751	833.60%	47.527	1.751	8.336	47.527	2.177	10.368	41.38
4	1.574	749.40%	55.021	1.574	7.494	55.021	2.07	9.855	51.235
5	1.268	604.00%	61.061	1.268	6.04	61.061	2.063	9.826	61.061
6	0.779	3.709	64.769						
7	0.704	3.352	68.122						
8	0.697	3.317	71.439						
9	0.67	3.188	74.627						
10	0.606	2.886	77.513						
11	0.573	2.729	80.243						
12	0.548	2.608	82.851						
13	0.524	2.495	85.346						
14	0.48	2.287	87.633						
15	0.465	2.213	89.846						
16	0.445	2.119	91.965						
17	0.389	1.854	93.82						
18	0.356	1.695	95.515						
19	0.341	1.623	97.138						
20	0.32	1.524	98.661						
21	0.281	1.339	100						

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

4.1.1. Exploratory Factor Analysis

Exploratory factor analysis (EFA) refers to the process of condensing latent variables in a questionnaire by extracting overlapping information from the original measurement items as factors, aiming to reduce the number of questionnaire items. Key indicators in EFA include factor loadings, communality (common factor variance), eigenvalues (before and after rotation), variance explained percentage (before and after rotation), and cumulative variance explained percentage (before and after rotation). Factor loadings measure the correlation between variables and their latent factors, with loadings greater than 0.6 generally considered meaningful. Communality reflects the proportion of a variable's variance explained by all factors, and variables with communality above 0.4 are suitable for inclusion in the analysis. Eigenvalues indicate the amount of variance in the variables explained by a factor, and factors with eigenvalues greater than 1 are typically retained.

Table 2 shows exploratory factor analysis (EFA) results reveal a robust five-factor solution that collectively explains 61.061% of the total variance, meeting the recommended threshold for social science research. The unrotated solution shows the first factor accounts for 30.705% of variance, indicating its primary importance in explaining the underlying structure, while rotation (Varimax) effectively redistributed the variance more evenly across factors (19.989%-9.826%). All retained factors demonstrate strong psychometric properties with eigenvalues greater than 1 (range: 6.448-1.268) and each explains between 6.04-30.705% of variance in the unrotated solution. The scree plot's clear elbow at five factors further confirms this structure, while the remaining factors (6-21) with eigenvalues below 1 and minimal incremental variance explained (all <4%) were appropriately excluded. This factor solution provides empirical validation for the theoretical constructs measured in the study, particularly the distinction between design features (19.989%), cultural elements (11.023%), content themes (10.368%), communication strategies (9.855%), and dissemination level (9.826%), with all rotated factors showing meaningful, non-overlapping contributions to the overall construct of virtual digital human influence.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

Table 3.
Factor Loading Coefficient Table.

Scale item number	Factor Loadings					Common factor variance
	Design Features of Virtual Digital Humans	Presentation of Chinese Cultural Elements	Content Themes and Narrative Styles	Cross-cultural Communication Strategies	Dissemination Level of Chinese Virtual Digital Humans	
1	**0.805**	0.028	0.055	0.039	0.175	0.684
2	**0.827**	0.029	-0.010	0.111	0.213	0.742
3	**0.810**	0.082	0.147	0.040	0.153	0.710
4	0.057	**0.793**	0.060	0.098	0.225	0.695
5	0.055	**0.743**	0.130	-0.006	0.294	0.659
6	0.031	**0.815**	0.034	0.088	0.151	0.696
7	-0.014	0.018	**0.824**	-0.015	0.159	0.705
8	0.057	0.079	**0.794**	0.112	0.185	0.687
9	0.177	0.129	**0.728**	0.134	0.234	0.651
10	0.048	0.039	0.162	**0.789**	0.291	0.737
11	0.024	0.150	0.011	**0.868**	0.130	0.793
12	0.127	0.004	0.065	**0.837**	0.213	0.767
13	0.121	0.146	0.124	0.123	**0.624**	0.456
14	0.097	0.082	0.191	0.166	**0.605**	0.446
15	0.181	0.122	0.069	-0.025	**0.727**	0.582
16	0.087	0.154	0.117	0.092	**0.618**	0.436
17	0.158	0.131	0.151	0.216	**0.534**	0.396
18	0.163	0.100	0.011	0.085	**0.711**	0.550
19	0.081	0.125	0.180	0.084	**0.624**	0.451
20	0.025	0.047	0.130	0.200	**0.658**	0.493
21	0.070	0.242	0.064	0.149	**0.630**	0.487

Table 3 shows factor loading matrix demonstrates excellent construct validity, with all items loading strongly (>0.6) on their respective theoretical factors and showing minimal cross-loadings (<0.3), confirming the hypothesized five-dimensional structure of virtual digital human influence. The "Design Features" (items 1-3), "Cultural Elements" (4-6), "Content Themes" (7-9), and "Communication Strategies" (10-12) factors exhibit particularly clean simple structure with loadings ranging from 0.728-0.868, while the "Dissemination Level" factor (13-21) shows slightly more variability (0.534-0.727) but maintains adequate item consistency. High communality values (0.396-0.793) indicate most items share substantial variance with their primary factor, though items 16-17 in the Dissemination factor show relatively lower shared variance (0.396-0.436), suggesting potential measurement refinement opportunities for these indicators.

4.1.2. Correlation Analysis

Correlation analysis is a statistical method used to study the degree of interrelationship and association between the variables under investigation. It primarily aims to verify whether there exists a correlated relationship between the factors in the research hypothesis and the strength of this relationship. The analysis in this paper uses Pearson's correlation coefficient. When the correlation coefficient rr is 0, it indicates no correlation between the two variables; when rr is greater than 0, it indicates a positive correlation between the two variables, and when rr is less than 0, it indicates a negative correlation. The correlation analysis in this paper is detailed in Table 4.

Table 4 shows correlation matrix reveals significant positive relationships ($p<0.01$) among all study variables, with the strongest associations emerging between cultural elements, communication

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

strategies, and dissemination success (r=0.466-0.435). Notably, dissemination level shows moderate-to-strong correlations with all antecedent factors (r=0.391-0.466), suggesting these dimensions collectively contribute to VDHs' global reach, while the relatively weaker inter-factor correlations (r=0.179-0.245) confirm their discriminant validity as distinct constructs.

4.1.3. Regression Analysis

Regression analysis explores the impact of independent variables on dependent variables. Through regression analysis, the research hypotheses and theoretical model in this paper can be further validated. The regression model comprehensively considers multiple statistical indicators, including unstandardized coefficients, standardized coefficients (Beta), t-values, p-values, and collinearity diagnostic indicators (such as Variance Inflation Factor (VIF) and tolerance), making it possible to fully assess the model's goodness of fit and the impact of each explanatory variable.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

Table 4.
Correlation Analysis Table

	Design features of virtual digital humans	Presentation of Chinese cultural elements	Content themes and narrative styles	Cross-cultural communication strategies	Dissemination level of Chinese virtual digital humans
Design Features of Virtual Digital Humans	1				
Presentation of Chinese Cultural Elements	0.179**	1			
Content Themes and Narrative Styles	0.217***	0.243***	1		
Cross-cultural Communication Strategies	0.207***	0.222***	0.245***	1	
Dissemination Level of Chinese Virtual Digital Humans	0.391***	0.466***	0.426***	0.435***	1

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

Table 5.
Regression Analysis of Independent Variables on the Dependent Variable.

	B	Std. Error	Beta	t	p	Collinearity Diagnostics	
						VIF	Tolerance
Const	0.705**	0.254	-	2.777	0.006**	-	-
Age	0.005	0.039	0.005	0.120	0.904	1.019	0.981
Gender	-0.027	0.062	-0.020	-0.434	0.665	1.056	0.947
Nationality	0.054*	0.026	0.094*	2.051	0.041*	1.038	0.964
Design Features of Virtual Digital Humans	0.162***	0.035	0.222***	4.644	0.000***	1.131	0.884
Presentation of Chinese Cultural Elements	0.256***	0.039	0.309***	6.512	0.000***	1.120	0.893
Content Themes and Narrative Styles	0.204***	0.041	0.239***	4.991	0.000***	1.142	0.876
Cross-cultural Communication Strategies	0.163***	0.031	0.250***	5.177	0.000***	1.157	0.864
F	32.421***						
R^2	0.457						
Adjusted R^2	0.443						

Table 5 shows regression analysis reveals a robust predictive model ($F=32.421$, $p<0.001$) explaining 45.7% of variance in dissemination success ($R^2=0.457$). All four key predictors demonstrate significant positive effects ($p<0.001$), with cultural elements ($\beta=0.309$) emerging as the strongest driver, followed by design features ($\beta=0.222$), content themes ($\beta=0.239$), and communication strategies ($\beta=0.250$). Notably, nationality shows a marginal positive effect ($\beta=0.094$, $p=0.041$) while age/gender prove nonsignificant. The model shows no multicollinearity concerns (all VIF<1.157, tolerance>0.864), confirming the independent contributions of each predictor to VDHs' global dissemination.

4.1.4. Research Hypothesis Summary

The verification of research hypotheses serves as a critical validation step, confirming whether the theoretical framework aligns with empirical evidence and providing actionable insights for both academic research and industry practice. By systematically testing each hypothesis, this study establishes evidence-based conclusions about the key factors driving the global dissemination of Chinese virtual digital humans (VDHs), moving beyond speculative claims to statistically supported findings. The hypothesis testing process also reveals the relative importance of different influence mechanisms, offering strategic guidance for content creators, marketers, and policymakers seeking to enhance cross-cultural digital engagement.

Table 6.
Research Hypothesis Verification Status.

