The Impact of Perceived Usefulness and Electronic Word of Mouth on the Behavioral Intension to Adopt Tiktok App Through the Moderating Role of Personality Traits

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Abstract
The global popularity of TikTok App has received significant interest from both users and marketing professionals. This research investigates the impact of perceived usefulness and electronic word of mouth (E-WOM) on users' behavioral intentions to use the TikTok App application. Additionally, the study examines the moderating effect of personality traits on this relationship. In conducting quantitative research, participants were selected from active social media users. The findings reveal that perceived usefulness and E-WOM are key antecedents influencing the intention to use TikTok. However, the strength of these relationships is moderated by certain personality traits, such as extraversion and openness. This study highlights the importance of segmenting individuals based on personality traits for targeted marketing strategies. Structural equation modelling was employed to analyze data from 300 social media users in South Punjab.
Keywords: Perceived Usefulness, Electronic Word of Mouth, Perceived Usefulness, and Social Media, Adopt TikTok App and Behavioral Intension.

1. Background of Study

The perceptions and experiences of customers are significantly influenced by the quality of online services. According to AlBalushi (2021), factors such as website design, assurance, functionality, dependability, and timeliness are critical in evaluating e-service quality. For firms to establish a successful online presence, it is crucial to understand and optimize e-service quality. Digital marketing strategies encompass a wide range of online platforms and techniques aimed at attracting, engaging, and converting digital customers. Kundu (2021), notes that effective digital marketing involves the strategic use of various channels, including social media, email marketing, and SEO. In a market driven by digital means, it is essential to explore how digital marketing impacts consumer satisfaction. According to Zia, Younus et al. (2021), brand equity and consumer loyalty are fundamentally based on brand awareness. In the age of technology, having a dependable and identifiable presence on the internet is essential to building and preserving brand recognition. The relevance of brand awareness in the context of digital marketing tactics is highlighted by the relationship it has with customer happiness. To shape the link between "e-service quality, digital marketing, brand recognition, and customer happiness, brand loyalty is an important moderator variable". Consumers' perceptions of and reactions to offered digital tactics and services may be influenced by their brand loyalty (Samarah, Bayram et al. 2022).

There is an abundance of studies on specific areas of digital marketing, brand recognition, e-service quality, and customer happiness; but, a comprehensive knowledge of how these variables work together to impact consumer satisfaction in a digital environment is still lacking. By examining the connections between e-service quality, digital marketing tactics, brand awareness, and their combined influence on customer satisfaction — with a special emphasis on the moderating function of brand loyalty - this study seeks to close this knowledge gap.

Organizations face the difficulty of managing the complex linkages among "Perceived Usefulness, EWOM, Perceived Playfulness, Social Media Influencer Marketing in the fast-paced world of modern business". There is still a fundamental study gap in our understanding of how these elements together affect Behavioral Intention and how Personal Traits play a moderating influence. To fill this gap, this study will examine "Perceived Usefulness, EWOM, Perceived Playfulness, and Social Media Influencer Marketing and evaluate how they together affect Behavior Intention while taking Personal Traits into account as a moderating factor".

The subtle aspects of Perceived Usefulness and their particular influence on Behavior Intention to Adopt TikTok remain little understood, considering the growing dependence on digital media (Jing, bin S Senathirajah et al. 2023). It is still urgently necessary to investigate how, in the light of digital relationships, Perceived Usefulness affects total Behavior Intention. Knowing how well Perceived Playfulness subsequently affects Behavior Intention to Adopt TikTok is essential in the digital era when users of social media are flooded with information (Kotler 2017). More study is necessary to fully understand the complex mechanisms by which social media techniques affect users and their loyalty. It is commonly known that EWOM plays a significant role in affecting Behavior Intention (Rahmawan and Suwitho 2023). However, there is much to learn about the complicated relationship between Perceived Usefulness, EWOM, and Perceived Playfulness, Social Media Influencer Marketing in the

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light of digital media and how it affects Behavior Intention to Adopt Tiktok. A key component of business achievement is the strong digital marketing of companies by upgrading social media platforms (Hamzah and Shamsudin 2020). Analyzing how Perceived Usefulness, EWOM, Perceived Usefulness, and Social Media Influencer Marketing all interact to shape Behavior Intention offers a thorough grasp of the forces influencing Social Media Users' tastes and opinions in the world of technology. Maintaining Users of Social Media interactions depends heavily on EWOM (Ibrahim and Aljarah 2023). The examination of how Personal Traits moderate the connections between "Perceived Usefulness, EWOM, Perceived Usefulness, and Social Media Influencer enhances comprehension of the circumstances in which Personal Traits turns into a noteworthy determining element".

2. Literature Review
2.1. Behavioral Intentions to Adopt TikTok

TikTok is an emerging social media app that has grown in popularity very quickly and is now playing a vibrant role in people's lives. As a researcher, it is crucial to analyze users' behavioral intentions to embrace TikTok to lay a firm understanding of why the app endures to grow popular. The use of social media platforms has brought about a total transformation in how people communicate, share content and even entertain themselves over the internet platforms (Thao and Anh 2020). In this age of the abundance of platforms available to the user, which has only grown in recent years, the global popularity of TikTok is noteworthy, where users can watch short videos, participate in creative challenges, and be part of a like-minded community (Falgoust, Winterlind et al. 2022). Understanding the behavioral intensions that lead individuals to download and use TikTok requires understanding to decipher the fascination of the platform and its consequence on the users and marketers in society (Chu, Deng et al. 2024).

