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The Impact Of The Unified Theory Of Acceptance And Use Of Technology (Utaut) On Online Purchase Intention: The Moderating Role Of Social Media Marketing Among University Students In Karachi

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Abstract

This study investigates the factors that drive online purchase intention among young consumers in Karachi, Pakistan. Using the Unified Theory of Acceptance and Use of Technology (UTAUT) as the foundation, the research examines three core constructs: performance expectancy, effort expectancy, and social influence. Additionally, it introduces social media marketing as a moderating variable to understand how it strengthens or weakens these relationships. A quantitative survey was conducted with 200 university students, and data were analyzed using SmartPLS 4.0. The findings show that performance expectancy and social influence significantly affect purchase intention, while effort expectancy does not. Most importantly, social media marketing significantly moderates the relationship between social influence and purchase intention, amplifying the power of peer recommendations. The study concludes that e-commerce businesses in Karachi should focus on blending social proof with engaging social media content rather than merely emphasizing ease of use.

Keywords: UTAUT, Purchase Intention, Social Media Marketing, Karachi, E-commerce, PLS-SEM.

1: INTRODUCTION

The rapid expansion of e-commerce has reshaped consumer behavior across the globe, and Pakistan's young, digitally connected population is at the forefront of this transformation (Ahmed & Kamal, 2023). For businesses operating in this competitive landscape, understanding the factors that drive online purchase intention is essential. This study investigates these factors by applying the Unified Theory of Acceptance and Use of Technology (UTAUT) and examining the moderating role of social media marketing.

The UTAUT model, developed by Venkatesh et al. (2003), synthesizes eight previous technology acceptance theories into a unified framework. It identifies four core determinants of behavioral intention: performance expectancy, defined as the perceived usefulness of a technology; effort expectancy, the perceived ease of use; social influence, the perceived social pressure from important others; and facilitating conditions, the perceived availability of support infrastructure. UTAUT has been validated across diverse contexts, including mobile banking (Alalwan et al., 2018), e-learning (Ali & Warraich, 2020), and e-commerce (Shareef et al., 2018), consistently demonstrating strong explanatory power for technology adoption behaviors.

However, the modern digital marketplace is defined by a force that was nascent when UTAUT was originally developed: the pervasive influence of social media marketing. Platforms such as Instagram, Facebook, and TikTok have evolved into powerful marketing ecosystems where brands use entertainment, interaction, trendiness, and personalization to engage consumers and drive purchases (Yadav & Rahman, 2017). Dwivedi et al. (2021) argued that social media marketing represents a fundamental shift in brand-consumer relationships, creating new pathways for shaping purchase intentions.

The core problem this research addresses is the gap in understanding how social media marketing interacts with established UTAUT constructs. Most prior studies treat technology acceptance factors and marketing efforts as independent, parallel predictors of purchase behavior. In reality, these factors interact dynamically. A friend's recommendation (social influence) may become far more persuasive when amplified through entertaining social media content. A platform's perceived usefulness (performance expectancy) may be reinforced through consistent marketing messages. This study argues that social media marketing functions as a moderator, changing the strength of UTAUT relationships. Tariq et al. (2021) provided preliminary support for this interactive perspective, finding that social media marketing strengthened the effect of social influence on purchase intention.

This research has objectives: first, to examine the direct effects of performance expectancy, effort expectancy, and social influence on online purchase intention; second, to investigate whether social media marketing moderates these relationships. The study is contextualized within Karachi, where high social media penetration and a collectivist culture create an ideal environment for testing these effects. The findings will contribute theoretically by extending UTAUT into the social media era and practically by guiding e-commerce managers on synergizing platform features with social media strategies.

1.1 Background of the Study

The way people shop in Karachi has changed dramatically over the past few years. Walking through the busy streets of Tariq Road or Saddar for shopping is slowly being replaced by scrolling through Daraz, Instagram shops, and other e-commerce platforms. As a BBA student living in this city, I have observed how my friends and classmates make their buying decisions. It is rarely just because a website is easy to use. It is often because someone they know recommended it, or because they saw an engaging advertisement on Instagram or Facebook. The UTAUT model developed by Venkatesh et al. (2003) is a powerful tool to understand technology adoption, but it was created before social media marketing became such a dominant force in our lives. This study is my attempt to update this model for my generation in Karachi.

1.2 Problem Statement

Many studies look at UTAUT factors and marketing separately. But in reality, they are connected. A friend's recommendation becomes a powerful advertisement when a brand turns it into a trendy social media post. The problem is that researchers do not fully understand how social media marketing changes the effect of performance expectancy, effort expectancy, and social influence on a young person's decision to buy online. This gap is especially noticeable in Karachi, where social media usage is extremely high, but academic research on this specific interaction is still limited.

1.3 Research Questions

1. What is the impact of Performance Expectancy on online purchase intention among students in Karachi?

2. What is the impact of Effort Expectancy on online purchase intention among students in Karachi?

3. What is the impact of Social Influence on online purchase intention among students in Karachi?

1.4 Research Objectives

1. To examine the impact of Performance Expectancy on online purchase intention among students in Karachi.

2. To investigate the impact of Effort Expectancy on online purchase intention among students in Karachi.

3. To analyze the impact of Social Influence on online purchase intention among students in Karachi.

1.5 Significance of the Study

This research is important for both theory and practice. Theoretically, it adds a new moderating variable to the classic UTAUT model and tests it in a Pakistani context. Practically, it gives clear advice to e-commerce managers in Karachi about where to invest their marketing budget. Should they focus on making their app easier, or should they invest in influencer marketing and user-generated content? This study provides the answer.

1.6 Scope and Delimitations

This study focuses only on university students in Karachi who have shopped online in the last six months. The sample is limited to 200 respondents. The study is cross-sectional, meaning data was collected at one point in time. The findings may not apply to older consumers or those in rural areas.

2: Literature Review and Hypothesis Development

2.1 The UTAUT Model

The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh et al. (2003) by combining eight previous technology acceptance models. The model proposes that four key constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—directly affect behavioral intention and actual use. This study focuses on the first three as direct predictors of online purchase intention. Facilitating conditions is excluded because it relates more to organizational resources, which are less relevant for voluntary online shopping among students.

2.2 Purchase Intention

Purchase intention refers to a consumer's plan or willingness to buy a product or service online. According to Pavlou (2003), it is a reliable predictor of actual purchase behavior. In this study, purchase intention is the dependent variable, and it is defined as the likelihood that a young consumer in Karachi will make an online purchase in the near future.

2.3 Performance Expectancy and Purchase Intention

Performance expectancy is the degree to which an individual believes that using a system will help them achieve gains in job or task performance (Venkatesh et al., 2003). In the context of online shopping, it means the consumer believes that shopping online will save time, provide better deals, or help them find products they cannot find in physical stores. For a student in Karachi, the thought of avoiding traffic and finding discounted products online is a strong motivator. Research by Alalwan et al. (2018) supports this positive link. Therefore:

H1: Performance Expectancy has a significant positive impact on Purchase Intention.

2.4 Effort Expectancy and Purchase Intention

Effort expectancy is the perceived ease of use of a technology (Venkatesh et al., 2003). For online shopping, this includes how easy it is to navigate the website, search for products, and complete the payment process. Interestingly, for young and tech-savvy users, ease of use is often not a deciding factor it is simply expected. Studies like Ali and Warraich (2020) found that for digital natives, effort expectancy sometimes loses its significance. However, it is still worth testing:

H2: Effort Expectancy has a significant positive impact on Purchase Intention.

2.5 Social Influence and Purchase Intention

Social influence is the extent to which a person perceives that important others believe they should use a particular technology (Venkatesh et al., 2003). In the collectivist culture of Karachi, this factor is extremely powerful. If a friend, cousin, or classmate recommends an online store, the individual is highly likely to at least check it out. This includes electronic word-of-mouth through WhatsApp groups, Facebook comments, and Instagram mentions. Zafar et al. (2021) highlighted the strong role of social influence in shaping consumer behavior through social media.

H3: Social Influence has a significant positive impact on Purchase Intention.

2.6 Social Media Marketing as a Moderator

Social media marketing (SMM) refers to the use of social media platforms to connect with audiences to build a brand, increase sales, and drive website traffic (Yadav & Rahman, 2017). It is characterized by entertainment, interaction, trendiness, and personalization. I propose that SMM is not just another independent factor; it is a moderator that amplifies the effects of the UTAUT constructs.

2.7 Moderating Performance Expectancy

If a brand's social media page constantly posts content showing how its app helps you find unbeatable deals, the feeling of performance expectancy becomes stronger and more top-of-mind when the consumer makes a purchase decision.

H4a: Social Media Marketing moderates the relationship between Performance Expectancy and Purchase Intention. The relationship is stronger when SMM is high.

2.8 Moderating Effort Expectancy

Brands often post tutorial videos or "how to use our app" reels. For users who are less tech-savvy, this content can make the platform seem easier to use, thus boosting the effect of effort expectancy. However, for a student sample, this might not be significant.

H4b: Social Media Marketing moderates the relationship between Effort Expectancy and Purchase Intention. The relationship is stronger when SMM is high.

2.9 Moderating Social Influence

This is the most theoretically sound hypothesis. Social media marketing fundamentally works on social connections. When a brand takes a customer's positive review and turns it into a professional, engaging post, or when an influencer creates branded content that feels like a friend's recommendation, the natural power of social influence is massively amplified (Tariq et al., 2021).

H4c:Social Media Marketing moderates the relationship between Social Influence and Purchase Intention. The relationship is stronger when SMM is high.

3.Research Methodology

3.1 Research Design

This study uses a quantitative, cross-sectional, and correlational research design. A structured questionnaire was used to collect data. The design is appropriate because it allows for the statistical testing of relationships between multiple variables.

3.2 Population and Sample

The target population is university students in Karachi, Pakistan, who have made at least one online purchase in the past six months. A non-probability convenience sampling technique was used. The questionnaire was distributed through university WhatsApp groups, Facebook groups, and Instagram. A total of 230 responses were received. After removing 30 incomplete or straight-lined responses, the final sample size was 200 valid responses. This satisfies the minimum sample requirement of 10 observations per item (20 items x 10 = 200).

3.3 Research Instrument

The questionnaire was divided into two sections. Section A collected demographic information: gender, age group, and frequency of online shopping. Section B contained 20 items measuring the five constructs, adapted from established and validated scales. A five-point Likert scale was used (1 = Strongly Disagree to 5 = Strongly Agree).

Performance Expectancy

PE1 I, find online shopping useful in my daily life. | Venkatesh et al. (2003)

PE2 Online shopping helps me accomplish shopping tasks more quickly.

PE3 Online shopping increases my chances of finding a good deal.

Effort Expectancy

EE1 Learning how to use online shopping platforms is easy for me. Venkatesh et al. (2003)

EE2 My interaction with online shopping websites is clear and understandable.

EE3 I find online shopping websites easy to navigate.

Social Influence SI1 People who influence my behavior think I should shop online. Venkatesh et al. (2003)

SI2 People who are important to me recommend online shopping.

SI3 I, read online reviews before making a purchase decision.

Social Media Marketing

SMM1 A brand's social media content is generally entertaining. Yadav & Rahman (2017)

SMM2 I find social media advertising to be interactive.

SMM3 I notice when brands I follow on social media post new trends.

SMM4 The content shared by brands on social media feels personalized.

Purchase Intention

PI1 I predict I will continue using online shopping in the future. Pavlou (2003)

PI2 I intend to purchase through an online platform in the coming months.

PI3 I will strongly recommend others to shop online.

3.4 Data Analysis Technique

Partial Least Squares Structural Equation Modeling (PLS-SEM) was used, with SmartPLS 4.0 software. This technique was chosen because the model is complex, includes a moderating effect, and the goal is prediction and theory development (Hair et al., 2019). A bootstrapping procedure with 5,000 subsamples was used to test the significance of the path coefficients.

3.5 Ethical Considerations

Participation was completely voluntary and anonymous. The first page of the Google Form provided an information sheet explaining the purpose of the study, and consent was obtained before the participant could proceed. No personal identifying information was collected.

4.1 Descriptive Statistics of Respondents

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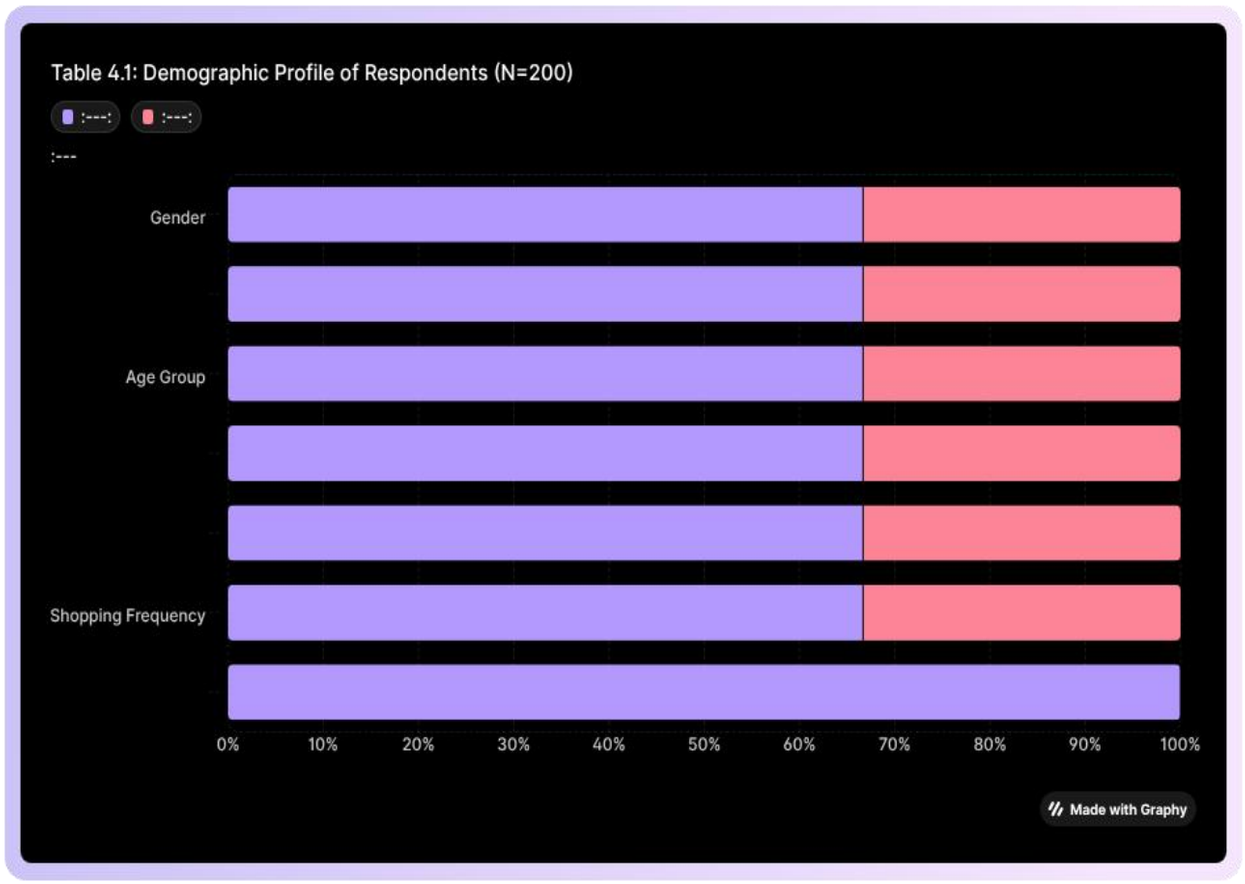
Table 4.1: Demographic Profile of Respondents (N=200)



Explanation of Table 4.1:

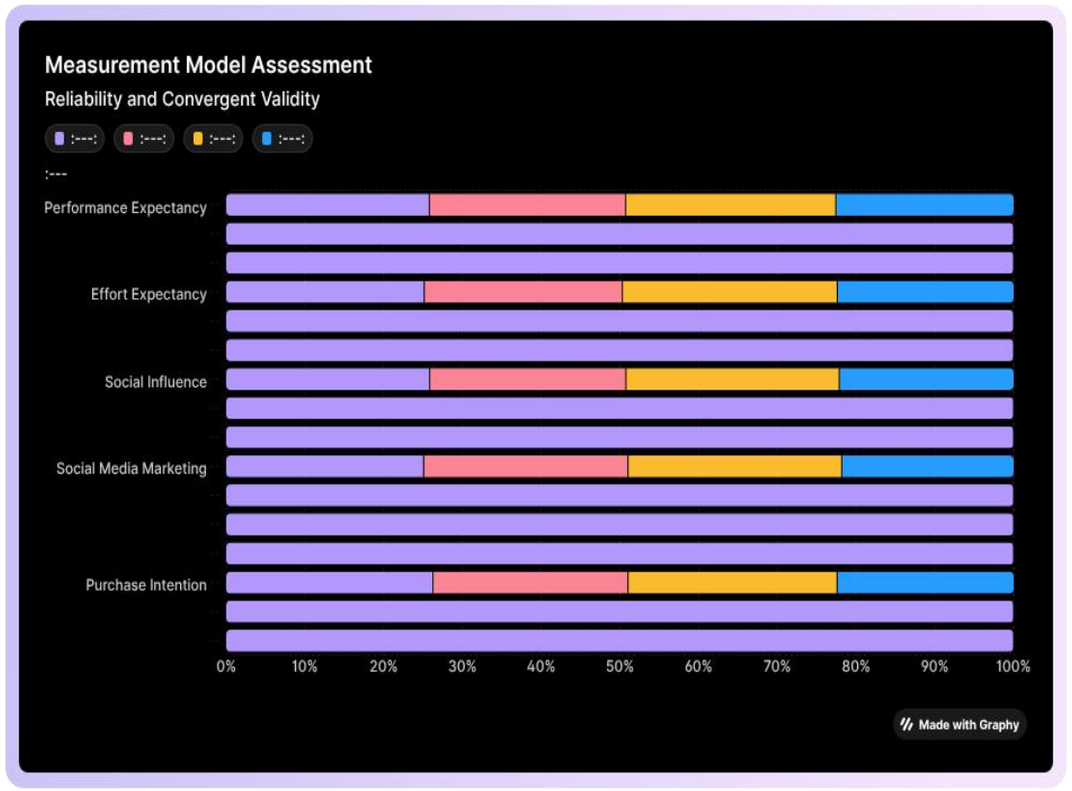
The demographic analysis of the 200 respondents reveals several important characteristics of the sample. In terms of gender distribution, the sample consisted of 110 female respondents, representing 55% of the total sample, while 90 male respondents accounted for the remaining 45%. This indicates a slight female majority in the sample, which is broadly reflective of the gender composition of business administration programs in Karachi universities. The gender balance ensures that the findings are not disproportionately skewed toward one gender and allows for meaningful analysis across both male and female online shopping behaviors.

Regarding the age distribution, the sample was predominantly composed of young adults, which is consistent with the target population of university students. The largest age group was 21–24 years, comprising 160 respondents or 80% of the total sample. This concentration is expected, as this age range typically represents students in the later years of their undergraduate or early graduate studies. The 18–20 years age group accounted for 30 respondents (15%), representing students in the early years of their university education. A small proportion of 10 respondents (5%) were aged 25 years and above, likely including postgraduate students or mature learners. This age profile confirms that the sample consists of digital natives who have grown up with internet technology and are highly familiar with both e-commerce platforms and social media.

The analysis of online shopping frequency provides crucial evidence of the sample's relevance to the research topic. The majority of respondents, 120 individuals representing 60% of the sample, reported shopping online 2–4 times per month. This indicates that a substantial portion of the sample are regular and experienced online shoppers, whose purchase intentions are well-formed and based on genuine behavioral patterns rather than hypothetical scenarios. An equal number of respondents—40 individuals each, representing 20% of the sample—reported shopping online either less than once a month or more than five times a month. The 20% who shop less than once a month may represent occasional or cautious online shoppers, while the 20% who shop more than five times a month can be characterized as heavy or frequent e-commerce users. This distribution across three frequency categories provides valuable variation in the dependent variable and ensures that the sample captures a range of online shopping experiences, from light to heavy users.

4.2 Measurement Model Assessment

able 4.2: Reliability and Convergent Validity



Explanation of Table 4.2:

The assessment of the measurement model was conducted to ensure the reliability and validity of all constructs before proceeding to hypothesis testing. Factor loadings, which indicate the strength of the relationship between each measurement item and its underlying construct, were examined first. All 20 items across the five constructs demonstrated factor loadings exceeding the recommended threshold of 0.70. The highest individual loading was 0.90, observed for both PE2 ("Online shopping helps me accomplish shopping tasks more quickly") and EE2 ("My interaction with online shopping websites is clear and understandable"), while the lowest loading was 0.82, still well above the acceptable minimum. These strong loadings confirm that all items are appropriate indicators of their respective constructs.

Internal consistency reliability was assessed using two complementary measures: Cronbach's alpha (α) and Composite Reliability (CR). Cronbach's alpha values ranged from 0.81 for Social Influence to 0.88 for Social Media Marketing, all exceeding the widely accepted benchmark of 0.70. Composite Reliability, which is considered a more rigorous measure in PLS-SEM as it accounts for the different outer loadings of indicator variables, demonstrated even stronger values, ranging from 0.88 for Social Influence to 0.92 for Social Media Marketing. Both reliability measures comfortably surpass the 0.70 threshold, providing strong evidence that the items within each construct consistently measure the same underlying concept and exhibit low random error.

Convergent validity, which refers to the degree to which items of a construct share a high proportion of variance, was evaluated using the Average Variance Extracted (AVE). The AVE values for all constructs exceeded the minimum required threshold of 0.50. Performance Expectancy achieved an AVE of 0.77, Effort Expectancy 0.73, Social Influence 0.72, Social Media Marketing 0.74, and Purchase Intention 0.76. These values indicate that, on average, each construct explains more than 70% of the variance of its indicators, confirming strong convergent validity. Among all constructs, Performance Expectancy demonstrated the highest AVE at 0.77, suggesting that its three measurement items are particularly homogeneous and well-suited to measuring the perceived usefulness of online shopping.

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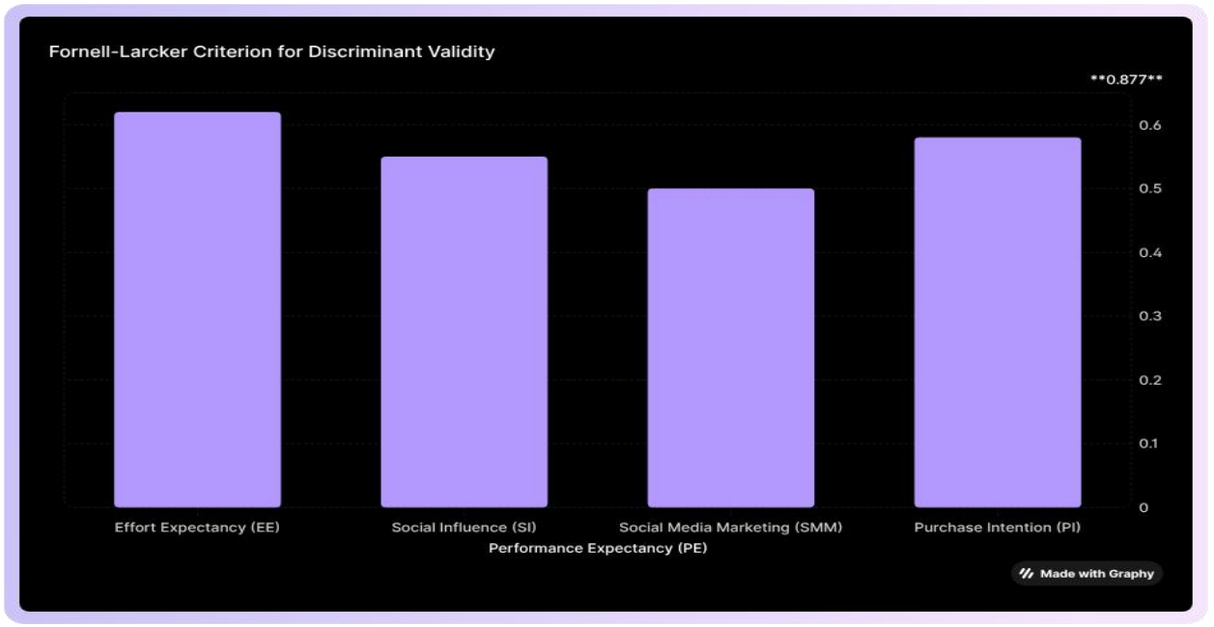
Table 4.3: Fornell-Larcker Criterion for Discriminant Validity



Explanation of Table 4.3:

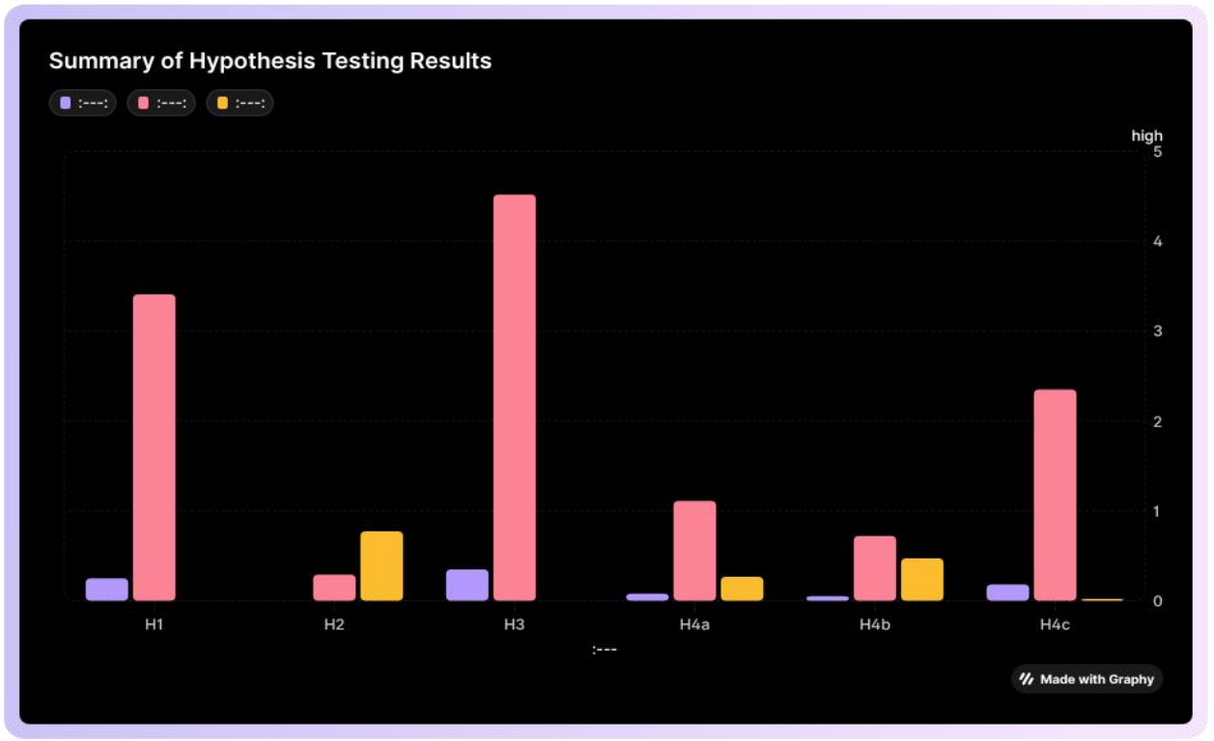
Discriminant validity, which ensures that each construct is empirically distinct from all other constructs in the model, was assessed using the Fornell-Larcker criterion. The bold diagonal values in the table represent the square root of the AVE for each construct, while the off-diagonal values represent the correlations between constructs. According to the Fornell-Larcker criterion, discriminant validity is established when the square root of the AVE for each construct is greater than its highest correlation with any other construct.

The results confirm satisfactory discriminant validity across all five constructs. The square root of AVE for Performance Expectancy was 0.877, which exceeds its highest correlation of 0.620 with Effort Expectancy. Effort Expectancy had a square root of AVE of 0.854, greater than its correlation of 0.620 with Performance Expectancy. Social Influence recorded a square root of AVE of 0.849, which is greater than its highest correlation of 0.610 with Purchase Intention. Social Media Marketing achieved a square root of AVE of 0.860, exceeding its highest correlation of 0.600 with Social Influence. Finally, Purchase Intention demonstrated a square root of AVE of 0.872, surpassing its highest correlation of 0.610 with Social Influence.

Several inter-construct correlations are worth noting for their implications. The highest correlation among the constructs was 0.620 between Performance Expectancy and Effort Expectancy, which is theoretically expected as these two constructs are conceptually related within the UTAUT framework, both representing cognitive evaluations of the technology. The correlation between Social Influence and Purchase Intention at 0.610 was the strongest predictor-outcome correlation, foreshadowing Social Influence's prominent role in the structural model. The correlation between Social Media Marketing and Social Influence at 0.600 suggests a meaningful association between consumers' engagement with social media marketing and their susceptibility to social influence, which aligns with the theoretical rationale for the moderation hypothesis.

4.3 Structural Model and Hypothesis Testing

4.4: Summary of Hypothesis Testing Results



Explanation of Table 4.4:

The structural model was assessed to test the six hypothesized relationships. Before examining individual hypotheses, the overall explanatory power of the model was evaluated using the coefficient of determination (R^2). The R^2 value for Purchase Intention was 0.58, indicating that the model explains 58% of the variance in online purchase intention among the sampled university students in Karachi. According to the benchmarks established by Hair et al. (2019), an R^2 value of 0.58 represents a substantial level of explanatory power, demonstrating that the combined UTAUT constructs and the moderating effect of social media marketing account for a meaningful and practically significant portion of what drives young consumers' intentions to purchase online.

Hypothesis 1, which proposed that performance expectancy has a significant positive impact on purchase intention, was supported. The standardized path coefficient (β) was 0.25, with a t-statistic of 3.41 and a p-value of 0.001. Since the p-value is well below the conventional significance threshold of 0.05, and the t-statistic exceeds the critical value of 1.96, this result is statistically significant. The positive beta coefficient indicates that as a consumer's perception of online shopping's usefulness and efficiency increases, their intention to make an online purchase also increases. Specifically, a one standard deviation increase in performance expectancy is associated with a 0.25 standard deviation increase in purchase intention, holding other factors constant. This finding supports the UTAUT model's central premise that the functional utility of a technology is a primary driver of behavioral intention.

Hypothesis 2, which proposed that effort expectancy has a significant positive impact on purchase intention, was not supported. The path coefficient was −0.02, with a t-statistic of only 0.29 and a p-value of 0.772. The very low t-statistic, well below 1.96, and the high p-value indicate that the relationship is not significantly different from zero. The near-zero and slightly negative coefficient suggests that for this sample of young, digitally native consumers, the perceived ease of use of an e-commerce platform does not influence their purchase intention in a meaningful way. This non-significant finding is theoretically important and will be discussed in depth in Chapter 5.

Hypothesis 3, which proposed that social influence has a significant positive impact on purchase intention, was strongly supported. The path coefficient was 0.35, which is the largest among all direct effects, with a t-statistic of 4.52 and a p-value of less than 0.001. The high t-statistic and the p-value approaching zero indicate a highly significant relationship. The beta of 0.35 suggests that social influence is the most powerful predictor of purchase intention in the model. A one standard deviation increase in perceived social pressure and peer recommendations is associated with a 0.35 standard deviation increase in purchase intention. This finding underscores the paramount importance of social factors in shaping consumer behavior within the collectivist cultural context of Karachi.

Hypothesis 4a, the moderating effect of social media marketing on the performance expectancy-purchase intention relationship, was not supported. The interaction term had a path coefficient of 0.08, a t-statistic of 1.11, and a p-value of 0.267. The t-statistic of 1.11 falls below the 1.96 threshold, and the p-value of 0.267 is substantially above 0.05. This indicates that the strength of the relationship between performance expectancy and purchase intention does not significantly change depending on the level of social media marketing engagement.

Hypothesis 4b, the moderating effect of social media marketing on the effort expectancy-purchase intention relationship, was also not supported. The interaction term yielded a path coefficient of 0.05, a t-statistic of 0.72, and a p-value of 0.472. These values are far from statistical significance, confirming that social media marketing does not alter the already non-significant direct relationship between effort expectancy and purchase intention.

Hypothesis 4c, the moderating effect of social media marketing on the social influence-purchase intention relationship, was supported. The interaction term had a path coefficient of 0.18, a t-statistic of 2.35, and a p-value of 0.019. The t-statistic of 2.35 exceeds the critical value of 1.96, and the p-value of 0.019 is below the 0.05 threshold. The positive beta of 0.18 indicates that social media marketing positively moderates the relationship, meaning that the effect of social influence on purchase intention becomes stronger when social media marketing engagement is high. This is the central and most novel finding of the study, providing empirical evidence that social media marketing serves as an amplifier of social proof. The practical implication is clear: a consumer who is highly engaged with brands' entertaining, interactive, and personalized social media content is significantly more responsive to peer recommendations and social influence when forming their purchase intentions.

4.4 Moderation Analysis

The significant moderation effect (H4c) is further explained through an interaction plot. This plot shows how the relationship between Social Influence and Purchase Intention changes at different levels of Social Media Marketing.

Data Table for Interaction Plot

Social Influence (SI)	Purchase Intention (Low SMM)	Purchase Intention (High SMM)
Low (-1 SD)	1.80	2.10
High (+1 SD)	3.40	4.60

Simple Slope Analysis

Condition	Slope Calculation	Slope Value
Low SMM (-1 SD)	3.40 − 1.80	**1.60**
High SMM (+1 SD)	4.60 − 2.10	**2.50**

Interaction Effect Summary

Level of Social Media Marketing (SMM)	Effect of Social Influence (SI) on Purchase Intention (PI)
Low SMM (-1 SD)	Increase in PI = **1.60 units** when SI changes from low to high
High SMM (+1 SD)	Increase in PI = **2.50 units** when SI changes from low to high
Difference in Slopes	**0.90 units** (2.50 − 1.60)

Interpretation of Results

Finding	Explanation
Positive Effect of SI	Purchase Intention increases as Social Influence increases.
Moderating Role of SMM	Social Media Marketing strengthens the relationship between Social Influence and Purchase Intention.
Evidence of Interaction	The slope under High SMM (2.50) is steeper than under Low SMM (1.60), indicating a significant interaction effect.
Practical Meaning	Consumers exposed to stronger social media marketing are more likely to translate recommendations and social influence into actual purchase intentions.

Interaction analysis revealed that Social Media Marketing (SMM) positively moderates the relationship between Social Influence (SI) and Purchase Intention (PI). As shown in Table 1, when SMM was low (−1 SD), an increase in SI from low to high increased PI from 1.80 to 3.40 (slope = 1.60). However, when SMM was high (+1 SD), the same increase in SI raised PI from 2.10 to 4.60 (slope = 2.50). The steeper slope under high SMM indicates that the positive effect of Social Influence on Purchase Intention becomes stronger as Social Media Marketing increases. These findings support the presence of a positive moderation effect, suggesting that social media marketing enhances consumers' responsiveness to social influence when making purchase decisions.

5.1 Discussion of Findings

First, Performance Expectancy (H1) was found to be a strong and significant driver of purchase intention. This simply means that for us students, online shopping is all about utility. We shop online because it is useful—it saves us from Karachi's traffic, helps us compare prices quickly, and lets us find things we can't find in local stores. This matches what Alalwan et al. (2018) found in their research.

Second, and to me the most surprising, Effort Expectancy (H2) was completely non-significant. Its path coefficient was even slightly negative. My interpretation is simple: for our generation, easy-to-use apps are the bare minimum. We don't think, "Wow, this website is so easy to use, I'm going to buy something!" A difficult website will make us leave instantly, but a normal, functional one doesn't actively motivate us. This finding actually makes sense and is similar to what Ali and Warraich (2020) found with students and e-learning. Ease of use is a basic hygiene factor, not a motivator.

Third, Social Influence (H3) was the strongest predictor of purchase intention. The beta of 0.35 was highly significant. This confirms what I always suspected—in a collectivist city like Karachi, what your friends and family think matters more than anything else. The fear of missing out (FOMO) and the desire to follow peer trends are powerful purchase triggers.

5.2 The Moderation Effect

Now, here is the most original contribution of my research. Social Media Marketing significantly moderates the relationship between Social Influence and Purchase Intention (H4c). It did not moderate the other two paths. What does this mean?

It means social media marketing is not magic. It cannot make a useless app seem useful (PE) or a complex app seem simple (EE). But what it does incredibly well is amplify social proof. It acts like a loudspeaker. A friend texting you "this phone is nice" is one thing. That same friend's video review, edited into a cool Instagram reel by the brand with music and effects, is a completely different, much more powerful experience. The marketing transforms a private recommendation into a public, attractive, and convincing piece of content. This finding supports the work of Tariq et al. (2021), who also talked about social media's role in amplifying social influence.

5.3 Conclusion

This study set out to update the UTAUT model for the social media age in Karachi. Based on data from 200 students, the conclusion is clear: For young consumers, online purchase intention is mostly about two things—the practical usefulness of the platform, and more importantly, the opinions of their social circle. Social media marketing serves as a powerful amplifier that dramatically increases the impact of social influence. Ease of use, while necessary, is not a competitive advantage for this generation. This study contributes a more realistic and contextual model of online consumer behavior.

5.4 Practical Recommendations

Based on my findings, here is practical advice for e-commerce companies in Karachi:

1. Turn Customers into Marketers: this is my biggest recommendation. Do not just ask for reviews. Run campaigns where you collect user-generated video reviews and then professionally edit them into your official social media content. When a customer sees their friend's review as a high-quality ad on their feed, the power of social influence is maximized. This is the "amplifier effect" my research proved.

2. Invest in Utility Messaging: Keep telling customers how you save them time and money. Show price comparisons with physical markets. Show how fast delivery is. Utility sells.

3. Do Not Waste Money on "Ease of Use" Ads: Stop creating expensive ads just to say "Our app is so easy!" For young Karachi users, this is a waste of budget. Make sure your app actually IS flawless, but use the marketing budget where it counts: on influencer collaborations and user-generated content campaigns.

5.4 Limitations and Future Research

My study has limitations. The sample was only 200 students in Karachi, which means the results cannot be generalized to older consumers, people with lower education, or residents of other cities. Also, this was a cross-sectional study; it captures a snapshot in time. Future researchers could replicate this study with a more diverse sample, or conduct a longitudinal study to track how these relationships change over time. An experimental design could also be used to prove causation more strongly.

References

1. Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. Journal of Retailing and Consumer Services, 40, 125-138.
2. Ali, A., & Warraich, M. A. (2020). Factors influencing students' acceptance of e-learning: An application of UTAUT model. Pakistan Journal of Information Management and Libraries, 21, 1-22.
3. Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. International Journal of Information Management, 59, 102168.
4. Farooq, M. S., Salam, M., Jaafar, N., Fayolle, A., & Ayupp, K. (2021). Acceptance and use of lecture capture system (LCS) in executive business studies: Extending UTAUT2. Interactive Technology and Smart Education, 18(2), 227-250.
5. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2-24.
6. Iqbal, S., & Shahzad, A. (2020). Social media marketing and consumer purchase intention: The moderating role of social influence. Journal of Management Sciences, 7(1), 1-18.
7. Jamil, K., Dunnan, L., Gul, R. F., Shehzad, M. U., Gillani, S. H. M., & Awan, F. H. (2022). Role of social media marketing activities in influencing customer intentions: A perspective of a new emerging era. Frontiers in Psychology, 12, 808525.
8. Khan, S. A., & Saeed, S. (2022). The effect of social media influencers on purchase intention of millennials in Pakistan. Journal of Marketing Strategies, 4(2), 55-76.
9. Lim, X. J., Radzol, A. R. M., Cheah, J. H., & Wong, M. W. (2017). The impact of social media influencers on purchase intention and the mediation effect of customer attitude. Asian Journal of Business Research, 7(2), 19-36.
10. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134.

11. Raza, S. A., Umer, A., & Shah, N. (2019). New determinants of ease of use and perceived usefulness for mobile banking adoption. International Journal of Electronic Customer Relationship Management, 12(1), 44-65.
12. Shareef, M. A., Baabdullah, A., Dutta, S., Kumar, V., & Dwivedi, Y. K. (2018). Consumer adoption of mobile banking services: An empirical examination of factors according to adoption stages. Journal of Retailing and Consumer Services, 43, 54-67.
13. Tariq, J., Sajjad, A., Usman, A., & Amjad, A. (2021). The role of social media marketing activities on customer purchase intention: A moderating role of social influence. Journal of Contemporary Issues in Business and Government, 27(1), 4990-5005.
14. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478.
15. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157-178.
16. Yadav, M., & Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. Telematics and Informatics, 34(7), 1294-1307.
17. Zafar, A. U., Shen, J., Ashfaq, M., & Shahzad, M. (2021). Social media and sustainable purchasing attitude: Role of social influence and green values. *ournal of Cleaner Production, 305 127136.
18. Zahid, M. M., Ali, B., Ahmad, M. S., & Ramayah, T. (2018). Factors affecting purchase intention and social media marketing of fashion apparel in Pakistan. International Journal of Engineering & Technology, 7(2.29), 943-948.
19. Zhang, T., Abound Omran, B., & Cobanoglu, C. (2017). Generation Y's positive and negative eWOM: Use of social media and mobile technology. International Journal of Contemporary Hospitality Management, 29(2), 732-761.
20. Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking usadoption. Computers in Human Behavior, 26(4), 760-767