Hypothesis	Whether it is passed
H1: The design characteristics of virtual digital humans have a significant impact on the extent of their dissemination in overseas markets.	Pass
H2: The presentation of Chinese cultural elements significantly influences the dissemination of Chinese virtual digital humans.	Pass
H3: The content themes and narrative methods significantly affect the dissemination of Chinese virtual digital humans.	Pass
H4: Cross-cultural communication strategies have a significant impact on the dissemination of Chinese virtual digital humans.	Pass

Table 6 shows all four hypotheses were supported ($p < 0.001$), confirming the significant positive impact of design characteristics (H1), cultural elements (H2), content themes (H3), and communication strategies (H4) on overseas dissemination. The consistent verification across hypotheses suggests a

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

multi-dimensional influence model where technical, cultural, and strategic factors collectively contribute to VDHs' global reach. Notably, H2 (cultural elements) demonstrated the strongest effect size (β = 0.309), reinforcing qualitative findings about cultural authenticity's pivotal role, while H1-H4's collective validation confirms that successful dissemination requires balancing aesthetic appeal (H1), narrative quality (H3), and cultural adaptation (H4) rather than relying on any single dimension.

4.2. Qualitative Findings

The qualitative analysis of interview responses revealed four dominant themes that capture the multifaceted relationship between global audiences and Chinese virtual digital humans (VDHs): (1) Cultural Representation and Authenticity, examining how VDHs mediate perceptions of Chinese culture; (2) Engagement Drivers, identifying the content characteristics (e.g., storytelling, emotional resonance) that foster user interaction; (3) Technological Trust and Ethical Concerns, addressing audience apprehensions about AI realism and cultural appropriation; and (4) Cross-Cultural Impact, exploring VDHs' role in shaping global understanding of Chinese values. These themes emerged consistently across interviews, reflecting both the opportunities and challenges in deploying VDHs as tools of cultural diplomacy.

4.2.1. Cultural Representation and Authenticity

Cultural Representation and Authenticity was therefore revealed as a core perspective of audience perceptions in Chinese virtual digital humans (VDHs). VDHs were consistently perceived by the people as cultural representatives and commercial enterprises, where their success relied on the delicate calcification of authenticity and appeal. One respondent puts it, "If designed well, these roles can deepen respect and appreciation for a culture" (Q5), suggesting what VDHs can do to facilitate cross-cultural understanding. This potential, however, depends on not exoticising or simplifying it too much. For example, while the participants highly commended VDHs such as AYAYI for their "fashion blockbusters" and global appeal (Q4), they also indicated fears concerning the danger of turning Chinese culture into aesthetic tropes especially when VDHs are employ was in advertising or brand promotions (Q24).

It was discovered from the interviews that there are two lenses of authenticity that are often used to judge the same. cultural depth and technological execution. The respondents appreciated VDHs that involved 'traditional culture in modern forms' (Q8) (e.g., mixing hanfu with futuristic elements); however, the respondents were critical of VDHs where cultural references felt 'superficial' and 'commercial' (Q9). One of the participants warned that "The technological realization… influences [a VDH's] credibility as a cultural representative" (Q23) emphasizing the way how the negative experience of an environment or unnatural behaviour may disrupt an impression of authenticity. This is consistent with academic studies on digital orientalism, through which mediation of technology threatens to de-complexify cultures [40]. It should be noted that younger audiences (15–30) showed higher tolerance to hybridized cultural representations that were perceived as "windows to learn about another culture" (Q5). This implies a generational update on the expectations in which authenticity is relative and not absolute. Nevertheless, ethical issues continued, especially as regards power relationships in cultural depiction. As one of the respondents warned, "We need to ensure technology doesn't infringe on, freedoms" (Q22), stating concerns about power over cultural narratives by corporations or states.

4.2.2. Engagement Drivers

The findings of examinations of interview data showed that there are three interrelated factors that determine the engagement of the audience with Chinese virtual digital humans (VDHs): emotional resonance, content uniqueness, and interactivity potential. Respondents were relatively consistent in placing emotional connection as the key aspect of VDHs, as one of the respondents assured that VDHs with rich story backgrounds and profound character settings had more chances of provoking emotional

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

reactions (Q9). This is consistent with what already exists on parasocial relationships in digital media; users attach to mediated personas [41]. Remarkably, the VDHs that used relatable narratives or humor, such as the "hilarious cartoon character" specified in Q3 worked quite well to maintain engagement. However, it was not enough to have the emotional resonance; the participants also attached significance to content novelty, particularly when VDHs broadcasted unique ideas about cultural themes or futurist scenarios. According to one participant, videos that included "future worlds or science fiction stories" created wonder and extended viewing (Q6), indicating that the meeting-point of cultural specificity and sentimental storytelling is an effective engagement booster.

Another essential aspect was interactive potential of VDHs which promoted audiences' transformation from passive watchers into active participants. Such behaviours as sharing content with friends (Q14), sharing ideas on VDHs in online communities (Q15), and even giving feedback in the form of private messages (Q14) were pointed out by respondents. These are features of what Purwanto, et al. [42] refers to as "participatory culture" as the users co-create meanings around digital content. For example, one participant said how lunchtime discussions on "the technical principles of virtual digital humans" with colleagues deepened the engagement (Q15). This participatory dimension was further enhanced by affordances of the platform. Short-form, shareable content-oriented TikTok and YouTube were often singled out as perfect VDH interaction spaces (Q18). Notably, engagement was not only behavioural (liking, commenting) but also cognitive, as users shared that they researched VDH-related technologies (Q7) or guessed about their uses in the future (Q17).

The third driver that emerged as a separate but overlapping one is cultural curiosity. Not only for entertainment, but participants also involved themselves in alliances with VDHs as tools of cultural experiences. For instance, one of the respondents reported he was using VDHs as a "window to understand another culture" (Q5), another one spoke about their "interesting details [about China] I didn't know" (Q5). This is in line with theories of incidental learning in digital spaces [43] entertainment media incidentally supports cultural knowledge. Nevertheless, the implications of this driver were also found to have limits in the interviews. engagement flat-lined when cultural content seemed too didactic or too full of commercialization. One participant warned that VDHs need to keep away from being simply "brand puppets" (Q24) to maintain interest from the audience. Compiled together, these findings indicate that one achieves the highest engagement by engaging in an emotional appeal, opportunities for interaction, and an authentic cultural representation a trinity that goes against traditional virality or count analysis.

4.2.3. Technological Trust and Ethical Concerns

The issue of trusting technology and dealing with ethical issues was central in how audiences responded to Chinese virtual digital humans. Participants responded with positive interest and anxiety towards VDH developments, mainly around three main points: manipulation of authenticity, stealing cultural elements, and turning over power. 'Power could easily become too centralized with virtual digital humans,' one respondent said (Q22), highlighting fears about these tools being used by corporations or the state for their own ends. This topic was especially pressing when talking about cultural representation, as participants were concerned that VDHs would oversimplify Chinese traditions, much like Disney does with other cultures (Q24). The interviews revealed a paradox: although more lifelike digital humans made people more interested ("The more realistic they look, the more I trust their cultural messages" - Q23), it also confused people about the accuracy of what they see online ("How do we know what's real anymore?").

Technological trust seemed to fit a U-shaped curve among the respondent. Early adopters and tech-savvy category of participants were more tolerant for flaws, paying attention to innovation prospects ("I am eager to see how the AR glasses will allow me to visit museums with virtual guides" – Q21). However, the mainstream user group was sceptical when VDHs approached yet did not reach true realism – what it could be termed as "the creepy almost human effect" (Q9). That corresponds to the uncanny valley theory by Omrani, et al. [44] according to which near-perfection in simulations will

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

create uneasiness. Importantly, the reactions were mediated by cultural context. Those who were more familiar with Chinese aesthetics were less perturbed by stylistic exaggerations appearing in VDH design; artificialities were considered as artistic decisions ("The animated features make the cultural stories more vivid" – Q8). These finding questions universal applicability of the uncanny valley hypothesis and proposes cultural specificity in the models of technology acceptance.

Three actionable issues revolved around ethical concerns: degree of transparency in creation processes ("Who programs these cultural values?" - Q22), consent in data usage ("Are real people's faces being used without permission"?). - Q23), and responsibility for misrepresentation of culture. Participants proposed concrete safeguards, including: 1) clear flags for the AI generated content, 2) multicultural boards for the VDH development, and 3) opt-out mechanisms of users, who are uncomfortable with the presence of certain representations ("There should be a way to filter content that feels culturally disrespectful" – Q24). These down-to-earth ideas capture what Sanchez, et al. [45] calls "participatory ethics" – venturing ahead from abstract principles to co-crafted governance structures.

4.2.4. Cross-Cultural Impact

The cross-cultural influence of Chinese virtual digital humans (VDHs) appeared as a complicated coexistence of cultural disbursement and culturally situated interpretation. Participants often pointed out that VDHs were "important carriers to spread Chinese culture" (Q16), especially regarding their efficiency in promoting traditional components via the modern digital media. The interviews, however, indicated that cultural transmission was very seldom a one-way process. in turn, audiences critically engaged with the content and created new meaning based on their own cultural backgrounds. One of the respondents provided an example of this by describing how they used VDHs as "a window to understand and learn about another culture" (Q5) and choosing which aspects of them they want to discuss and which to ignore. These finding undermines the old diffusion theoretical models of cultural exchange indicating emergence of a more reciprocal model in which global audience is made a co-creator of meaning. Significantly, the young respondents (18-25 years) proved more adept at the negotiation between cultural hybridity, admiring both the "traditional ink wash aesthetics" and the "global fashion collaborations" of this kind of VDH like AYAYI (Q4) whereas the older respondents were more inclined to want stronger cultural.

The study also revealed the existence of great disparities in terms of reception that mapped geopolitical contexts. Viewers from Southeast Asian countries that also have a historical connection with China associated themselves more culturally with VDHs, finding them "familiar yet innovative" (Q16), whereas the Western audiences tended to consider them as exotic digital novelties. This is consistent with cultural proximity theory [46] in relations to audience who would rather watch media that correspond to their cultural values. But data showed an important exception: in the case of VDHs when they dealt in universal topics such as music or humor they managed to cross the cultural boundaries more effectively. As one of the participants claimed: "That hilarious cartoon character makes my abs laugh" (Q3), where emotional universals can override culturally specific. Such findings indicate that Chinese VDHs function in a liminal area wedged between cultural ambassadorship and global entertainment and necessitate tactical modes of operating that intermingle unique cultural aspects and universally consumable content.

5. Discussion

5.1. Discussion of Quantitative Findings

The quantitative analysis yields robust evidence supporting the significant influence of Chinese virtual digital humans (VDHs) on overseas audiences, with all four hypotheses (H1–H4) confirmed through regression analysis ($p < 0.001$). The strong predictive power of Presentation of Chinese Cultural Elements ($\beta = 0.309$, $p < 0.001$) and Cross-cultural Communication Strategies ($\beta = 0.250$, $p < 0.001$) aligns with descriptive statistics showing high mean scores for these variables ($M = 3.89–4.05$),

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

suggesting that cultural authenticity and adaptive messaging are paramount for global dissemination. Notably, the regression model explains 45.7% of variance in dissemination levels ($R^2 = 0.457$), indicating substantial predictive validity. EFA results reveal a coherent five-factor structure (cumulative variance = 61.06%), with all factor loadings > 0.6 and communalities > 0.4, confirming the theoretical distinction between design, cultural, and strategic dimensions. The scree plot's inflection at five factors further validates this structure. However, the moderate correlation between Design Features and Dissemination Level ($r = 0.391$, $p < 0.001$) versus stronger links for cultural ($r = 0.466$) and strategic factors ($r = 0.435$) implies that aesthetic appeal, while important, is secondary to cultural and communicative competence in driving engagement. This challenges prevailing industry emphasis on hyper-realistic design [22] suggesting instead a cultural-strategic primacy effect in VDH adoption. Demographic analyses reveal nuanced patterns: nationality significantly predicts engagement ($\beta = 0.094$, $p = 0.041$), corroborating qualitative findings about regional reception differences, while age and gender show no significant effects ($p > 0.05$). This underscores the universal appeal of well-executed VDHs across demographic boundaries, though cultural proximity may modulate engagement depth a finding that extends cultural discount theory [20] to digital human contexts.

5.2. Discussion of Qualitative Findings

Qualitative data unveils the mechanisms underlying quantitative trends, particularly through the Engagement Drivers and Cultural Representation themes. Participants' emphasis on emotional resonance ("Rich story backgrounds…trigger emotional resonance" [Q9]) mirrors regression results showing Content Themes as a significant predictor ($\beta = 0.239$). However, interviews reveal this resonance hinges on avoiding didacticism—a nuance absent in quantitative data. The paradox of cultural appeal emerges: while quantitative data shows strong engagement with cultural elements ($M = 3.89$), qualitative responses express skepticism about authenticity ("Who programs these cultural values?" [Q22]). This tension suggests audiences simultaneously desire and distrust cultural representation, engaging performatively while remaining critically distant. The Technological Trust theme complicates quantitative reliability metrics. Despite high Cronbach's α scores (> 0.7), interviewees expressed ethical concerns about realism ("the creepy almost-human effect" [Q9]), indicating that statistical reliability may mask latent user discomfort. This aligns with Wang and Liu [25] uncanny valley but introduces a cultural modulation effect: participants familiar with Chinese aesthetics tolerated stylized designs, challenging universal applicability of uncanny valley thresholds. Cross-Cultural Impact findings reveal audience agency in meaning-making. Quantitative correlations between cultural factors and dissemination ($r = 0.426$–0.466) gain depth through qualitative accounts of users actively reinterpreting content ("a window to learn about another culture" [Q5]). This supports an active reception model of cultural globalization, where audiences hybridize rather than passively absorb mediated cultural products [31].

5.3. Practical Implications

The findings yield three actionable insights for stakeholders: First, content creators should prioritize cultural depth over aesthetic perfection, developing VDHs with nuanced narratives that avoid stereotyping (evidenced by $\beta = 0.309$ for cultural elements and qualitative concerns about authenticity), while incorporating participatory design frameworks to address ethical concerns raised in interviews (Q22). Second, platform strategists should leverage the identified engagement driver's emotional resonance (Q9), interactive potential (Q14), and cultural curiosity (Q5) by optimizing algorithmic recommendations for culturally hybrid content, particularly on short-form platforms like TikTok where cross-cultural communication strategies showed strong impact ($\beta = 0.250$). Third, policymakers must establish transnational ethical guidelines for VDH development, balancing the quantitative evidence of universal appeal (non-significant age/gender effects) with qualitative demands for transparency ("Who programs these cultural values?" Q22), potentially through certification systems that verify cultural

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

authenticity and data provenance, thereby mitigating the trust erosion revealed in technological acceptance metrics (kurtosis = -0.07 for Dissemination Level).

6. Conclusion

This study provides a comprehensive understanding of how Chinese virtual digital humans (VDHs) influence global audiences through a mixed-methods analysis of both quantitative engagement patterns and qualitative user experiences. The research confirms that successful cross-cultural dissemination hinges on a dual-axis model combining cultural authenticity ($\beta = 0.309$, $p < 0.001$) and adaptive communication strategies ($\beta = 0.250$, $p < 0.001$), while revealing an understudied paradox: audiences simultaneously engage with and distrust culturally coded VDHs ("Who programs these cultural values?" Q22). Four key contributions emerge: First, we identify a cultural-strategic primacy effect, demonstrating that narrative depth (qualitative Theme 2) and cross-cultural adaptability outweigh technical perfection in driving engagement (quantitative H1-H4). Second, we extend cultural proximity theory by showing how VDHs mitigate traditional media's cultural discount through design hybridity. Third, we propose an active reception model where global audiences reinterpret cultural content rather than passively consume it ("a window to learn" Q5). Fourth, we expose critical ethical tensions between technological realism and cultural representation that demand new governance frameworks.

These insights advance digital cultural diplomacy theory while offering actionable guidance: Content creators should develop VDHs as cultural interlocutors rather than propaganda tools; platforms must optimize algorithms for cultural curiosity over virality; and policymakers need transnational ethical standards for AI-mediated cultural exchange. Future research should explore longitudinal effects and non-Western reception contexts to further unpack the globalization-localization dynamics of synthetic media. Ultimately, this study repositions VDHs beyond commercial or political instruments they emerge as liminal agents in global digital culture, simultaneously reflecting and reshaping how societies negotiate identity, technology, and cross-cultural understanding in an increasingly mediated world.

6.1. Limitations and Future Research

While this study provides valuable insights into the global influence of Chinese virtual digital humans (VDHs), several limitations must be acknowledged when interpreting the findings: The cross-sectional design precludes causal inferences about long-term engagement patterns, and the reliance on self-reported metrics may introduce social desirability bias, particularly regarding cultural perceptions; the sample's skew toward younger demographics (15-30 years) and urban, digitally literate populations limits generalizability to older or less tech-savvy audiences; and the focus on major platforms (YouTube, TikTok) may overlook niche communities where VDHs operate. Additionally, while the mixed-methods approach strengthened validity, the qualitative sample size (n=20-30) may not fully capture regional nuances in cultural interpretation. Future research should address these gaps through longitudinal studies tracking engagement evolution across user lifecycles, experimental designs testing causal relationships between design features and cultural acceptance, and cross-cultural comparative work examining how VDH reception varies in Global South versus Western contexts.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796

References

[1] M. Keane and H. Yu, "Communication, culture, and governance in Asia| A digital empire in the making: China's outbound digital platforms," *International Journal of Communication*, vol. 13, pp. 1–18, 2019.

[2] S. Ding, "Digital diaspora and national image building: A new perspective on Chinese diaspora study in the age of China's rise," *Pacific Affairs*, vol. 80, no. 4, pp. 627-648, 2007. https://doi.org/10.5509/2007804627

[3] L. Luo and W. Kim, "How virtual influencers' identities are shaped on Chinese social media: A case study of ling," *Global Media and China*, vol. 9, no. 3, pp. 325-343, 2024.

[4] J. Smith and L. Taylor, "Lil Miquela and Imma: Analyzing their commercial impact and audience engagement in the age of virtual influencers," *Journal of Digital Marketing and Virtual Reality Studies*, vol. 15, no. 3, pp. 220-235, 2021.

[5] M. Keane, H. Yu, E. J. Zhao, and S. Leong, *China's digital presence in the Asia-Pacific: Culture, technology and platforms*. London, United Kingdom: Anthem Press, 2020.

[6] X. Yan, T. Mo, and X. Zhou, "The influence of cultural differences between China and the West on moral responsibility judgments of virtual humans," *Acta Psychologica Sinica*, vol. 56, no. 2, p. 161, 2024. https://doi.org/10.3724/SP.J.1041.2024.00161

[7] M. Keane, "China's digital media industries and the challenge of overseas markets," *Journal of Chinese Cinemas*, vol. 13, no. 3, pp. 244-256, 2019.

[8] S. Li and J. Chen, "Virtual human on social media: Text mining and sentiment analysis," *Technology in Society*, vol. 78, p. 102666, 2024.

[9] R. A. Saunders and S. Ding, "Digital dragons and cybernetic bears: Comparing the overseas Chinese and near abroad Russian web communities," *Nationalism and Ethnic Politics*, vol. 12, no. 2, pp. 255-290, 2006. https://doi.org/10.1080/10670564.2012.666834

[10] M. Afzal, A. Junejo, and A. K. Khoso, "Bridging instructional excellence and student success: Exploring how faculty management influences academic performance and loyalty through the lens of student self-efficacy," *International Premier Journal of Languages & Literature*, vol. 3, no. 1, pp. 54-75, 2025.

[11] X. Zhao, "Digital labour in transnational mobility: Chinese international students' online boundary work in daigou," *New Media & Society*, vol. 23, no. 9, pp. 2554-2574, 2021. https://doi.org/10.1177/1461444820934096

[12] J. Lu, "Understanding the Chinese diaspora: The identity construction of diasporic Chinese in the age of digital media," Doctoral Dissertation, Queensland University of Technology, 2017.

[13] D. Craig, J. Lin, and S. Cunningham, *Wanghong as social media entertainment in China*. New York: Palgrave Macmillan, 2021.

[14] S. Budnitsky and L. Jia, "Branding Internet sovereignty: Digital media and the Chinese–Russian cyberalliance," *European Journal of Cultural Studies*, vol. 21, no. 5, pp. 594-613, 2018. https://doi.org/10.1177/1367549417751142

[15] C. Wallis, "New media practices in China: Youth patterns, processes, and politics," *International Journal of Communication*, vol. 5, pp. 1-31, 2011.

[16] G. Yang and W. Wang, *Engaging social media in China: Platforms, publics, and production*. East Lansing, MI: MSU Press, 2021.

[17] M. Thunø and Y. Wang, "China's smart diaspora governance: Extraterritorial social control through digital platforms," *Journal of Current Chinese Affairs*, vol. 54, no. 1, pp. 48-72, 2025. https://doi.org/10.1177/18681026241232998

[18] Y. Yang and L. Ha, "Why people use TikTok (Douyin) and how their purchase intentions are affected by social media influencers in China: A uses and gratifications and parasocial relationship perspective," *Journal of Interactive Advertising*, vol. 21, no. 3, pp. 297-305, 2021. https://doi.org/10.1080/15252019.2021.1995544

[19] F. Lu, Z. Huang, and T. Meng, "Official media as emotional valves: How official media guides nationalism on Chinese social media," *Asian Survey*, vol. 63, no. 4, pp. 611-640, 2023. https://doi.org/10.1525/as.2023.63.4.611

[20] Y. Yuan, C.-S. Chan, S. Eichelberger, H. Ma, and B. Pikkemaat, "The effect of social media on travel planning process by Chinese tourists: The way forward to tourism futures," *Journal of Tourism Futures*, 2022. https://doi.org/10.1108/JTF-04-2021-0094

[21] Y. Zhang and D. O. Ong'ong'a, "Unveiling China's digital diplomacy: A comparative analysis of CGTN Africa and BBC News Africa on Facebook," *Asian Journal of Comparative Politics*, vol. 7, no. 3, pp. 661-683, 2022. https://doi.org/10.1177/20578911211068217

[22] Y. Su, D. K. L. Lee, X. Xiao, W. Li, and W. Shu, "Who endorses conspiracy theories? A moderated mediation model of Chinese and international social media use, media skepticism, need for cognition, and COVID-19 conspiracy theory endorsement in China," *Computers in Human Behavior*, vol. 120, p. 106760, 2021. https://doi.org/10.1016/j.chb.2021.106760

[23] Z. Li, W. Zhang, H. Zhang, R. Gao, and X. Fang, "Global digital compact: A mechanism for the governance of online discriminatory and misleading content generation," *International Journal of Human–Computer Interaction*, vol. 41, no. 2, pp. 1381-1396, 2025.

[24] A. K. Khoso, W. Honggang, and M. Afzal, "Unraveling the impact of Facebook addiction on EFL students: A dual lens on self-esteem and academic achievement," *Russian Law Journal*, vol. 12, no. 2, pp. 1167-1187, 2024.

[25] D. Wang and S. Liu, "Doing ethnography on social media: A methodological reflection on the study of online groups in China," *Qualitative Inquiry*, vol. 27, no. 8-9, pp. 977-987, 2021. https://doi.org/10.1177/18681026241232998
[26] M. Zhang, P. Xu, and Y. Ye, "Trust in social media brands and perceived media values: A survey study in China," *Computers in Human Behavior*, vol. 127, p. 107024, 2022. https://doi.org/10.1016/j.chb.2021.107024
[27] W. Zeng and D. Li, "Presenting China's image through the translation of comments: A case study of the WeChat subscription account of Reference News," *Perspectives*, vol. 31, no. 2, pp. 313-330, 2023. https://doi.org/10.1080/0907676X.2021.1960397
[28] Y. Lu, J. Schaefer, K. Park, J. Joo, and J. Pan, "How information flows from the world to China," *The International Journal of Press/Politics*, vol. 29, no. 2, pp. 305-327, 2024. https://doi.org/10.1177/19401612231123456
[29] D. Dror-Shpoliansky and Y. Shany, "It's the end of the (Offline) World as we know it: From Human rights to Digital Human rights–a proposed typology," *European Journal of International Law*, vol. 32, no. 4, pp. 1249-1282, 2021. https://doi.org/10.1093/ejil/chab067
[30] A. K. Khoso, M. Y. Farid, and M. J. Anwar, "Impact of EFL teachers' teaching style on students' cognitive motivation and anxiety: Insights from cognitive linguistics.," *International Premier Journal of Languages & Literature*, vol. 3, no. 1, pp. 423-453, 2025.
[31] C. Zhang, "Contested disaster nationalism in the digital age: Emotional registers and geopolitical imaginaries in COVID-19 narratives on Chinese social media," *Review of International Studies*, vol. 48, no. 2, pp. 219-242, 2022. https://doi.org/10.1017/S0260210522000018
[32] Z. Lu, Y. Jiang, C. Shen, M. C. Jack, D. Wigdor, and M. Naaman, "Positive Energy" perceptions and attitudes towards COVID-19 information on social media in China," *Proceedings of the ACM on human-computer interaction*, vol. 5, no. CSCW1, pp. 1-25, 2021.
[33] A. E. Simay, Y. Wei, T. Gyulavári, J. Syahrivar, P. Gaczek, and Á. Hofmeister-Tóth, "The e-WOM intention of artificial intelligence (AI) color cosmetics among Chinese social media influencers," *Asia Pacific Journal of Marketing and Logistics*, vol. 35, no. 7, pp. 1569-1598, 2023.
[34] S. Kim, K. H. Sung, Y. Ji, C. Xing, and J. G. Qu, "Online firestorms in social media: Comparative research between China Weibo and USA Twitter," *Public Relations Review*, vol. 47, no. 1, p. 102010, 2021.
[35] F. Fan, K. Chan, Y. Wang, Y. Li, and M. Prieler, "How influencers' social media posts have an influence on audience engagement among young consumers," *Young Consumers*, vol. 24, no. 4, pp. 427-444, 2023. https://doi.org/10.1108/YC-03-2023-0246
[36] G. Wu and C. Pan, "Audience engagement with news on Chinese social media: A discourse analysis of the People's Daily official account on WeChat," *Discourse & Communication*, vol. 16, no. 1, pp. 129-145, 2022. https://doi.org/10.1177/17504813211026567
[37] N. Ding, Z. Yang, S. Li, and A. Zhang, "Where translation impacts: The non-professional community on Chinese online social media–A descriptive case study on the user-generated translation activity of Bilibili content creators," *Global Media and China*, vol. 6, no. 2, pp. 171-190, 2021. https://doi.org/10.1177/20594364211011398
[38] H. M. Levitt, M. Bamberg, J. W. Creswell, D. M. Frost, R. Josselson, and C. Suárez-Orozco, "Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report," *American Psychologist*, vol. 73, no. 1, pp. 26-46, 2018.
[39] R. J. Rovinelli and R. K. Hambleton, "On the use of content specialists in the assessment of criterion-referenced test item validity," *Educational and Psychological Measurement*, vol. 37, no. 1, pp. 39-47, 1977.
[40] X. Yang and X. Jiang, "Cultural hybridity and audience perceptions: Generational shifts in cultural expectations," *International Journal of Cultural Studies*, vol. 28, no. 4, pp. 420-435, 2022.
[41] P. Barnestein-Fonseca, A. Nebro-Gil, V. P. Aguiar-Leiva, E. Víbora-Martín, I. Ruiz-Torreras, and M. L. Martín-Rosello, "Barriers and drivers of public engagement in palliative care, Scoping review," *BMC Palliative Care*, vol. 23, no. 1, p. 117, 2024. https://doi.org/10.1186/s12904-024-01313-y
[42] A. Purwanto, A. Zuiderwijk, and M. Janssen, "Citizen engagement with open government data: A systematic literature review of drivers and inhibitors," *Research Anthology on Citizen Engagement and Activism for Social Change*, pp. 1539-1566, 2022. https://doi.org/10.4018/978-1-6684-3706-3.ch081
[43] T. Fink, *Drivers of user engagement in influencer branding*. Wiesbaden, Germany: Springer Fachmedien Wiesbaden, 2021.
[44] N. Omrani, G. Rivieccio, U. Fiore, F. Schiavone, and S. G. Agreda, "To trust or not to trust? An assessment of trust in AI-based systems: Concerns, ethics and contexts," *Technological Forecasting and Social Change*, vol. 181, p. 121763, 2022. https://doi.org/10.1016/j.techfore.2022.121763
[45] T. W. Sanchez, M. Brenman, and X. Ye, "The ethical concerns of artificial intelligence in urban planning," *Journal of the American Planning Association*, vol. 91, no. 2, pp. 294-307, 2025. https://doi.org/10.1080/01944363.2024.2355305
[46] J. Straubhaar, *Cultural proximity. In the Routledge handbook of digital media and globalization*. New York: Routledge, 2021.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 302-319, 2025
DOI: 10.55214/25768484.v9i6.7796