

Factors Influencing Users' Viewing Intentions of *Tuwei* Vertical Micro-Dramas: An Empirical Study Based on TAM3

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Abstract. With the rise of mobile internet and changing media consumption habits, vertical micro-dramas have become an increasingly popular content format. This study, grounded in the Technology Acceptance Model 3 (TAM3), employs a questionnaire survey and structural equation modeling to systematically investigate the influencing mechanisms behind users' viewing intentions toward *tuwei* vertical micro-dramas. The findings aim to provide suggestions for content optimization. The results reveal that social norms and image exert significant positive effects on perceived usefulness, while self-efficacy in expressing *tuwei* content and perceived enjoyment significantly enhance perceived ease of use. Furthermore, both perceived usefulness and perceived ease of use positively impact viewing intention. These findings highlight the combined effects of technological acceptance and social-psychological factors, and shed new light on user behavior in the short-form video context.

Keywords: social acceleration; *tuwei* vertical micro-dramas; TAM3 model; structural equation modeling.

Vertical micro-dramas are a novel short-video format optimized for mobile viewing, characterized by vertical orientation and a typical length of 3 to 5 minutes^[1]. They feature fast-paced narratives with immediate climaxes^[2], and are produced and released rapidly^[3]. Leveraging smartphone interactivity, these dramas enhance user engagement^[4]. The term *tuwei* (literally "earthy taste") refers to grassroots, kitschy, or mass-entertainment cultural forms. Its integration into vertical micro-dramas creates a distinct style.

Since 2022, China's National Radio and Television Administration (NRTA) has issued the notice titled *Regarding Further Strengthening the Management of Online Micro-Short Dramas and Implementing the Creative Improvement Plan*. This notice emphasizes the need to deeply understand the dual attributes of online micro-short dramas as both ideological and cultural products, and to promote their healthy and orderly development. Under this policy environment, the market for vertical micro-dramas has grown rapidly. By December 2024, the user base of micro-dramas had reached 662 million, and average daily usage per person for dedicated apps increased from 90 minutes to 101 minutes within just six months^[5].

Despite growing popularity, *tuwei* vertical micro-dramas remain in a nascent stage. Although there have been a number of influential hits, there is a lack of development in vertical micro-short dramas from the user perspective, indicating substantial room for improvement in construction and dissemination concepts. On the one hand, vertical micro-dramas face inherent limitations. Due to the uneven quality of production teams and the low entry threshold for actors, the market is rife with regulatory violations. Numerous micro-dramas involving piracy, copyright infringement, and the dissemination of harmful values continue to surface. On the other hand, the dissemination concept of such content remains relatively narrow. It is unclear whether users can provide timely feedback after viewing, and whether the industry can respond to such feedback with targeted improvements. As a result, a closed loop from content production to users—and back from users to content—is yet to be established and remains unstable and underdeveloped.

1. Theoretical Model Construction

1.1 TAM3 Model

The Technology Acceptance Model (TAM), proposed by Davis (1989) [6] based on the Theory of Reasoned Action, is a foundational framework for studying user behavior in information systems. It aims to explain users' acceptance intention of technology through two core variables: perceived usefulness and perceived ease of use. However, with the increasing complexity of the technological environment, the traditional TAM model is no longer sufficient to comprehensively analyze user behavior.

To overcome these limitations, Venkatesh and Bala (2008) [7] introduced the extended TAM3 model, which integrates theories from multiple disciplines. This model constructs a multi-level causal path of “external variables → perceived usefulness/ease of use → behavioral intention → actual usage”, as shown in Figure 1. Compared with the traditional TAM, TAM3 has more theoretical completeness, stronger explanatory power, and deeper practical guidance.

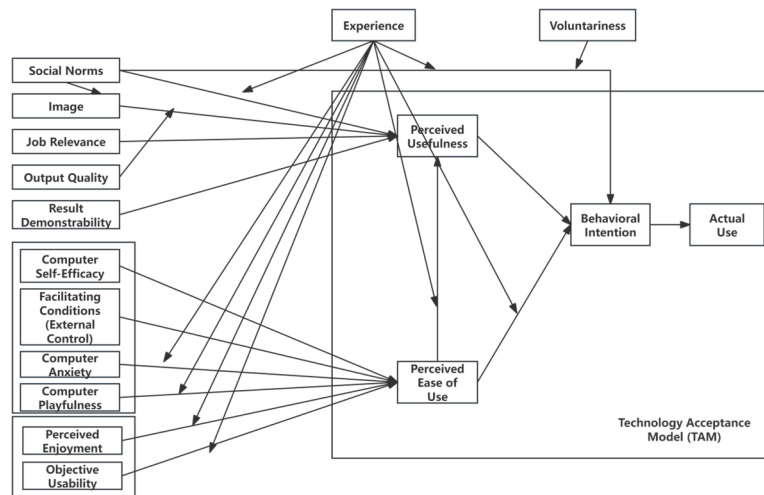


Figure 1 TAM3 Theoretical Model

1.2 Research Hypotheses

Drawing on the TAM3 model and the characteristics of *tuwei* vertical micro-dramas, this study identifies seven latent variables: social norms, image, self-efficacy in *tuwei* expression, perceived enjoyment, perceived ease of use, perceived usefulness, and viewing intention.

Social norms influence individuals' decisions and behaviors by prompting the heuristic-systematic model (HSM) of cognition [8], and indirectly affects perceived usefulness through the “social influence process” (e.g., subjective norm, image), especially under mandatory usage scenarios where the positive effect is more prominent [9]. Based on this, the following hypothesis is proposed:

H1: Social norms positively affect perceived usefulness.

The construction of individual identity serves not only access to resources or personal benefits, but also fulfills deeper needs such as belonging, existential meaning, and social recognition [10]. Individuals who derive a sense of purpose and affiliation from their identity object tend to exhibit behavior aligned with the expectations of that affiliation [11]. Image, by influencing users' perceptions of a technology's utility, indirectly promotes usage intentions. For example, if users believe that using a certain technology enhances their social or professional image, they are more inclined to perceive it as useful [12]. Hence, the following hypothesis is proposed:

H2: Image positively affects perceived usefulness.

Self-efficacy refers to an individual's subjective assessment of their ability to perform a specific task in order to achieve a desired goal [13]. It is a key proximal determinant of human motivation, affect, and behavior. Individuals with higher self-efficacy are more likely to engage in cognitive processes that support effective action [14]. In the context of short-form video content, users with higher self-

efficacy tend to possess greater digital literacy and are more adept at navigating online platforms^[15]. Therefore, the following hypothesis is proposed:

H3: Self-efficacy in *tuwei* expression positively affects perceived ease of use.

Huang and colleagues developed a behavioral model linking user experience in online gaming to word-of-mouth communication, demonstrating that functional, hedonic, and social experiences all significantly impact users’ willingness to share content^[11]. Drawing on this, the following hypothesis is proposed:

H4: Perceived enjoyment positively affects perceived ease of use.

According to Venkatesh and Bala, perceived usefulness and perceived ease of use both positively influence behavioral intention—an assertion supported by other researchers, such as J. P. C. Chou et al.^[16]. Thus, the following hypotheses are proposed:

H5: Perceived ease of use positively affects perceived usefulness.

H6: Perceived usefulness positively affects viewing intention.

H7: Perceived ease of use positively affects viewing intention.

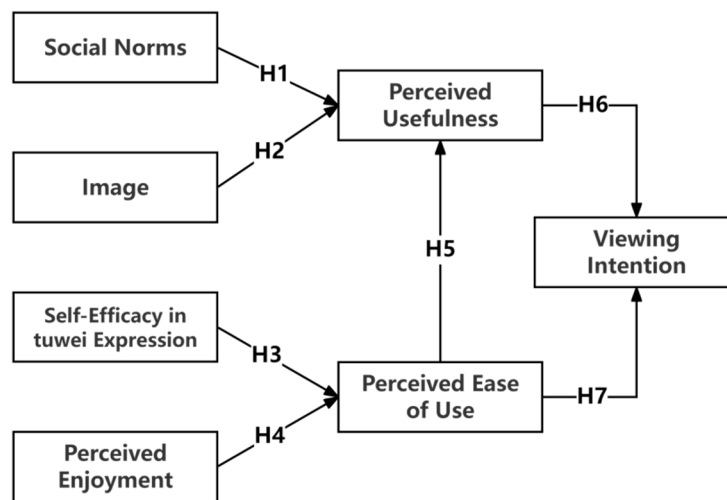


Figure 2 Hypothetical Model of Users’ Viewing Intention toward *Tuwei* Vertical Micro-Dramas

2. Research Methodology

2.1 Questionnaire Design

To ensure the reliability of the empirical investigation, the questionnaire was divided into two main components: (1) demographic information and (2) constructs corresponding to the model variables. The items for the model constructs were designed using a five-point Likert scale. Detailed item descriptions are provided in Table 1. A pilot study was conducted, followed by individual follow-ups to evaluate item clarity and relevance. Based on the feedback, the questionnaire was revised and finalized to include 24 measurement items. Given the size and geographic dispersion of the target population, a multi-stage sampling method^[17] was employed, and questionnaires were distributed across multiple universities.

Table 1 Measurement Items for Each Latent Variable

Latent Variable	Manifest Variable	Specific Measurement Items
Social Norms	SN1	Many people around me watch <i>tuwei</i> vertical micro-short dramas.
	SN2	People around me often recommend <i>tuwei</i> vertical micro-short dramas.
	SN3	I believe watching <i>tuwei</i> vertical micro-short dramas is a new trend.

Image	IM1	Watching <i>tuwei</i> vertical micro-short dramas keeps me in vogue.
	IM2	Watching <i>tuwei</i> vertical micro-short dramas enhances my fashion sense.
	IM3	Watching <i>tuwei</i> vertical micro-short dramas gives me more topics to discuss with friends and helps me fit in.
Self-Efficacy in <i>tuwei</i> Expression	SE1	I know where to watch <i>tuwei</i> short dramas without seeking help.
	SE2	I can easily filter out the <i>tuwei</i> short dramas that interest me.
	SE3	I can skillfully use interactive features (e.g., voting, commenting).
	SE4	I can quickly find previously unfinished <i>tuwei</i> short drama segments.
Perceived Enjoyment	PE1	The process of watching <i>tuwei</i> short dramas is relaxing and enjoyable.
	PE2	After watching <i>tuwei</i> short dramas, my negative emotions like stress and fatigue are alleviated.
	PE3	The narratives in <i>tuwei</i> dramas provide a refreshing experience.
Perceived Usefulness	PU1	Watching <i>tuwei</i> vertical micro-short dramas enhances the quality of my leisure time.
	PU2	Watching <i>tuwei</i> vertical micro-short dramas increases topics for conversation with others.
	PU43	I find <i>tuwei</i> vertical micro-short dramas valuable in my life.
Perceived Ease of Use	PEOU1	My interactions with the <i>tuwei</i> vertical micro-short drama platform are clear and understandable.
	PEOU2	Watching <i>tuwei</i> vertical micro-short dramas does not require much mental effort to understand the plot.
	PEOU3	I find the viewing method for <i>tuwei</i> vertical micro-short dramas to be very user-friendly.
	PEOU4	I find it easy to locate the <i>tuwei</i> vertical micro-short dramas I want to watch.
Viewing Intention	BI1	I am willing to share and forward <i>tuwei</i> vertical micro-short dramas.
	BI2	I would recommend <i>tuwei</i> vertical micro-short dramas to friends and family.
	BI3	I plan to continue watching <i>tuwei</i> vertical micro-short dramas in the future.
	BI4	I will actively search for and watch <i>tuwei</i> vertical micro-short dramas.

2.2 Data Collection

This study employed a combination of online and offline data collection methods. A total of 767 valid questionnaires were retrieved. Among the respondents, 53.83% were male and 46.17% were female. Among the questionnaires, 54.63% were underclassmen (freshmen and sophomores). Regarding viewing habits, 42.43% reported preferring to “save first and watch in fragmented time.” A majority (75.18%) watched *tuwei* vertical micro-dramas 1–5 times per week, with 31.01% reporting an average session length of 20–40 minutes. The most favored content genres were melodramatic romance (53.98%) and family ethical disputes (50.53%). As for viewing motivations, 60% of respondents cited the fast-paced nature of the plot—free from lengthy or redundant exposition—as their primary reason for engagement.

3. Data Processing and Testing

3.1 Reliability and Validity Testing

This study employed SPSS to assess the reliability of the survey data. As shown in Table 2, the Cronbach’s alpha^[18] values for “subjective norm,” “image,” “perceived usefulness,” and “perceived enjoyment” all exceeded 0.7, indicating acceptable reliability. The values for “self-efficacy of ‘tuwei’ expression,” “perceived ease of use,” and “viewing intention” were all above 0.8, demonstrating good reliability. The overall Cronbach’s alpha of the questionnaire exceeded 0.9, indicating a high degree of internal consistency across dimensions and items, thus ensuring the questionnaire can yield reliable results.

Table 2 Cronbach’s Alpha Coefficients for Each Latent Variable

Dimension	Cronbach’s Alpha	Number of Items	Reliability Assessment
Social Norms	0.769	3	Acceptable
Image	0.776	3	Acceptable
Self-Efficacy in <i>tuwei</i> Expression	0.882	4	Good
Perceived Enjoyment	0.770	3	Acceptable
Perceived Usefulness	0.787	3	Acceptable
Perceived Ease of Use	0.821	4	Good
Viewing Intention	0.828	4	Good
Overall	0.905	24	Excellent

Validity was analyzed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett’s Test of Sphericity^[19]. As Table 3 shows, the KMO value was 0.899, and the significance level of Bartlett’s test was less than 0.05, indicating that the questionnaire had good structural validity.

Table 3 KMO and Bartlett’s Test of Sphericity

KMO and Bartlett’s Test of Sphericity		
KMO Measure of Sampling Adequacy		0.899
Approximate Chi-Square		6273.718
Bartlett’s Test of Sphericity	Degrees of Freedom	276
	Significance	0.000

Principal component analysis was conducted for dimensionality reduction of the independent and dependent variables using varimax rotation. The cumulative variance contribution rate of the first seven extracted factors was 67.519%, indicating that these factors sufficiently represent the majority of the information. The rotated component matrix is shown in Table 4.

Table 4 Principal Component Analysis

Rotated Component Matrix ^a							
	Component						
	1	2	3	4	5	6	7
E1	.110	.134	.137	.039	.122	.763	.145
E2	.107	.133	.121	.117	.108	.782	.104
E3	.146	.130	.191	.115	.131	.765	.085

E4	.140	.147	.112	.126	.758	.128	.120
E5	.197	.146	.111	.112	.754	.104	.100
E6	.083	.113	.157	.091	.794	.136	.165
E7	.785	.140	.107	.091	.091	.073	.129
E8	.762	.077	.109	.124	.101	.114	.116
E9	.733	.162	.076	.084	.119	.108	.113
E10	.764	.104	.162	.127	.124	.093	.066
E11	.149	.111	.163	.090	.185	.139	.734
E12	.126	.144	.151	.176	.109	.094	.750
E13	.136	.125	.150	.089	.100	.115	.800
E14	.158	.168	.117	.760	.147	.116	.084
E15	.107	.128	.041	.802	.073	.101	.152
E16	.140	.183	.154	.786	.110	.053	.104
E17	.128	.101	.796	.058	.065	.141	.084
E18	.111	.130	.753	.107	.139	.108	.134
E19	.059	.114	.740	.062	.117	.102	.170
E20	.167	.174	.736	.109	.087	.129	.097
E21	.069	.784	.115	.142	.125	.102	.135
E22	.165	.733	.140	.107	.101	.141	.089
E23	.148	.730	.163	.162	.063	.125	.106
E24	.122	.781	.110	.110	.150	.078	.082

3.2 Goodness of Fit Testing

AMOS software was used to construct and analyze the structural equation model. Four indices were used to evaluate model fit: the ratio of chi-square to degrees of freedom (CMIN/DF), Root Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI) ^{[20][21]}. As shown in Table 5, all indices met the standard criteria, indicating that the model fit was satisfactory. All standardized factor loadings were above 0.68, a desirable level, suggesting that the observed variables were strongly associated with the latent variables and had excellent measurement validity.

Table 5 Goodness of Fit Testing

Indicator	Measurement Value	Reference Standard	Conclusion
CMID/DF	2.895	Ideal: 1-3; Acceptable: 3-5	Ideal
RMSEA	0.053	Ideal: <0.05; Acceptable: <0.08	Acceptable
GFI	0.927	Ideal: >0.9; Acceptable: >0.8	Ideal
AGFI	0.910	Ideal: >0.9; Acceptable: >0.8	Ideal

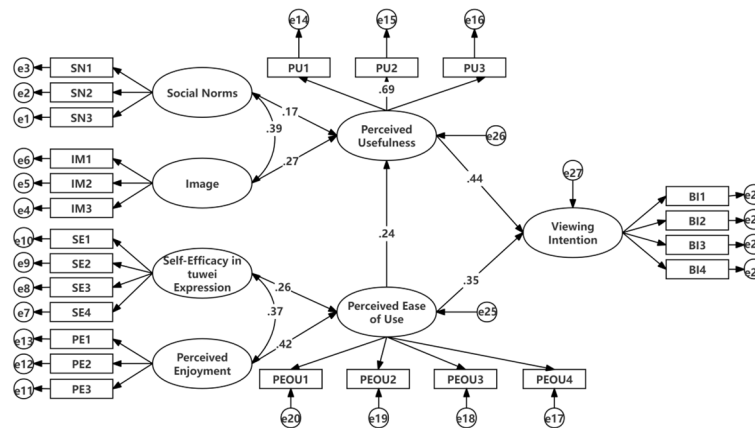


Figure 3 Model Output Diagram

3.3 Hypothesis Testing

The hypothesis testing results are shown in Table 6. All hypotheses were supported by the data. Specifically, social norm and image significantly influenced perceived usefulness; self-efficacy and perceived enjoyment significantly affected perceived ease of use—with perceived enjoyment showing a stronger effect; and both perceived ease of use and perceived usefulness significantly influenced users’ viewing intention.

Table 6 Hypothesis Testing Results

Path	Estimate	S.E.	C.R.	P	Label
Social Norms → Perceived Usefulness	0.170	0.053	3.185	0.001	H1
Image → Perceived Usefulness	0.272	0.054	5.013	***	H2
Self-Efficacy in <i>tuwei</i> Expression → Perceived Ease of Use	0.263	0.050	5.268	***	H3
Perceived Enjoyment → Perceived Ease of Use	0.418	0.056	7.432	***	H4
Perceived Ease of Use → Perceived Usefulness	0.240	0.044	5.513	***	H5
Perceived Usefulness → Viewing Intention	0.439	0.053	8.209	***	H6
Perceived Ease of Use → Viewing Intention	0.348	0.407	7.379	***	H7

3.4 Result Analysis

3.4.1 Significant Positive Impact of Social Norms and Image on Perceived Usefulness

The study found that both subjective norm and image had significant positive effects on perceived usefulness (standardized coefficients of 0.17 and 0.27, respectively). This effect is closely related to social identity and group belonging. When *tuwei* vertical micro-dramas become a topic of interest in users' social circles, viewing them provides users with a sense of recognition, thereby enhancing perceived value. Specifically, attitudes of surrounding peers (e.g., endorsement or popularity) shape users’ perception of their social image. If the content facilitates social interaction or group inclusion, its perceived usefulness arises not only from the content itself but also from fulfilling social belonging needs. This indicates that media value assessments are socially embedded—subjective norm enhances perceived usefulness through group identity mechanisms.

3.4.2 Positive Impact of Self-Efficacy in Tuwei Expression and Perceived Enjoyment on Perceived Ease of Use

Both self-efficacy of *tuwei* expression and perceived enjoyment had significant positive impacts on perceived ease of use (standardized coefficients of 0.26 and 0.42, respectively). This reflects broader shifts in contemporary sociocultural contexts: in a fast-paced, high-pressure environment, traditional elite culture is increasingly diluted by grassroots content. With characteristics such as “rustic,” “vulgar,” “exciting,” and fragmented presentation, vertical micro-dramas cater perfectly to audiences’ desire for low-cognitive-load entertainment. The study further reveals that when such dramas offer easy interactive options, users experience higher self-efficacy, and the pleasure derived during viewing reduces their perceived effort. This dual mechanism enhances evaluations of the ease of use of *tuwei* content, highlighting new trends in entertainment consumption in the digital age.

3.4.3 Positive Impact of Perceived Ease of Use on Perceived Usefulness

In the context of fragmented time and “social acceleration”^[22], *tuwei* vertical micro-dramas—with their convenient access and easily digestible content—efficiently meet users’ leisure needs and thereby enhance perceived usefulness. This recognition is driven by two mechanisms: (1) the immediate availability and quick consumption of micro-dramas align with contemporary time structures, and (2) the low cognitive threshold reduces users’ information processing burden, enabling maximal entertainment in minimal time.

3.4.4 Positive Impact of Perceived Usefulness and Perceived Ease of Use on Viewing Intention

Both perceived usefulness and perceived ease of use significantly influenced users’ intention to continue watching *tuwei* vertical micro-dramas. Specifically, when users believe that such content meets their entertainment or social needs (perceived usefulness) and is easy to access and interact with (perceived ease of use), their willingness to continue engaging with the content increases markedly.

4. Conclusion

This study, based on the TAM3 model, employs structural equation modeling to reveal the mechanism underlying users’ viewing intention toward *tuwei* vertical micro-dramas. The findings demonstrate that social norm, image, self-efficacy related to *tuwei* expression, and perceived enjoyment jointly influence users’ intention to watch such content. The value of these micro-dramas is derived not only from their entertainment attributes, but also from their low entry threshold and highly efficient viewing experience.

Users tend to watch emotionally intense plots during fragmented time, which aligns with the theory of “social acceleration.” The rise and development of *tuwei* vertical micro-dramas have been significantly driven by the background of social acceleration. This impact is not merely additive, but rather manifests as an organic integration of internet technology and the traditional film and television industry, thereby realizing “instant viewing” and “instant dissemination.” In addition, by taking *tuwei* expression as the entry point, the study reveals a trend of “reverse sophistication” in vertical storytelling, indicating that the apparent crudeness reflects users’ deeper desire for authenticity. These findings offer a new theoretical perspective for understanding user behavior in the era of short-form video.

This study takes college students in Xi’an as the research subjects and conducts a relatively systematic analysis of related issues. However, certain limitations remain. First, due to constraints in research conditions and scope, the sample mainly consists of university students from institutions in Xi’an, without including a broader range of social groups (e.g., individuals from different professions or age brackets). This may limit the applicability of the findings. Future research could expand the sample scope by incorporating respondents of different age groups (such as young and middle-aged individuals) and social backgrounds to further explore inter-group differences and enhance the external validity of the study.

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