It is critical to examine the underlying determinants that make users to adopt TikTok as the platform gains more popularity with cases of multiple individuals familiarizing themselves with the platform in a very short time (Chu, Deng et al. 2024). Concerning the uses and gratifications theory, the experience of users in the digital environment depends on the perceived relevance and importance of the content they interact with and the tools and means they choose to use. Consequently, by analyzing behavioral intentions concerning TikTok usage, we obtain a greatly enhanced understanding of users' needs, wants, and goals in the context of the modern digital world (Thao and Anh 2020).

2.2. Underpinning Theory
2.2.1. Technology Acceptance Model (TAM):

TAM is one of the most prominent theories employed by researchers and scholars to understand the usage of technology. Zhang, Luo et al. (2019) used TAM to examine the factors that compel the use of TikTok; particularly, perceived usefulness and perceived ease of use. From their research, the authors found that users of the platform are likely to have positive behavioral intentions towards TikTok entertainment and content creation utility is perceived and ease of use of the platform is high. This is in line with the TAM model, which also highlights perceived benefits and user-friendliness as key parameters influencing the use of a particular technology.

2.3. Perceived Usefulness and Behavioral Intentions to Adopt TikTok

Perceived usefulness or the conviction that an object can be useful in accomplishing relevant tasks is central to the decision to adopt new technologies such as TikTok. This literature review emphasizes perceived usefulness as a factor in the TikTok users' behavioral intention to adopt TikTok with supporting evidence from empirical research and theory. In the DP context, perceived usefulness is defined as the user's perception of TikTok's ability to meet their social, entertainment, and content creation needs optimally (Davis 1989). The public is also evaluating the usefulness of TikTok from the aspect of the object characteristics which include features and functions of the object, and the worth of the benefits it affords in enabling social interactions, self-actualization and entertainment.

In this respect, the current study finds that perceived usefulness has a strong positive correlation with behavioral intention to use TikTok among the users. By using a structural model of convenience sampling, Hess, McNab et al. (2014) identified that intentions to adopt TikTok rise with the perceived usefulness of the platform for entertainment, creativity, and social purposes. From the perceived utility of such features as preferably-adaptive content, filters and engagement stats, the more the positive attitudes, and motivation to use TIK TOK are bolstered (Mohd Amir, Mohd et al. 2020). Thus, it can be inferred that among those characteristics, users' behavioral intention to embrace TikTok is positively influenced by its perceived usefulness. This is because, as much as the users find TikTok the best platform through which they can feed their social and entertainment needs, they are willing to spend time actively on the platform. Nathania and Anandya (2021) also noted that users who deem TikTok as useful for self-entertainment and Personal Contentment are more likely to adopt TikTok and create User Generated Content. The studies regarding satisfaction in this respect reveal that TikTok's features and functionalities for its users will increase their perceived value proposition and intention to adopt TikTok as a part of their digital usage patterns. According to the above discussion following hypotheses have been established:

H1: Perceived Usefulness has a positive and significant impact on Behavioral Intentions to Adopt TikTok.

2.4. Electronic Word of Mouth (E-WOM) and Behavioral Intentions to Adopt TikTok

Electronic Word of Mouth (E-WOM) is a key phenomenon that has an impact on the attitudes, preferences and consumer habits in the modern, technologically sophisticated world. Drawing from prior writings, this paper provides a literature analysis involving the influence of E-WOM on users' behavioural intentions towards adopting TikTok, about how such interactions affect persons' decisions to join the platform. In the same manner, Abdullah, Febrian et al. (2023), define Electronic word-of-mouth (E-WOM) as information, opinions, recommendations, and experiences that consumers verbally share and spread through the use of the internet and other electronic media outlets. Concerning TikTok, E-WOM refers to all content, comments, likes, shares, and any other communication that customers post, i.e., subjective personal communication that has an impact on the formation of perceptions, attitudes, and behavioral intentions of other consumers concerning the platform.

Several studies indicate that there exists a positive significant relationship between E-WOM and users' behavioral concerns towards adopting TikTok. In the same social networking sites study Akther and Nur (2022) observed that perceived usefulness and social endorsement had a direct impact on perceived usefulness, which in turn shaped individuals' intentions to adopt TikTok. Endorsed eWOM communication through positive valence of user-generated content, viral content and influential endorsements contributes to positive user perceptions towards the perceived appeal and credibility of TikTok which drives adoption intentions (Kwok, Mao et al. 2019). Thus, Analyzing the direct effect of E-WOM reveals the extent to which users' behavioral intentions to adopt TikTok have been influenced by perceptions towards the social value, entertainment value and user value. Madi, Al Khasawneh et al. (2024) found that users who are exposed to positive E-WOM about the quality of content, trends of community and creativity of opportunities are more likely to intend to join TikTok and contribute to its content. The word of mouth being viral builds the users' awareness further on the features and perceived benefits offered by the platform which in turn affects their uptake and usage on the digital engagement platform: TikTok (Haenlein, Anadol et al. 2020).

H2: E-WOM has a positive and significant impact on Behavioral Intentions to Adopt TikTok.

2.5. Perceived Playfulness and Behavioral Intentions to Adopt TikTok

Self-perceived playfulness has been found to impact the users' choice to participate and interact in technology-supported environments and systems, which include social networking sites and entertainment products. In this literature review, the authors focus on perceived playfulness and its influence on the users' behavioral intentions towards the adoption of TikTok, as well as other play aspects influencing the users' attitudes and behavioral patterns. Lee, Hwang et al. (2019), define Perceived playfulness as the extent to which people believe that the design of a technology will help elicit enjoyment, amusement, and curiosity while using the technology. Concerning TikTok, perceived playfulness refers to users' attitudes toward the entertaining aspects of the application, funny content, and elements provided by the TikTok platform that evoke fun and playful behavior.

The research literature shows a close positive correlation between perceived playfulness and users' behavioral intention to adopt TikTok. People tend to engage with TikTok's short videos, performances, fun challenges, fascinating filters, and viral memes that contribute to positive emotions, interest, and enthusiasm (Hsu, Chang et al. 2012). Thao and Anh (2020) revealed that when people have fun perceptions of TikTok they are more likely to report using intentions to use this platform and engage with its content dissemination. In particular, perceived playfulness plays a significant role in influencing users' behavioral intentions to adopt TikTok as it boosts the perceived value proposition and user experience. According to Tan and Chou (2007) perceived playfulness is associated with users' intrinsic motivation and enjoyment of technology-mediated environments, hence increased behavioral intentions to use and explore. TikTok's tangibility aspect and contents entice users' curiosity, creation, and interactions, thus making them immersed and continue to use the app (Van der Heijden 2004).

H3: Perceived Playfulness has a positive and significant impact on Behavioral Intentions to Adopt TikTok.

2.6. Social Media Influencer Marketing and Behavioral Intentions to Adopt TikTok

Influencer marketing has come out as one of the most effective ways through which brands can connect with and drive engagement with their target audiences on social media. Through using social media influencers' authority, followers, and endorsement, brands can widely market products, services, and platforms. This literature review aims to address the effects of influencer marketing on users' behavioral intention to adopt TikTok, regarding the positive attitudes and motivations brought by influencer endorsements and collaborations. Social media influencer marketing involves the use of persons who have large followership and clout on social media platforms to endorse products, services or platforms to the respective audience (Hajli 2014). Influencer marketing is a concept that involves engaging influential individuals to post content that will depict brands or products in a certain manner, usually in return for a fee or other gifts. Influencer marketing on sites such as TikTok entails the influencers posting content that contains references to the site and encourages the users to employ it.

Exploring the effects of social media influencer marketing strategies on users' perceptions and behaviors towards downloading TikTok. Influencers have many followers and guiding abilities in changing the users' attitudes and behaviors regarding the platform (Saima and Khan 2020). Johansen and Guldvik (2017) noted from the studies that influencer endorsement and collaboration boost users' perception of the value proposition and relevance of TikTok. A technique that can be used is finding positive statements from the users' favorite influencers and

alerting them about TikTok. These effects of social media influencer marketing on user behavioral intentions to adopt TikTok are apparent in how influencers influence users' perceptions of and decisions towards adopting TikTok. The use of sponsored content, product endorsements, and brand partnerships expands TikTok's reach and resonates positively with consumers (Radwan, Mousa et al. 2021). When influencers followed by the users endorse TikTok, the platform is seen as more attractive, conformity to which increases the likelihood of users' intentions to use TikTok and interact with its content.

H4: Social Media Influencer Marketing has a positive and significant impact on Behavioral Intentions to Adopt TikTok.

2.7. Moderating Role of Personal Traits

Personality traits, also called individual differences, are relatively permanent dispositions or tendencies to feel, think, and act in a consistent way which distinguish one individual from another (Serapio-García, Safdari et al. 2023). These are sufficiently permanent cross-situational traits that reflect how people think, feel, and behave in various spheres of life and contexts affecting several activities, incl. decision-making, social communication, and the use of technologies. Personality dimensions include among others, openness, conscientiousness, extraversion, agreeableness and neuroticism, which is also called the 'OCEAN' model of traits and sub-traits inclusive of innovativeness, risk-taking, and proneness to social influence (Salmony and Kanbach 2022).

In this context, personal traits act as a moderator that influences the moderator role of perceived usefulness and other factors such as eWOM, perceived playfulness, social media influencer marketing, and TikTok users' behavioral intention to accept TikTok as an information source. Thus, understanding users' differences in demography and social psychology allows marketers, developers, and researchers to identify factors that encourage people's TikTok usage and pave the way for its expansion throughout different spectrums of the population. According to the above literature following hypotheses have been developed:

H5a: Personal Traits positively and significantly moderate the relationship between Perceived Usefulness and Behavioral Intentions to Adopt TikTok.

H5b: Personal Traits positively and significantly moderates the relationship between E-WOM and Behavioral Intentions to Adopt TikTok.

H5c: Personal Traits positively and significantly moderate the relationship between Perceived Playfulness and Behavioral Intentions to Adopt TikTok.

H5d: Personal Traits positively and significantly moderate the relationship between Social Media Influencer Marketing and Behavioral Intentions to Adopt TikTok.

3. Methodology
3.1. Conceptual Framework
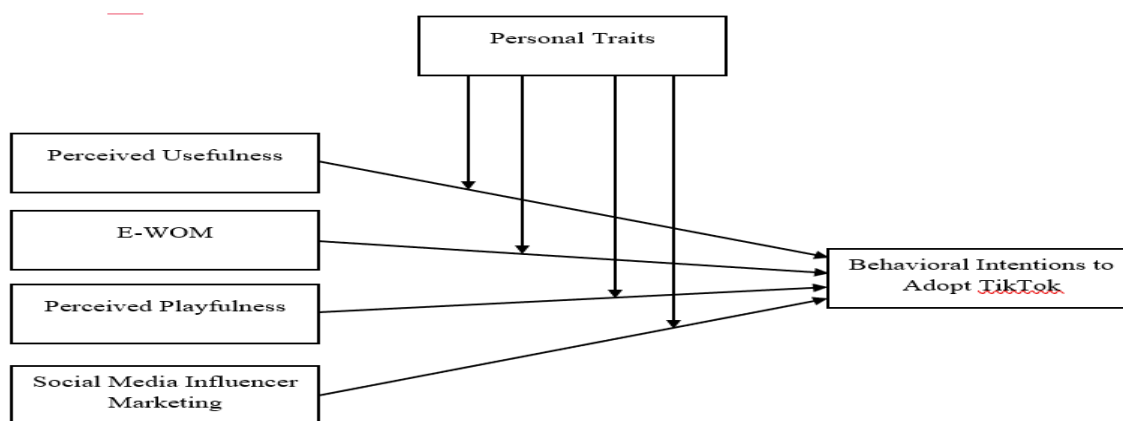
Figure 1: Conceptual Framework

3.2. Researched Design

This study used explanatory purposes to examine the relationship between Perceived Usefulness, E-WOM, Perceived Playfulness, Social Media Influencer Marketing and Behavioral Intentions to Adopt TikTok with the moderating effect of Personal Traits.

There are two dimensions including correlational and causal. The correlational research design recognizes the explaining and determining underlying relationships between variables that have theoretical and conceptual linkage. Whereas, causal research design highlighted effect and cause analysis between variables in addition to understanding the causal dimension of the variables towards its impacts and results with specific steams and stages (Cooper, Schindler et al. 2006). The research aims to determine the association between Perceived Usefulness, E-WOM, Perceived Playfulness, Social Media Influencer Marketing and Behavioral Intentions to Adopt TikTok with the moderating effect of Personal Traits in Bahawalpur. Hence, a Correlational research design is suited to a

specific context to evaluate the relationship between variables. So, we used Correlational Research Design for this study.

The population is described as the whole group of objects, and people that the investigators aim to study (Sekaran and Bougie 2003). This study selected the population including Social Media Users of South Punjab, this study calculated the population conveniently through the questionnaire as well as through the Google form.

The sample size is the element of the entire population. We can't research the complete population; hence exact sample size of the entire population is required to clarify the population's findings. The sample size for this research was selected by the thumb's rule, as suggested by Hair Jr, Sarstedt et al. (2014). Who proposed, to determine the sample size by multiplying the total items of the questionnaire by ten. So, the current study has 30 measurement items; the required sample is 300.

3.3. Measurement Model

"The measurement model" is assessed to determine the validity and reliability of the construct. The validity of the construct and as well as reliability of the construct are examined after the "factor loadings" are examined to determine the quality.

3.3.1. Factor Loadings

Factor Loadings refer to "the extent to which each of the items in the correlation matrix correlates with given principal component. Factor loadings can range from -1.0 to +1.0, with higher absolute values indicating a higher correlate of the item with the underlying factor" (Pett, Lackey et al. 2003). According to (Hult, Hair Jr et al. 2018), no item has been deleted in this study because no item's value was less than 0.500. The outcomes are displayed in Table.

