https://doi.org/10.59865/abacj.2024.29

SOCIALIZATION AND IMPULSE BUYING OF YOUNG ADULTS IN S-COMMERCE: MEDIATING ROLES OF HEDONIC BROWSING AND UPWARD SOCIAL COMPARISON

Penjuree Kanthawongs[1] and Felicito Jabutay[2,*]

Abstract

Social media has become ubiquitous in the lives of young adults, exposing them constantly to their peers' online activities and an influx of commercial content that triggers impulsive purchases. Drawing insights from theoretical and empirical literature, the current study proposes a conceptual model to help explain what leads young adult consumers to impulse buy while using social media platforms for social interaction. The model was tested using partial least squares structural equation modeling, with data collected from 416 young adults from Thailand. The findings revealed that the social interaction motive elicits both hedonic browsing and upward social comparison. Hedonic browsing also acts as an antecedent of upward social comparison. The increased intensity of browsing and comparison elevates the likelihood of impulse buying. The study also found that hedonic browsing mediates the relationship between social interaction motives and upward social comparison. This comparison variable, in turn, mediates the connection between browsing and buying. However, the frequency of social media use does not have significant moderating effects on the relationships among hedonic browsing, upward social comparison, and impulse buying. These findings have significant practical and theoretical implications.

Keywords: Social Interaction Motive, Hedonic Browsing, Upward Social Comparison, Impulse Buying, S-commerce.

1. INTRODUCTION

For the past two decades, social media platforms have emerged as primary channels for individuals seeking online social interaction. In recent years, these platforms have evolved and now offer features that enable businesses to set up virtual storefronts, allowing them to advertise and sell products and services directly to users within social media spaces. This evolution has given rise to the widely embraced trend known as social commerce or s-commerce (Van Tran et al., 2023; Zafar et al., 2021).

Previous studies have indicated that impulse buying is a common phenomenon in s-commerce, with young adults being particularly vulnerable to this phenomenon (e.g., Anindito & Handarkho, 2022; Zafar et al., 2021). Online impulse buying refers to unplanned purchases triggered by excitement, desire, or a need for immediate gratification, which occur within

[1] Ms. Penjuree Kanthawongs is currently working as a Vice Director for Administrative Affairs and a lecturer of Business Administration (International Program) at Kasem Bundit University, Thailand. She obtained a Master of Business Administration degree from Southern Illinois University, USA. Email: penjuree.kan@kbu.ac.th

[2,*] Dr. Felicito Jabutay (Corresponding Author) is currently working as a lecturer in the Graduate School at Kasem Bundit University, Thailand. He obtained a Master of Business Administration degree from Assumption University, Thailand. He earned his Ph.D. in Business Management from the College of Management at Mahidol University, Thailand. Email: felicito.jab@kbu.ac.th

online commercial platforms (Park et al., 2012; Zheng et al., 2019). Young adults are typically described as highly sociable individuals aged 18 to 34 (Fry, 2016; Vespa, 2017).

Young adults' impulse buying in s-commerce is understandable. As heavy social media users, they are constantly exposed to celebrity and influencer marketing and persuasive advertisements, encouraging them to engage in impulse buying (Van Tran et al., 2023; Zafar et al., 2021). Additionally, their desire for greater status and self-expression through fashion brands, along with their tendency to compare themselves with online personalities as benchmarks for standards, increases the likelihood of impulse-driven purchases (Anindito & Handarkho, 2022; Iyer et al., 2020; Van Tran et al., 2023). Furthermore, their inclination to browse content hedonically on social media also makes them susceptible to peer influence and recommendations, consequently leading to impulse buying (Anindito & Handarkho, 2022; Shahpasandi et al., 2020).

The results of previous studies have indicated interconnections between young adults' social interactions on social media platforms and their inclination to engage in hedonic browsing and impulse buying within the commercial aspects of these platforms. However, these studies have not conclusively proven these connections empirically. For instance, while they have suggested plausible connections among social interaction motives, hedonic browsing, and upward social comparison (e.g., Lewis, 2021; Liu et al., 2019; Van Tran et al., 2023), they have not provided empirical evidence to support these relationships. Additionally, while previous studies have empirically linked impulse buying in s-commerce to hedonic browsing (e.g., Kimiagari & Malafe, 2021; Shahpasandi et al., 2020) and upward social comparison (e.g., Liu et al., 2019; Van Tran et al., 2023), the interconnections among these three variables have not been examined in a single empirical study. Hence, addressing these gaps is the main focus of the current study.

In Thailand, s-commerce platforms are heavily used for commercial activities, exposing social media users—estimated to be 68% of the country's 71 million population—to advertisements and celebrity endorsements, which makes s-commerce purchases prevalent (Kemp, 2024; Leesa-Nguansuk, 2024). A recent study indicated that impulse buying significantly contributes to these purchases among Thais (Pellegrino et al., 2022). Therefore, exploring the interconnections between social media use, hedonic browsing, social comparison, and impulse buying in s-commerce, holds particular significance in Thailand, as the results can provide invaluable localized insights for businesses, consumers, and other stakeholders.

Given the significance of this study in terms of the novelty of the findings and the selected location, a conceptual model (see Figure 1) representing ten hypotheses has been proposed to address the identified gaps. This model was employed to examine how motivation for engaging with social media for social interaction initiates the process leading to impulse buying and to evaluate the mediating roles of hedonic browsing and upward social comparison. Additionally, the model was used to assess how the frequency of social media usage moderates the relationships among hedonic browsing, upward social comparison, and impulse buying. Specifically, the current study uses the model to address the following research questions:

RQ1: How do social interaction motives influence hedonic browsing and upward social comparison in s-commerce?

RQ2: How do hedonic browsing and upward social comparison affect impulse buying in s-commerce?

RQ3: Does hedonic browsing mediate the effect of social interaction motives on upward social comparison in s-commerce?

RQ4. Does upward social comparison mediate the effect of hedonic browsing on impulse buying in s-commerce?

RQ5: Does the frequency of social media use moderate the relationships among hedonic browsing, upward social comparison, and impulse buying in s-commerce?

The results of the study could serve as a practical guide for businesses aiming to develop effective marketing strategies that resonate with their target audience and stimulate impulse buying, ultimately leading to increased sales. Additionally, this research has the potential to raise awareness among young adults in Thailand regarding the impact of their social media presence on their purchase decisions. Through this study, they may better understand the association between their social media activities and impulsive purchasing behavior, enabling them to be more mindful of their online activities and behaviors. As the first study in Thailand to examine the roles of social interaction motives, hedonic browsing, and upward social comparison, in fostering impulse buying in s-commerce, the findings could also contribute to the broader conversation on online consumer behavior in the country.

2. LITERATURE REVIEW

2.1 Theories

Several theories can explain people's behavior on social media, with two prominent theories being the Use and Gratification (U&G) theory and the Social Comparison Theory (SCT). The U&G theory provides insights into individuals' proactive role in selecting media based on personal needs and desires (Katz et al., 1973; Rubin, 1993). It posits that media use is goal-directed, influenced by social and psychological factors, and interconnected with interpersonal communication (Rubin, 1993). Previous studies employing the U&G theory have indicated that individuals use social media to socialize, communicate, present an idealized version of themselves, seek information, and for entertainment (e.g., Abbas Naqvi et al., 2020; Qin, 2020). Past research has also found that gratifications in the experience of using social media foster brand-consumer interactions and facilitate consumer purchasing in s-commerce (e.g., Santos Corrada, 2020; Qin, 2020).

Festinger (1954) laid the groundwork for the SCT by proposing that individuals naturally evaluate themselves by comparing their opinions and abilities to those of others. When people engage in social comparison and perceive a discrepancy, they may adjust their opinions and abilities to better align with those of others. Subsequent scholars expanded the theory's scope, suggesting that social comparison can manifest in upward and downward social trajectories and extend beyond opinions and abilities to encompass possessions, appearance, and performance (e.g., Collins, 1996; Taylor & Lobel, 1989). Past studies have revealed that exposure to carefully curated portrayals of others' lives on social media significantly intensifies upward social comparison, leading to adverse psychological outcomes such as negative affect and decreased self-esteem (Aubry et al., 2024; Liu et al., 2019). Moreover, upward social comparison has been linked to impulse buying in s-commerce (Liu et al., 2019; Van Tran et al., 2023).

2.2 Social Interaction Motive

Social interaction motive refers to an individual's inclination to engage in social exchange and self-presentation within social media platforms (Senkbeil, 2018). Previous studies have implied that users' positive experiences of social interaction on social media drive them to explore commercial content. For instance, Anindito and Handarkho (2022) insinuated that young adult social media users who enjoy positive social experiences with their online peers are more likely to engage in commercial browsing and buying. Additionally, Chen et al. (2020) found that social media users who engage in social browsing also tend to engage in hedonic browsing for products and services. While these studies did not empirically explore the direct link between a social interaction motive in using social media and hedonic browsing for commercial content, they implied a causal connection between these two variables.

Furthermore, previous research has indicated that social interactions on social media platforms often expose young adults to individuals projecting superiority in attractiveness, possessions, success, or popularity. This exposure can trigger upward social comparison behaviors that extend to the platforms' commercial aspects. For instance, Liu et al. (2019) implied that young adult social media users engage in upward social comparison when interacting with others they perceive as having superior attractiveness or possessions. Subsequently, this may lead them to explore commercial content in search of items they believe can bridge the perceived gap between themselves and those individuals. Furthermore, Van Tran et al. (2023) suggested that such comparisons also occur directly within s-commerce platforms when young adults extend their social interactions to engage with attractive personalities or observe celebrity endorsers on these platforms. However, it is worth noting that while the link between social interaction motives and upward social comparison seems apparent, the cited prior studies have not provided empirical evidence, relying instead on assumptions to establish this connection.

Therefore, based on a synthesis of the empirical literature (e.g., Anindito & Handarkho, 2022; Chen et al., 2020) and drawing conjectural support from the U&G theory (Katz et al., 1973; