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Determinants of CapCut Acceptance by Digital Media Students in Universities in China

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Abstract

Purpose: This study investigates the determinants of CapCut acceptance among digital media students in Chinese universities, drawing on a conceptual framework to propose causal relationships among Perceived Usefulness, Perceived Ease of Use, Compatibility, Behavioural Beliefs, Peer Influence, Superior Influence, Normative Beliefs, Attitude, Subjective Norms, and Behavioural Intention. **Research design, data and methodology:** The researcher applied a quantitative method (n = 493), distributing questionnaires to digital media students. A multi-stage nonprobability sampling design was employed: Step I involved purposive sampling to select the Department of Digital Media at three universities; Step II applied stratified sampling to target sophomore and junior students within these departments. Confirmatory Factor Analysis and Structural Equation Modelling assessed model fit, reliability, and validity. **Results:** The results explicated that Perceived Usefulness, Perceived Ease of Use, Compatibility, and Behavioural Beliefs significantly influence students' Attitude towards using the video editing software. Concurrently, Peer Influence, Superior Influence, and Normative Beliefs were found to have an impact on students' Subjective Norms. Furthermore, both Attitude and Subjective Norms emerged as significant predictors of Behavioural Intention. All nine hypotheses were empirically supported. **Conclusions:** Educators, institutions, and developers should enhance usability, compatibility, and social reinforcement to sustain students' CapCut acceptance.

Keywords: CapCut, Reasoned Action Approach, Behavioural Beliefs, Digital Media Students, Chinese Higher Education

JEL Classification Code: I23, O33, D91

1. Introduction

CapCut, a video editing platform developed by ByteDance, has evolved from a mobile-focused casual editing tool into a comprehensive content creation ecosystem. The platform incorporates features such as one-click template generation, AI-driven subtitle recognition, intelligent beat synchronization, and direct publishing capabilities to major Chinese social media networks including TikTok, WeChat, and Rednote (Panit, 2025). Among digital media students at Chinese universities, CapCut has seen rapid adoption for academic assignments, campus media production, and individual self-media initiatives. This extensive uptake is attributable not only to the platform's user-friendly interface but also to its seamless integration with the social media infrastructure that plays a pivotal role in shaping students' creative and professional identities.

The People's Republic of China is home to the world's largest higher education system. In recent years, there has been a rapid expansion of digital media programmes in this country, which has occurred in parallel with the growth of the short-video and content creation sectors. (Kim & Jeong, 2026). Within Guangdong Province, particularly in the Zhanjiang area, several universities maintain well-established digital media departments that offer specializations in animation, photography, and network and new media. Given its dynamic digital content production ecosystem and strong connections to the platform economy, Guangdong serves as a pertinent context for investigating how digital media students assess and adopt video editing technologies. In this setting, a significant tension has arisen:

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although institutional curricula continue to emphasize professional-grade post-production software as essential competencies, students' everyday creative activities are increasingly dominated by CapCut and comparable AI-driven, lightweight tools (Panit, 2025). However, this discrepancy constitutes an unresolved research gap: existing studies have neither systematically examined how students reconcile institutional expectations of professional software proficiency with their preference for lightweight AI tools, nor how this reconciliation shapes the belief-based antecedents of acceptance.

Examining the factors influencing students' acceptance of CapCut provides valuable insights for instructional design, curriculum development, and institutional policy, especially in the context of integrating AI-driven tools into professional media education. Prior technology acceptance research in higher education has predominantly relied on TAM or UTAUT frameworks, which emphasize perceived usefulness and ease of use while overlooking the decomposed belief and normative structures central to reasoned action theories. To address this gap, the present study explores such acceptance through the theoretical frameworks of the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975), the Decomposed Theory of Planned Behaviour (DTPB; Taylor & Todd, 1995), and the Reasoned Action Approach (RAA; Fishbein & Ajzen, 2010). By analysing the belief structures that underpin students' attitudes and subjective norms, the research seeks to identify the principal cognitive and social determinants influencing students' behavioural intentions to utilize CapCut. Utilizing survey data collected from sophomore and junior digital media students at three universities in the Zhanjiang region of Guangdong Province, this study contributes empirical evidence to the relatively underexplored domain of technology acceptance at the nexus of higher education and creative practice.

2. Literature Review

2.1 Theoretical Background

Proficiency in video editing represents a fundamental component of digital media education within Chinese higher education institutions. CapCut, an AI-enhanced, lightweight video editing platform developed by ByteDance, has swiftly transitioned from a mobile-oriented casual editing tool to a comprehensive content creation ecosystem. The platform now features functionalities such as one-click template generation, AI-driven subtitle recognition, intelligent beat-matching algorithms, and direct publishing capabilities to prominent Chinese social media platforms including TikTok, WeChat, and Rednote (Panit, 2025). CapCut's user-friendly, zero-threshold interaction design, AI-assisted editing features, and seamless integration within its platform ecosystem have contributed to its widespread adoption among digital media students for routine creative activities, encompassing coursework, campus media production, and personal self-media projects. Within the context of digital media education, CapCut has been increasingly incorporated into pedagogical practices across various Chinese universities. For instance, Chongqing University has initiated a university-industry collaborative educational initiative entitled " From Tool Application to Deep Participation: CapCut in Media Literacy General Education". This initiative integrates CapCut's operational functionalities into video case creation, thereby enabling students to enhance their theoretical comprehension through experiential learning (Putra & Pradnyana, 2026). Likewise, library workshops at Nanchong Vocational and Technical College employ a dual-faceted approach combining "practical operation and resource provision" to facilitate students' mastery of essential CapCut skills, addressing challenges related to editing in campus event promotion and course assignment production. These institutional endeavours highlight the increasing acknowledgment of CapCut as a valid instructional resource within Chinese higher education. However, there remains a conspicuous lack of systematic empirical research examining the factors influencing students' acceptance of such AI-powered video editing software in the extant literature.

While the Technology Acceptance Model (TAM) has been widely applied to explain technology adoption, the present study does not treat TAM as an independent theoretical framework. Instead, perceived usefulness and perceived ease of use, constructs originally introduced by Davis (1989), are incorporated as decomposed antecedents of attitude within the Decomposed Theory of Planned Behaviour. This approach avoids redundant theoretical exposition while retaining the explanatory value of these two user-perception variables.

The theoretical foundation of this study is structured around three complementary frameworks. The Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975) provides the overarching architecture, positing that attitude (ATT) and subjective norms (SN) are the proximal determinants of behavioural intention (BI); this directly underpins H8 and H9. The Decomposed Theory of Planned Behaviour (DTPB; Taylor & Todd, 1995) further disaggregates the belief antecedents of these two constructs: attitude is decomposed into perceived usefulness, perceived ease of use, compatibility, and behavioural beliefs, corresponding to H1-H4; subjective norms are decomposed into peer influence, superior influence, and normative beliefs, corresponding to H5-H7. The Reasoned Action Approach (RAA; Fishbein & Ajzen, 2010) reinforces the primacy of beliefs, clarifying

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that behavioural beliefs function as the direct cognitive source of attitude (H4) and normative beliefs as the direct cognitive source of subjective norms (H7), while the decomposed belief sets collectively shape the higher-order constructs. This layered integration eliminates conceptual overlap and ensures that each theoretical strand maps explicitly onto the hypothesised paths, rather than being presented as parallel but disconnected frameworks.

2.2 Conceptual Framework and Hypotheses

The conceptual framework guiding this research is derived from an integration of three sequential theoretical models within the reasoned action paradigm. Initially, the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975) posits that attitude (ATT) and subjective norms (SN) serve as immediate predictors of behavioural intention (BI). Subsequently, the Decomposed Theory of Planned Behaviour (DTPB; Taylor & Todd, 1995) advances this framework by further delineating the attitudinal and normative components: ATT is subdivided into perceived usefulness (PU), perceived ease of use (PEOU), compatibility (CO), and behavioural beliefs (BB), whereas SN is partitioned into peer influence (PI), superior influence (SI), and normative beliefs (NB). Finally, the Reasoned Action Approach (RAA; Fishbein & Ajzen, 2010) reinforces the central role of belief structures, asserting that behavioural and normative beliefs constitute the essential cognitive foundations from which ATT and SN emerge. The resulting conceptual framework, depicted in Figure 1, synthesizes these three theoretical perspectives into a cohesive structural model encompassing ten latent constructs interconnected by nine hypothesized causal relationships.

Based on the above models and theories, this research developed a conceptual framework as shown in Figure 1.

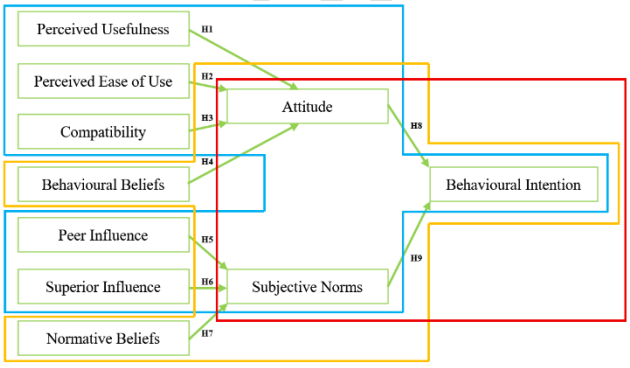

Figure 1: Conceptual Framework

The hypotheses related to the extracted elements are as follows:

H1: Perceived Usefulness has significant impact on students' Attitude in using CapCut.

H2: Perceived Ease of Use has significant impact on students' Attitude in using CapCut.

H3: Compatibility has significant impact on students' Attitude in using CapCut.

H4: Behavioural Beliefs have significant impact on students' Attitude in using CapCut.

H5: Peer Influence has significant impact on students' Subjective Norms in using CapCut.

H6: Superior Influence has significant impact on students' Subjective Norms in using CapCut.

H7: Normative Beliefs have significant impact on students' Subjective Norms in using CapCut.

H8: Attitude has significant impact on students' Behavioural Intention in using CapCut.

H9: Subjective Norms has significant impact on students' Behavioural Intention in using CapCut.

This study seeks to examine the factors influencing digital media students' Behavioural Intention (BI) to utilize CapCut as a video editing application within university environments. The proposed framework posits that PU (H1), PEOU (H2), CO (H3), and BB (H4) exert direct influences on ATT, while PI (H5), SI (H6), and NB (H7) exert direct influences on SN. In turn, ATT (H8) and SN (H9) are hypothesized to significantly predict BI.

3. Research Methods and Materials

3.1 Methodology

The researcher employed a quantitative methodology, utilizing a structured questionnaire as the principal instrument for data collection. The survey was administered through both online means, via the WJX platform, and offline in a paper-based format to a targeted sample comprising sophomore and junior students enrolled in the Department of Digital Media at three selected universities in Guangdong Province. The questionnaire was divided into three distinct sections. The initial section included screening questions aimed at confirming that respondents were digital media majors within the specified academic year cohorts. The second section operationalized ten latent constructs, Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Compatibility (CO), Behavioural Beliefs (BB), Peer Influence (PI), Superior Influence (SI), Normative Beliefs (NB), Attitude (ATT), Subjective Norms (SN), and Behavioural Intention (BI), measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement items for each construct were adapted

from previously validated instruments established in prior research based on the Decomposed Theory of Planned Behaviour (DTPB) and the Reasoned Action Approach (RAA). The final section gathered demographic data, including academic major, gender, and frequency of CapCut usage.

For the pilot study, content validity was evaluated through expert assessment using the index of item-objective congruence (IOC). Subsequently, a pilot survey was conducted with 30 participants drawn from the target population. The internal consistency of all constructs was confirmed, as indicated by Cronbach's alpha coefficients exceeding the 0.70 benchmark. Following the reliability assessment, the finalized questionnaire was administered to the intended respondents, yielding 493 valid responses after data screening. The dataset was analysed utilizing SPSS AMOS version 26.0. Confirmatory Factor Analysis (CFA) was then conducted to assess convergent validity, discriminant validity, composite reliability, and overall model fit. Finally, Structural Equation Modelling (SEM) was applied to examine the nine hypothesized causal relationships among the study variables.

3.2 Population and Sample Size

The study's target population consisted of sophomore and junior undergraduate students enrolled in the Department of Digital Media at three universities situated in the Zhanjiang region of Guangdong Province, China. These cohorts were selected because students at these academic levels have completed foundational coursework in video production and possess considerable practical experience in content creation, thereby enabling them to provide well-informed responses regarding the use of CapCut. A multi-stage nonprobability sampling strategy was implemented. Initially, purposive sampling was utilized to identify three universities with established digital media programs that include specialized courses in post-production and editing. Subsequently, stratified sampling was performed within each institution, with students categorized by academic year (sophomore and junior) to ensure proportional representation of these key cohorts. According to Kline (20 1 1), a minimum sample size of 475 respondents is recommended for structural equation Modelling studies involving models of similar complexity. The survey was administered to 500 potential participants, and after a thorough data screening process, 493 valid responses were retained for analysis. This sample size surpasses the recommended minimum, thereby providing sufficient statistical power for the ensuing Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA) procedures.

3.3 Sampling Technique

The researcher utilized a multi-stage non-probability sampling strategy to recruit participants from the target population. It is important to clarify that although a stratified allocation procedure was applied, the overall design remains non-probability in nature because the first stage relied on purposive selection of universities and the final stage relied on convenience-based recruitment. Consequently, the findings should not be interpreted as statistically representative of the entire Chinese digital media student population. In the initial stage, purposive sampling was employed to select three universities located in the Zhanjiang region of Guangdong Province, each of which maintains established Departments of Digital Media with specialized curricula focused on video post-production and digital content creation. This selection criterion ensured that all participating institutions shared a comparable educational framework and pedagogical emphasis on digital media training.

In the subsequent stage, stratified sampling was implemented within each of the three selected universities. The stratification variable was academic year, specifically targeting sophomore and junior cohorts, as students at these levels have acquired sufficient exposure to both formal editing coursework and independent content creation activities, enabling them to provide informed insights regarding the use of CapCut. Population data for the six strata, defined by the intersection of university and academic year, were obtained from departmental enrolment records, totalling 1,014 students. The sample size for each stratum was determined proportionally according to the formula: Sample Size ≈ (n / 1,014) × 500, where "n" represents the population size of the respective stratum. The resulting sample allocation is detailed in Table 1. However, it must be stressed that within each stratum, respondents were not selected through random procedures. Instead, participation was voluntary, meaning that the stratified allocation served as a quota mechanism rather than as probability-based stratified random sampling. This distinction has direct implications for the external validity of the findings.

Table 1: Number of Population and Sample Size

Academic disciplines	School	Grade	Population Size= n	Sample Size ≈ (n / 1014) *500
Digital Media Art	University 1	Sophomore	181	89
		Junior	214	103
	University 2	Sophomore	144	70
		Junior	143	70
	University 3	Sophomore	154	76
		Junior	178	85
Total			1014	493

Source: Created by the author

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After establishing stratum-specific quotas, the online questionnaire was administered to participants. The survey link, hosted on the WJX platform, was disseminated through two principal channels: official email invitations distributed via departmental academic affairs offices, and class-specific WeChat groups corresponding to each sampled grade cohort within the respective universities. This dual-channel dissemination approach was implemented to optimize coverage and enhance response rates across all strata. The data collection phase extended over a one-month period, during which two reminder notifications were sent through the same channels to prompt participation among initial non-respondents. Upon the conclusion of the survey period, all collected responses underwent a rigorous screening process, wherein incomplete questionnaires, patterns indicative of straight-lining, and responses from individuals outside the targeted academic year cohorts were excluded. Out of 500 distributed questionnaires, 493 valid responses were retained post-screening, resulting in an effective response rate of 98.6%, consistent with the proportional allocations delineated in the sampling framework.

In addition to the limitations associated with non-probability sampling, the present study relied exclusively on self-reported questionnaire data collected at a single time point. This cross-sectional design raises the possibility of common method bias, as both predictor and criterion variables were measured using the same instrument and source. To mitigate interpretive concerns, Harman's single-factor test was not conducted in the current analysis; however, future research should consider temporal separation of measurements, collection of objective usage data, or inclusion of marker variables to formally assess and control for common method variance. Given these methodological constraints, the results are most appropriately generalized to digital media students in institutions with comparable regional, demographic, and curricular characteristics, rather than to the national population as a whole.

4. Results and Discussion

4.1 Demographic Information

Table 2 presents a summary of the demographic characteristics of the 493 valid respondents. The sample was evenly distributed between academic year levels, with sophomores comprising 49.9% (n = 246) and juniors 50.1% (n = 247), consistent with the proportional allocation ensured by the stratified sampling method. Regarding academic specialization, participants were drawn from three distinct tracks within the digital media field: Animation represented the largest subgroup at 36.5% (n = 180), followed by Photography at 32.7% (n = 161), and Network and New Media at 30.8% (n = 152). In terms of gender composition, female respondents accounted for 55.0% (n = 271), while males constituted 45.0% (n = 222). Concerning the frequency of CapCut usage, the majority of respondents reported using the software 3-4 times per week (29.6%, n = 146), followed by daily users (26.6%, n = 131), those using it 5-6 times per week (21.9%, n = 108), and those using it 1-2 times per week (21.9%, n = 108). This distribution indicates that over 78% of the sample engage with CapCut at least three times weekly, reflecting a substantial habitual integration of the platform into their routine content creation activities.

Table 2: Demographic Profile

Demographic and Behaviour Data (N=493)		Frequency	Percentage
Grade	Sophomore	246	49.9%
	Junior	247	50.1%
Major	Animation	180	36.5%
	Photography	161	32.7%
	Network and New Media	152	30.8%
Gender	Male	222	45.0%
	Female	271	55.0%
Frequency	1-2times one week	108	21.9%
	3-4times one week	146	29.6%
	5-6times one week	108	21.9%
	Every day	131	26.6%

Source: Created by the author

4.2 Confirmatory Factor Analysis (CFA)

A confirmatory factor analysis (CFA) was conducted using SPSS AMOS 26.0 to evaluate the measurement model comprising ten latent constructs. Prior to model estimation, the dataset was screened for missing data, outliers, and violations of multivariate normality. The missing data were found to be negligible, with less than 2% of items missing across all categories. This issue was addressed through listwise deletion, a recommended approach for covariance-based Structural Equation Modelling (SEM) when missingness is minimal and completely at random (Kline, 2011). In accordance with Hair et al. (2010), the model demonstrated acceptable goodness-of-fit indices, and all items loaded significantly on their designated factors, with standardized loadings ranging from 0.679 to 0.885, well above the 0.50 threshold, thereby providing preliminary evidence of convergent validity. Composite reliability (CR) and Cronbach's alpha values universally exceeded the 0.70 benchmark (CR: 0.785-0.932; α: 0.751-0.911), confirming internal consistency reliability. Furthermore, average variance extracted (AVE) estimates for all constructs surpassed 0.50, ranging from 0.550 (Peer Influence) to 0.741 (Behavioural Intention), thereby establishing convergent validity as defined by Fornell and Larcker (1981). A summary of these results of the study is presented in Table 3.

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Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Perceived Usefulness (PU)	Al-Adwan et al. (2023)	4	0.903	0.771-0.857	0.883	0.654
Perceived Ease of Use (PEOU)	Al-Adwan et al. (2023)	4	0.791	0.735-0.806	0.856	0.597
Compatibility (CO)	Wang and Lin (2021)	4	0.833	0.761-0.785	0.857	0.600
Behavioural Beliefs (BB)	Al-Gahtani (2016)	5	0.785	0.834-0.885	0.932	0.733
Peer Influence (PI)	Ahmed and Ward (2016)	3	0.911	0.679-0.793	0.785	0.550
Superior Influence (SI)	Ahmed and Ward (2016)	3	0.794	0.701-0.790	0.793	0.561
Normative Beliefs (NB)	Anani et al. (2025)	4	0.813	0.761-0.809	0.864	0.614
Attitude (ATT)	Alshurafat et al. (2021)	4	0.751	0.783-0.830	0.883	0.653
Subjective Norms (SN)	Lai et al. (2022)	4	0.758	0.757-0.785	0.859	0.604
Behavioural Intention (BI)	Al-Adwan et al. (2023)	4	0.843	0.858-0.864	0.920	0.741

Note: CR = Composite Reliability, AVE = Average Variance Extracted
Source: Created by the author

Discriminant validity was evaluated by comparing the square root of the average variance extracted (AVE) for each construct with the correlations between constructs. As shown in Table 4, the square root of the AVE for each construct (indicated in bold along the diagonal) was greater than its correlations with all other constructs, thereby satisfying the Fornell and Larcker (1981) criterion for discriminant validity. For example, the square root of the AVE for Behavioural Intention (BI) was 0.882, which notably exceeded its highest correlation with any other construct, specifically 0.500 with Attitude (ATT). Similarly, the square root of the AVE for Behavioural Beliefs (BB) was 0.856, surpassing its highest inter-construct correlation of 0.398 with BI. These findings demonstrate that each construct shares a greater proportion of variance with its own indicators than with those of other constructs, thus confirming discriminant validity.

Table 4: Discriminant Validity

	PU	PEOU	CO	BB	PI	SI	NB	ATT	SN	BI
PU	**0.809**									
PEOU	0.205	**0.773**								
CO	0.322	0.258	**0.775**							
BB	0.324	0.173	0.281	**0.856**						
PI	0.167	0.196	0.217	0.244	**0.742**					
SI	0.208	0.229	0.255	0.164	0.221	**0.749**				
NB	0.246	0.186	0.267	0.253	0.368	0.334	**0.784**			
ATT	0.354	0.328	0.388	0.368	0.253	0.205	0.342	**0.808**		
SN	0.187	0.257	0.272	0.337	0.318	0.328	0.460	0.351	**0.777**	
BI	0.337	0.292	0.335	0.398	0.269	0.242	0.299	0.500	0.380	**0.882**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author

Table 5 presents the goodness-of-fit indices for the measurement model. The results indicate an excellent fit between the model and the data, as evidenced by a CMIN/DF value of 1.123, which is well below the recommended threshold of 5.00 (Al-Mamary & Shamsuddin, 2015; Collier, 2020). Additionally, the model achieved a GFI of 0.931, surpassing the 0.85 benchmark and an AGFI of 0.918, exceeding the 0.80 criterion (Sica & Ghisi, 2007). The NFI, CFI, and TLI values were 0.936, 0.993, and 0.992, respectively, all of which are substantially above the 0.80 cut-off (Bentler, 1990; Sharma et al., 2005; Wu & Wang, 2006). Furthermore, the RMSEA was 0.016, considerably lower than the maximum acceptable value of 0.08 (Pedroso et al., 2016). Collectively, these indices confirm that the measurement model fits the data adequately, thereby supporting the validity of the construct structure and enabling the subsequent analysis of the structural model.

Table 5: Goodness of Fit for Confirmatory Factor Analysis (CFA)

Index	Acceptable Values	Statistical Values
CMIN/DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Collier, 2020)	737.558/657 or 1.123
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.931
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.918
NFI	≥ 0.80 (Wu & Wang, 2006)	0.936
CFI	≥ 0.80 (Bentler, 1990)	0.993
TLI	≥ 0.80 (Sharma et al., 2005)	0.992

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Index	Acceptable Values	Statistical Values
RMSEA	< 0.08 (Pedroso et al., 2016)	0.016
Model summary		**Acceptable Model Fit**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness of fit index, AGFI = Adjusted goodness of fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis's index, and RMSEA = Root means square error of approximation
Source: Created by the author

4.3 Structural Equation Model (SEM)

Structural Equation Modelling (SEM) was utilized to examine and confirm the causal relationships among the latent variables delineated in the conceptual framework. The SEM analysis was performed using SPSS AMOS version 26.0, which incorporates measurement error into the estimation of structural parameters, thereby enhancing the precision of the parameter estimates (Hair et al., 2010). Prior to structural model estimation, the same data screening procedures described in the CFA section were applied and verified. To evaluate the adequacy of the hypothesized model in representing the observed covariance matrix of the sample data, various goodness-of-fit indices were examined. The Structural Equation Model (SEM) Path Diagram of the Study. The fit indices for the structural model are summarized in Table 6. The chi-square to degrees of freedom ratio (CMIN/DF) was 1.819, which is well below the recommended maximum threshold of 5.00, indicating an acceptable model fit (Al-Mamary & Shamsuddin, 2015; Co llier, 2020). The Goodness of Fit Index (GFI) was 0.867, exceeding the acceptable criterion of 0.85 , while the Adjusted Goodness of Fit Index (AGFI) was 0.851, surpassing the benchmark of 0.80 (Sica & Ghisi, 2007). The Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) were 0.947 and 0.944, respectively, both exceeding the recommended threshold of 0.90, indicative of excellent incremental fit (Hair et al., 2010). The Normed Fit Index (NFI) was 0.890, which is above the acceptable level of 0.80 (Wu & Wang, 2006). Lastly, the Root Mean Square Error of Approximation (RMSEA) was 0.041, falling below the upper limit of 0.08, suggesting a good fit with reasonable approximation errors in the population (Pedroso et al., 2016). Collectively, these fit indices demonstrate that the structural model adequately fits the empirical data, thereby validating both the measurement and structural components of the model and allowing for the meaningful interpretation of the path coefficients.

Table 6: Goodness of Fit for Structural Equation Model (SEM)

Index	Acceptable Values	Statistical Values
CMIN/DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Collier, 2020)	1260.621 or 1.819
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.867
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.851
NFI	≥ 0.80 (Wu & Wang, 2006)	0.890
CFI	≥ 0.90 (Hair et al., 2010)	0.947
TLI	≥ 0.90 (Hair et al., 2010)	0.944
RMSEA	< 0.08 (Pedroso et al., 2016)	0.041
Model summary		**Acceptable Model Fit**

Source: Created by the author

4.4 Research Hypothesis Testing Result

The research model was evaluated by analysing the significance of the standardized path coefficients corresponding to each hypothesized relationship. As shown in Table 7, the findings demonstrate empirical support for all nine hypotheses at a significance threshold of $p < 0.05$. The standardized path coefficients indicate the relative magnitude of influence exerted by each predictor within the structural model. Within the attitudinal pathway, Compatibility (CO) exerted the most pronounced effect on Attitude (ATT), with a standardized coefficient of $\beta = 0.273$, followed by Behavioural Beliefs (BB) at $\beta = 0.267$, Perceived Ease of Use (PEOU) at $\beta = 0.256$, and Perceived Usefulness (PU) at $\beta = 0.232$. Regarding the normative pathway, Normative Beliefs (NB) had the strongest impact on Subjective Norms (SN), with a coefficient of $\beta = 0.423$, succeeded by Superior Influence (SI) at $\beta = 0.232$ and Peer Influence (PI) at $\beta = 0.190$. In predicting Behavioural Intention (BI), Attitude (ATT) emerged as the most influential predictor with $\beta = 0.474$, whereas Subjective Norms (SN) also contributed a statistically significant but comparatively moderate effect, with $\beta = 0.256$.