Table 1: Factor Loadings

	BI	EWOM	PP	PU	PT	SMIM
BI1	0.892					
BI2	0.850					
BI3	0.889					
BI4	0.824					
EWOM1		0.877				
EWOM2		0.904				
EWOM3		0.843				
EWOM4		0.854				
PP1			0.902			
PP2			0.909			
PP3			0.875			
PT1					0.704	
PT10					0.810	
PT2					0.833	
PT3					0.808	
PT4					0.801	
PT5					0.799	
PT6					0.537	
PT7					0.811	
PT8					0.834	
PT9					0.812	
PU1				0.860		
PU2				0.885		
PU3				0.915		
PU4				0.829		
SMIM1						0.858
SMIM2						0.923
SMIM3						0.902
SMIM4						0.865

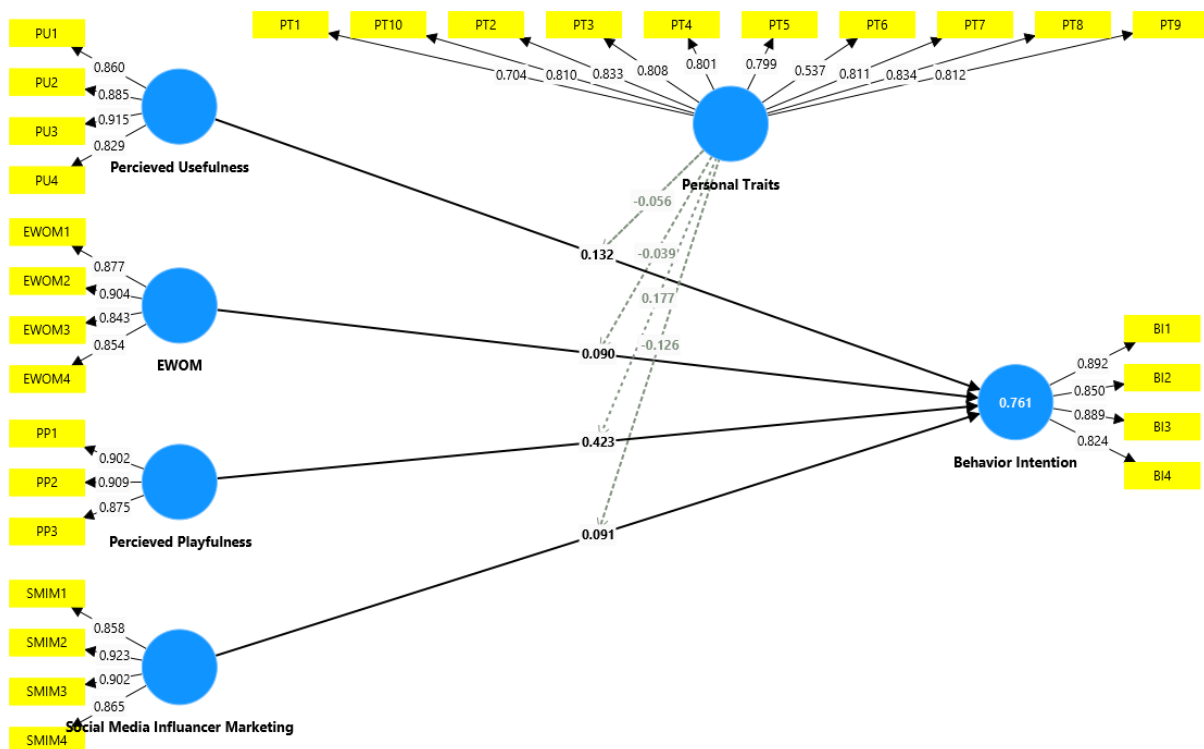Source: Author's Computations using SmartPLS v4

Figure 2: Factor Loadings

3.4. Reliability Analysis

According to (Mark 1996) "Reliability is defined as the extent to which a measuring instrument is stable and consistent. The essence of reliability is repeatability. If an instrument is administered over and over again, will it yield the same results" (p. 285). "Cronbach's Alpha and Composite Reliability" are the methods that are most commonly employed to assess reliability. The table below displays the results of "Cronbach's Alpha and Composite Reliability". Although the range of values of "Composite Reliability" varies between 0.924 to 0.939, the value of "Cronbach's Alpha" is between 0.876 to 0.926. "Cronbach's Alpha and Composite Reliability" both show dependability that is higher than the advised levels of 0.70 (Hair, Ringle et al. 2011).

Thus, the reliability of the construct is established.

Table 2: Cronbach's Alpha & Composite Reliability

	Cronbach's alpha	Composite reliability
Behaviour Intention	0.887	0.922
EWOM	0.892	0.925
Perceived Playfulness	0.876	0.924
Perceived Usefulness	0.896	0.928
Personal Traits	0.926	0.939
Social Media Influencer Marketing	0.910	0.937

Source: Author's Computations using SmartPLS v4

3.5. Construct Validity

PLS-SEM is used statistically to measure discriminant as well as "convergent validity" to assess concept validity.

3.6. Convergent Validity

"Convergent Validity is a degree to which multiple attempts to measure the same concept agree. The idea is that two or more measures of the same thing should covary highly if they are valid measures of the concept" (Bagozzi, Yi et al. 1991). Using converging items, the fundamental concept is assessed whenever the value of the "Average Variance Extracted" equals or exceeds 0.50 (Fornell and Larcker 1981). "Convergent validity" results are reliant on AVE statistics. Each of the variables in the following table exceeds the suggested values. Convergent validity is therefore proven.

Table 3: Average Variance Extracted (AVE)

Construct	Average variance extracted (AVE)
Behaviour Intention	0.747

EWOM	0.757
Perceived Playfulness	0.801
Perceived Usefulness	0.762
Personal Traits	0.608
Social Media Influencer Marketing	0.788

Source: Author's Computations using SmartPLS v4

3.7. Discriminant Validity

"Discriminant Validity is the degree to which measures of different concepts are distinct. The notion is that if two or more concepts are unique, then valid measures of each should not correlate too highly" (Bagozzi, Yi et al. 1991).

"Discriminant validity" is produced if a construct's AVE R squared value is higher than its Pearson correlation with additional variables, as per the criteria developed by Fornell and Larcker (1981). R2 of AVE of the construct in the current investigation was shown to be smaller compared to its Pearson correlation with a different construct. Thus, offering substantial evidence for discriminant validity.

Table 4: Fornell and Larcker Criterion

	BI	EWOM	PP	PU	PT	SMIM
Behavior Intention	**0.864**					
EWOM	0.755	**0.870**				
Perceived Playfulness	0.819	0.744	**0.895**			
Perceived Usefulness	0.747	0.759	0.736	**0.873**		
Personal Traits	0.806	0.861	0.807	0.797	**0.780**	
Social Media Influencer Marketing	0.752	0.706	0.775	0.717	0.760	**0.887**

"Note: Values in Italic-Bold represent the square root of AVE."
Source: Author's Computations using SmartPLS v4

3.8. Structural Model

The suggested hypotheses are then evaluated by analyzing the postulated relationship in SEM.

3.9. Hypotheses Testing

The purpose of H1 is to determine whether E-WOM significantly improves BI. According to the results, E-WOM significantly affects BI **($\beta = 0.197$, t = 3.309, p = 0.001).** Therefore, H1 accepted**.** H2 determines if PP significantly improves the BI. The findings showed a significant relationship between PP and BI **($\beta = 0.417$, t = 5.279, p = 0.000).** H2 is therefore supported**.** Whether H3 explore that PU significantly improves the BI. According to the results, PU significantly affects BI **($\beta = 0.169$, t = 2.920, p < 0.004).** H3 is therefore supported**.** H4 develops whether SMIM has a positive significant effect on the BI. The findings represented that SMIM has a significant impact on BI ($\beta = 0.168$, t = 2.656, p = 0.008). **Hence, H4 is therefore accepted.**

The table provides a summary of the outcomes.

Table 5: Direct Hypotheses

Path	Beta Coefficient	S.D	T Values	P Values
EWOM ->BI	0.197	0.059	3.309	0.001
PP ->BI	0.417	0.079	5.279	0.000
PU ->BI	0.169	0.058	2.920	0.004
SMIM ->BI	0.168	0.063	2.656	0.008

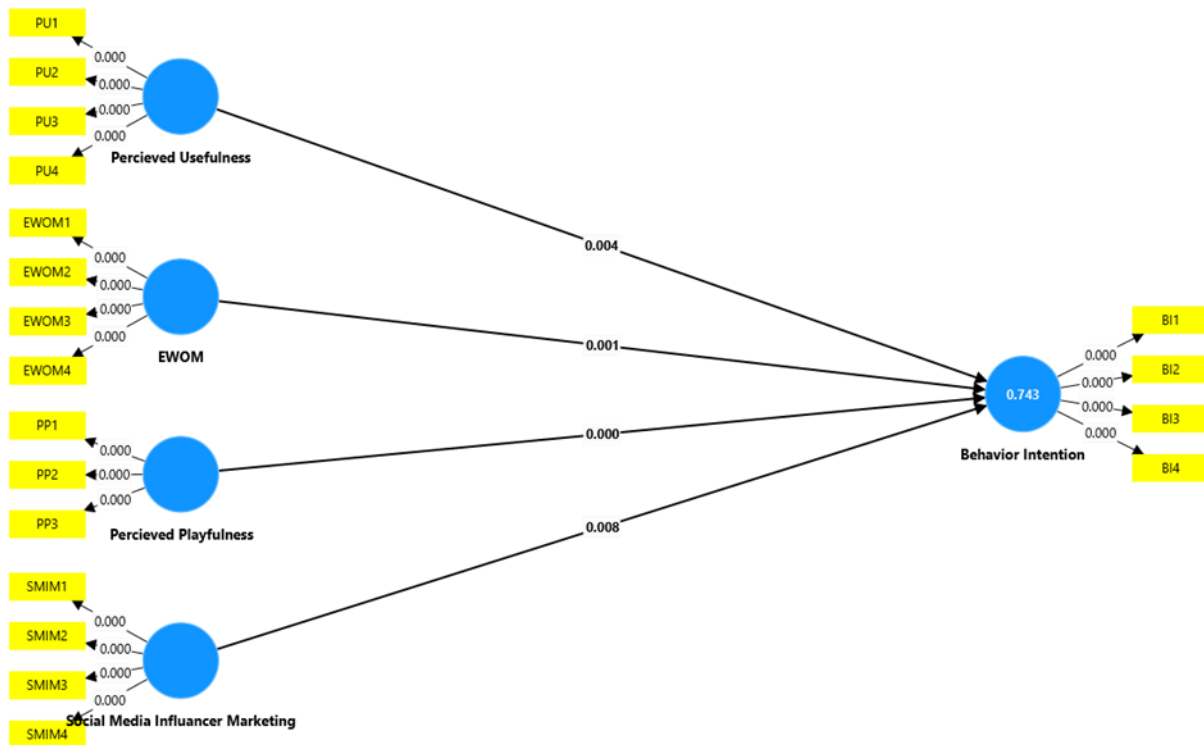Source: Author's Computations using SmartPLS v4

Figure 3: Direct Hypotheses

3.10. Moderating Analysis

The moderator's Personality Traits were explored through moderation analysis.

The results indicate that there is a substantial and partly positive relationship between PT and BI **(β = 0.171, t = 1.786, p = 0.074).** H6 the findings represented that PT moderates the insignificant association between E-WOM and BI **(β = 0.039, t = 0.668, p = 0.504).** H7 the findings represented that PT moderates the insignificant association between PP and BI **(β = 0.117, t = 2.222, p = 0.026).** H8 the findings represented that PT moderates the insignificant association between PU and BI **(β = 0.056, t = 1.323, p = 0.186).** H9 the findings represented that PT moderates the insignificant on association between SMIM and BI **(β = 0.126, t = 1.550, p = 0.122).**
The results are summarized in the table.

Table 6: Moderating Hypotheses

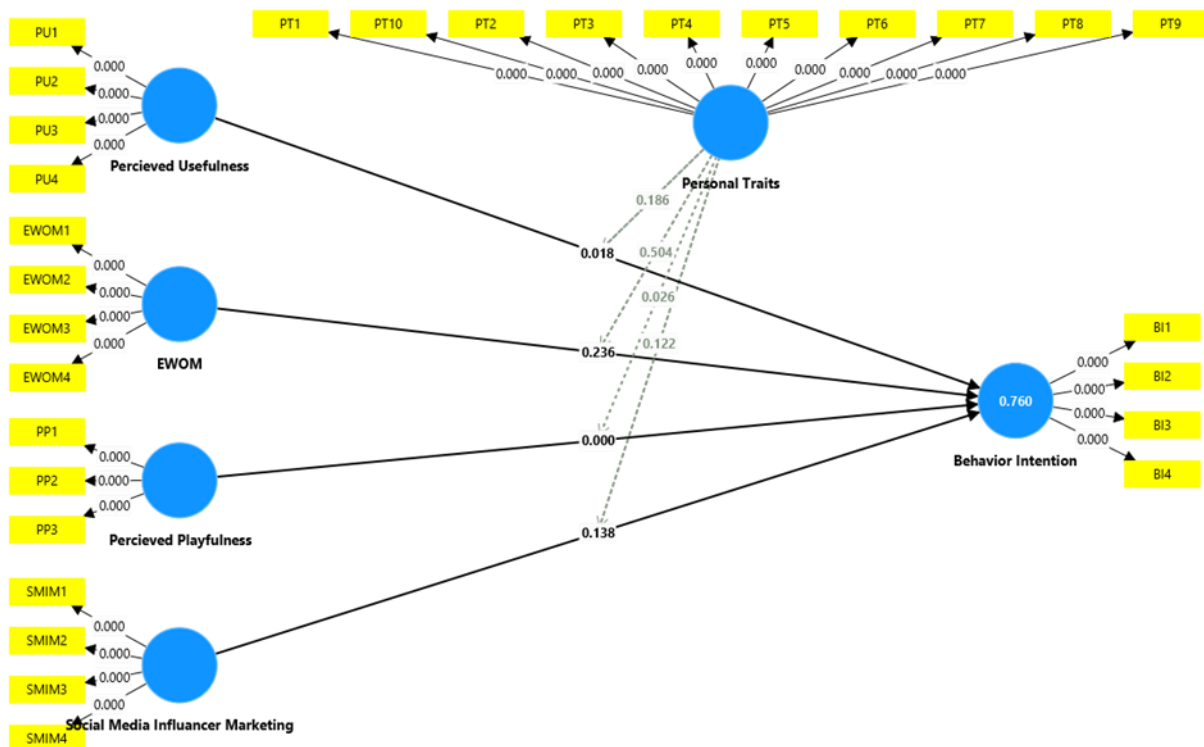|	Beta Coefficient	S.D	T Values	P Values
PT ->BI	0.171	0.096	1.786	0.074
PT x SMIM ->BI	0.126	0.082	1.550	0.122
PT x EWOM ->BI	0.039	0.058	0.668	0.504
PT x PU ->BI	0.056	0.043	1.323	0.186
PT x PP ->BI	0.177	0.080	2.222	0.026

Source: Author's Computations using Smart PLS v4.

Figure 4: Moderating Hypotheses

4. Conclusion and Discussion

4.1. Discussion

The primary objective of this research has been to determine the associate amongst Perceived Usefulness, E-WOM, Perceived Playfulness, Social Media Influencer Marketing and Behavioral Intentions to Adopt TikTok with the moderating effect of Personal Traits. The results have lent credible support to the hypothesized relationships among the subject constructs. Empirical support to H1 confirms that the impact of E-WOM is significant on Behavior Intention. Likewise, the corroboration of H2 confirms that the impact of perceived playfulness is significant on behavior intention. H3 states that behavior intention is positively impacted by perceived usefulness. Similarly, H4 Social media marketing influencers significantly and favorably affect users' intentions to use TikTok. Whereas only two moderating effects are positive and significant while two are not significant. The results are consistent with some of the previous research. Empirical support to the moderator confirms the significant moderating effects of Personal Traits in the relationship between Perceived Usefulness, Perceived Playfulness, E-WOM, Social media marketing Influencer and Behavior Intention.

Hess, McNab et al. (2014) identified that intentions to adopt TikTok rise with the perceived usefulness of the platform for entertainment, creativity, and social purposes. Thus, it can be said that users' behavioral intention to use TikTok is favorably influenced by perceived usefulness. Akther and Nur (2022) observed that perceived usefulness and social endorsement had a direct impact on perceived usefulness, which in turn shaped individuals' intentions to adopt TikTok. Madi, Al Khasawneh et al. (2024) found that users who are exposed to positive E-WOM about the quality of content, trends of community and creativity of opportunities are more likely to intend to join TikTok and contribute to its content. Consequently, it can be said that E-WOM positively affects users' behavioral intention to use TikTok. According to Tan and Chou (2007) perceived playfulness is associated with users' intrinsic motivation and enjoyment of technology-mediated environments, hence increased behavioral intentions to use and explore. Thao and Anh (2020) revealed that when people have fun perceptions of TikTok they are more likely to report using intentions to use this platform and engage with its content dissemination. Thus, it can be said that users' behavioral intention to use TikTok is positively influenced by perceived usefulness. Johansen and Guldvik (2017) noted from the studies that influencer endorsement and collaboration boost users' perception of the value proposition and relevance of TikTok. The use of sponsored content, product endorsements, and brand partnerships expands TikTok's reach and resonates positively with consumers (Radwan, Mousa et al. 2021). Consequently, it can be said that social media marketing influencers positively impact consumers' behavioral intention to use TikTok.

In this context, personal traits act as a moderator that influences the moderator role of perceived usefulness and other factors such as eWOM, perceived playfulness, social media influencer marketing, and TikTok users' behavioral intention to accept TikTok as an information source. Thus, understanding users' differences in demography and social psychology allows marketers, developers, and researchers to identify factors that

encourage people's TikTok usage and pave the way for its expansion throughout different spectrums of the population.

4.2. Theoretical Contributions

The framework of Behavior Intention to Adopt TikTok developed by the earlier research is enhanced by the theoretical implications of this research. The new relationship determination by this research is critical for the understanding of Behavior Intention to Adopt TikTok in modern studies. The research has introduced two new direct relationships in the domain of Behavior Intention to Adopt TikTok. Firstly, the research emphasized that "Perceived Playfulness" has a positive impact on "Behavior Intention to Adopt TikTok". Secondly, this study enhances the literature by reporting that "perceived usefulness" has a significant and positive effect on "Behavior Intention to Adopt TikTok". Likewise, in this study result revealed that E-WOM has a positive and significant impact on Behavior Intention. While last direct association between the Social media marketing Influencers and Behavior Intention to Adopt TikTok is significant as well. Furthermore, this study has introduced and corroborated the moderating role of Personal Traits between perceived playfulness, perceived usefulness, E-WOM, social media marketing influencer and behavior intention to adopt TikTok. Indeed, few studies have discussed behavior intention to adopt TikTok, but this moderating relationship was not discussed anywhere.

4.3. Managerial Implications

The research presented here offers managers valuable insights to increase TikTok adoption among users. Improving the application's value for entertainment and playfulness is essential for keeping users interested since enjoyable experiences encourage users to use it. In addition, highlighting TikTok's benefits outside of amusement, like learning or innovative thinking, might increase its perceived value and draw in more people to participate. Promotions for referrals and content created by customers are crucial in influencing new users through positive electronic word of mouth (E-WOM) from satisfied users. Working with social media influencers who share the same interests as the platform's intended market helps increase engagement. Lastly, knowing individual characteristics, such as tech-savvyness or receptivity to new experiences, enables more focused marketing tactics, adjusting messaging to various user categories for optimal effect.

4.4. Future Research Directions and Limitations

However, the following are the shortcomings of this study and they include: First, the studies are conducted only for TikTok, thereby confining the generalization of the results to other social applications or platforms with distinct audiences or uses. More research should be done to know whether the same variables including perceived playfulness and usefulness, exert the same effects on the use of other platforms. Second, the study is mainly based on self-reports that can be affected by social desirability, and, or, participants' recall biases. Increased usage of other more quantitative measures other than students' self-estimations might add vigor to future works.

Furthermore, personal traits as a moderator are discussed in general though future research is needed to discuss how specific traits (for instance, extraversion, openness) may moderate particular influencers and marketing strategies. Increasing the sample size to encompass other moderating variables by either cultural or demographic factors may also give more understanding. Finally, considering that social media is constantly changing, future research based on longitudinal work, aimed to identify changes in perception and intention throughout a specific period, would contribute towards a better understanding of how user intentions change as platform changes.

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