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Table 7: Hypothesis Result of the Structural Model

Hypothesis	Paths	Standardized path coefficient (β)	S.E.	t-value	Testing result
H1	PU > ATT	0.232	0.040	4.941*	Supported
H2	PEOU > ATT	0.256	0.045	5.305*	Supported
H3	CO > ATT	0.273	0.046	5.609*	Supported
H4	BB > ATT	0.267	0.041	5.788*	Supported
H5	PI > SN	0.190	0.047	3.758*	Supported
H6	SI > SN	0.232	0.049	4.540*	Supported
H7	NB > SN	0.423	0.052	8.040*	Supported
H8	ATT > BI	0.474	0.052	9.593*	Supported
H9	SN > BI	0.256	0.048	5.480*	Supported

Note: *p<0.05
Source: Created by the author

Table 7 delineates the decomposed antecedents of attitude and subjective norms. Perceived Usefulness (PU) exerts a significant positive effect on Attitude ($\beta = 0.232$, $t = 4.941$, $p < 0.05$), consistent with the findings of Davis (1989) and extending its applicability to the adoption of CapCut among digital media students. Those students who perceive the software as enhancing their editing efficiency and social media performance tend to develop more favourable attitudes toward its use. Similarly, Perceived Ease of Use (PEOU) significantly influences Attitude ($\beta = 0.256$, $t = 5.305$, $p < 0.05$), corroborating Taylor and Todd's (1995) Decomposed Theory of Planned Behaviour (DTPB) assertion that a reduction in cognitive effort fosters positive attitudinal orientations. Features of CapCut such as drag-and-drop functionality, AI-generated subtitles, and automated music synchronization effectively reduce psychological barriers traditionally associated with editing software. The compatibility of the software demonstrated the strongest impact on users' Attitudes ($\beta = 0.273$, $t = 5.609$, $p < 0.05$), thereby supporting Rogers' (2003) diffusion of innovations theory. The seamless integration of CapCut with China's social media platforms, including WeChat, TikTok, BiliBili, and Rednote, creates an ecological embeddedness that reinforces users' attitudinal preferences. Furthermore, Behavioural Beliefs significantly predict Attitude ($\beta = 0.267$, $t = 5.788$, $p < 0.05$), affirming the Reasoned Action Approach (RAA) premise that belief structures constitute the cognitive foundation of attitudes (Fishbein & Ajzen, 2010). Career-related beliefs, such as enhanced prospects for internships and employment, serve as potent drivers of positive attitudes.

Regarding normative influences, Peer Influence significantly affects Subjective Norms ($\beta = 0.190$, $t = 3.758$, $p < 0.05$), albeit with the smallest normative coefficient observed. This finding aligns with Bandura's (1986) social cognitive theory, suggesting that peer Modelling and vicarious reinforcement primarily disseminate through informal social media interactions rather than explicit social pressure. Superior Influence also significantly shapes

Subjective Norms ($\beta = 0.232$, $t = 4.540$, $p < 0.05$), providing empirical support for the concept of "implicit authoritative guidance," whereby instructor endorsement, classroom demonstrations, and CapCut-related grading practices convey authority-based normative cues. Normative Beliefs exert the most substantial influence on Subjective Norms ($\beta = 0.423$, $t = 8.040$, $p < 0.05$), consistent with the RAA's proximal cognitive mechanism. This pronounced effect indicates that internalized expectations from significant

5. Conclusions and Recommendation

5.1 Conclusions

This study investigated the determinants of digital media students' acceptance of CapCut as a video editing application within Chinese higher education. The conceptual model integrates the Theory of Reasoned Action, the Decomposed Theory of Planned Behaviour, and the Reasoned Action Approach into a dual pathway framework. Four decomposed attitudinal antecedents (i.e. Perceived Usefulness, Perceived Ease of Use, Compatibility, and Behavioural Beliefs) are hypothesised to shape Attitude, while three normative antecedents (i.e. Peer Influence, Superior Influence, and Normative Beliefs) are posited to determine Subjective Norms. It is predicted that both Attitude and Subjective Norms will predict Behavioural Intention. A CFA-validated questionnaire was administered to a stratified sample of 493 sophomore and junior digital media students from three universities in Zhanjiang, Guangdong, and structural equation modelling tested the nine hypothesized paths.

The empirical results substantiate several key mechanisms. First, within the attitudinal pathway, all four antecedents exhibited significant positive effects, with

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Compatibility emerging as the strongest predictor (β = 0.273), followed by Behavioural Beliefs (β = 0.267), Perceived Ease of Use (β = 0.256), and Perceived Usefulness (β = 0.232). This hierarchy indicates that CapCut's seamless integration with China's social media infrastructure and students' career-oriented outcome expectations outweigh conventional functional and cognitive drivers in attitude formation, empirically anchoring the "ecological compatibility dominance" proposition. The pre-eminence of compatibility warrants a more profound theoretical interpretation. In contrast to constructs such as perceived usefulness or ease of use, which are predominantly tool-centric in nature, compatibility encompasses the extent to which a technology aligns with the user's pre-existing sociotechnical ecosystem. In this context, the TikTok-WeChat-Rednote platform continuum represents the prevailing creative infrastructure of Chinese digital media students. In the context of higher education, where the creation of content is not merely a curricular task but a continuous performance of identity, the primary evaluative lens becomes the compatibility of a tool with platform conventions, publishing workflows, and peer-validated aesthetics. It is evident that CapCut's integration within the platform economy does not merely serve to minimise friction; rather, it operates to redefine the parameters of what constitutes a legitimate and effective creative practice. This, in turn, has the most profound effect on the formation of attitudes. Second, in the normative pathway, Normative Beliefs exerted the most pronounced influence (β = 0.423), substantially exceeding Superior Influence (β = 0.232) and Peer Influence (β = 0.190). The present study seeks to contribute to the extant literature on the "norm convergence effect" by exploring the relationship between internalised expectations and the influence of social pressure on subjective norms. Third, Attitude (β = 0.474) was a markedly stronger predictor of Behavioural Intention than Subjective Norms (β = 0.256), aligning with meta-analytic evidence that personal evaluative dispositions surpass perceived social pressures in personal technology adoption. This finding also reflects the specific nature of CapCut adoption: it is a discretionary, individually enacted behaviour embedded in students' personal creative routines, rather than a collective or institutionally mandated practice. In such contexts, attitudinal conviction, rooted in personal outcome expectancies and perceived fit, tends to dominate social approval mechanisms. Furthermore, as Subjective Norms have already converged into a positive consensus, as indicated by the high mean scores and the strong NB → SN path, the incremental predictive power of social pressure is naturally attenuated. Once normative expectations are uniformly favourable, individual intention variation is driven primarily by how strongly one personally evaluates the behaviour. This interpretation serves to enhance the comprehension of the reasons underlying the observation that the attitudinal route exerted the quantitatively more substantial total effect on the formation of intention. Fourth, the complete validation of all nine hypothesized pathways confirms the applicability of the RAA-based decomposed belief-attitude-norm-intention model to AI-embedded editing tool uptake in Chinese higher education, providing systematic empirical grounding for the hypothesized belief restructuring processes.

In order to contextualize these findings within the broader landscape of recent AI technology adoption research, it is instructive to compare the present results with studies examining the acceptance of generative AI tools such as ChatGPT and AIGC platforms. For instance, Albayati (2024) found that perceived usefulness and social influence were primary drivers of ChatGPT adoption among university students, while Al-Adwan et al. (2023) reported that hedonic motivation and facilitating conditions significantly predicted behavioural intention in AI chatbot use. The extant literature, predominantly grounded in TAM/UTAUT variants, has a consistent tendency to privilege utility and social influence, whilst frequently conceptualising compatibility as an undifferentiated facilitating condition. In contrast, the present RAA-based decomposition demonstrates that when AI tools are deeply woven into existing platform ecosystems and creative identities, compatibility emerges as a distinct and dominant antecedent. This insight has been largely obscured by conventional acceptance models. Furthermore, whereas recent AIGC acceptance studies frequently report non-significant effects for perceived ease of use or perceived risk, the present studies fully supported attitudinal pathway underscores the explanatory advantage of decomposing belief structures rather than relying on aggregated TAM constructs. This comparison not only reinforces the theoretical contribution of the study but also suggests that the relative importance of acceptance determinants may shift as AI tools transition from general-purpose assistants to domain-specific creative infrastructure. Collectively, these findings validate the decomposed RAA framework as a robust explanatory model and empirically elucidate how exposure to AI-powered lightweight editing tools reshapes the belief structures underlying acceptance.

5.2 Recommendation

Given the primacy of Compatibility and Normative Beliefs, pedagogical interventions should transcend technical skill transmission toward "belief-oriented pedagogy." Instructors are encouraged to design comparative assignments that require students to systematically evaluate output quality, workflow flexibility, and creative control between CapCut and professional-grade

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tools, thereby strengthening the behavioural belief that professional functionality retains career-relevant value. Faculty development programs must equip instructors to recognize and address "implicit authoritative guidance": when demonstrations and grading rubrics tacitly normalize CapCut as the default instrument, the resulting normative signal may inadvertently accelerate the erosion of professional tool literacy. At the institutional level, policymakers should pursue educational licensing partnerships with professional software vendors to ensure legitimate access to industry-standard tools and simultaneously design instructional modules foregrounding the cognitive logic of professional post-production workflows rather than mere operational proficiency. Moreover, student peer networks and video creation clubs represent potent channels for normative reinforcement; harnessing these informal structures for peer-led professional tool workshops may partially counterbalance the positive stigmatization of lightweight AI tools. These recommendations offer actionable guidance for realigning pedagogical objectives, social normative environments, and institutional resource allocation to cultivate a balanced digital literacy that integrates the creative accessibility of AI-powered tools with the foundational competencies demanded by professional practice.

5.3 Limitation and Further Study

Several limitations qualify the present findings and open productive avenues for subsequent inquiry. First, the sample was restricted to sophomore and junior digital media students from three universities in Zhanjiang, Guangdong, constraining generalizability; future research should replicate the RAA-based framework across diverse institutional types and provinces to assess the cross-contextual stability of the path coefficients. Second, the cross-sectional design precludes causal inference regarding the temporal dynamics of attitude and norm formation; longitudinal or panel designs tracking a cohort from freshman to senior year would permit examination of how behavioural beliefs evolve with cumulative CapCut exposure and whether the SN-behaviour isomorphism intensifies or attenuates over time. Thirdly, the exclusive focus on CapCut limits scope; extending the framework to other AI embedded creative tools, such as AI-powered illustration platforms, text-to-video generators, or music composition applications, would clarify whether the observed belief restructuring and norm convergence effects are specific to a particular tool or whether they can be generalised across the broader landscape of AI-assisted content creation. Fourth, reliance on self-reported Likert-scale measures may introduce common method bias; future studies should incorporate behavioural trace data (e.g., software usage logs) to triangulate self-reports with objective indicators. Fifth, the propositions concerning "tool substitutability belief inhibition" and "AI-ease reconstructing professionalism cognition" were not directly tested as moderated relationships; operationalizing prior CapCut usage frequency or cumulative editing hours as moderators could formally assess whether high-frequency AI-tool exposure attenuates the PU → ATT and BB → ATT pathways. Finally, qualitative or mixed-methods designs employing in-depth interviews, focus groups, or digital ethnography within student creative communities could illuminate the micro-social processes through which peer-generated visual symbolic displays on platforms such as WeChat Moments and Rednote are translated into normative beliefs, thereby enriching the quantitative structural model with deeper explanatory texture.

References

Ahmed, E., & Ward, R. (2016). Analysis of factors influencing acceptance of personal, academic and professional development e-portfolios. *Computers in Human Behavior*, *63*, 152-161.

Al-Adwan, A. S., Li, N., Al-Adwan, A., Abbasi, G. A., Albelbisi, N. A., & Habibi, A. (2023). Extending the technology acceptance model (TAM) to predict university students' intentions to use metaverse-based learning platforms. *Education and information technologies*, *28*(11), 15381-15413

Albayati, H. (2024). Investigating undergraduate students' perceptions and awareness of using ChatGPT as a regular assistance tool: A user acceptance perspective study. *Computers and Education: Artificial Intelligence, 6*, 100203.

Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. *Applied Computing and Informatics, 12*(1), 27-50.

Al-Mamary, Y. H., & Shamsuddin, A. (2015). Testing of the technology acceptance model in context of Yemen. *Mediterranean Journal of Social Sciences, 6*(4), 268-273.

Alshurafat, H., Al Shbail, M. O., Masadeh, W. M., Dahmash, F., & Al-Msiedeen, J. M. (2021). Factors affecting online accounting education during the COVID-19 pandemic: an integrated perspective of social capital theory, the theory of reasoned action and the technology acceptance model. *Education and Information Technologies, 26*(6), 6995-7013.

Anani, G. E., Nyamekye, E., & Bafour-Koduah, D. (2025). Determinants of Postgraduate Students′ Use of Artificial Intelligence (AI) in Academic Writing in Ghana: A Structural Equation Modelling Analysis. *Human Behavior and Emerging Technologies, 2025*(1), 9943540.

Bandura, A. (1986). Social foundations of thought and action. En glewood Cliffs, NJ, 1986(23-28), 2.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin*, *107*(2), 238.

Collier, J. (2020). *Applied structural equation modeling using AMOS: Basic to advanced techniques*. Routledge.

AU-GSB E-JOURNAL

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340. https://doi.org/10.2307/249008

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley.

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. Psychology Press. https://doi.org/10.4324/9780203838020

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equatio n models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis.

Kim, S., & Jeong, H. S. (2026). Coconstructing Critical and Digit al Media Literacies Through Creative Pedagogies: A Case Stu dy in a South Korean Elementary Classroom. *Literacy*, *60*(2), e70037.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.

Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behavior prediction. *Computers & Education*, *179*, 104413.

Panit, N. M. (2025). Can critical thinking and AI work together? Observations of science, Mathematics, and language instructors. *Environment & Social Psychology*, *9*(11), 3141-3157.

Pedroso, R., Zanetello, L., Guimarães, L., Pettenon, M., Gonçalves, V., Scherer, J., & Pechansky, F. (2016). Confirmatory factor analysis (CFA) of the crack use relapse scale (CURS). *Archives of Clinical Psychiatry (São Paulo)*, *43*(3), 37-40.

Putra, I. G. W. M. N., & Pradnyana, P. G. M. V. (2026). E nhancing Students' Storytelling Creativity through CapCut -Based Video Editing Training: A Case Study at SMA N egeri 1 Semarapura. *ABDIMAS: Jurnal Pengabdian Masy arakat*, *9*(2), 846-856.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Sharma, G. P., Verma, R. C., & Pathare, P. (2005). Mathematical Modelling of infrared radiation thin layer drying of onion slices. *Journal of Food Engineering, 71*(3), 282-286.

Sica, C., & Ghisi, M. (2007). The Italian versions of the beck anxiety inventory and the beck depression inventory-ii: psychometric properties and discriminant power.

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research, 6*(2), 144-176.

Wang, W. T., & Lin, Y. L. (2021). The relationships among students' personal innovativeness, compatibility, and learning performance. *Educational Technology & Society*, *24*(2), 14-27.

Wu, J. H., & Wang, Y. M. (2006). Measuring kms success: a respecification of the delone and mclean's model. *Information & Management, 43*(6), 728-739.

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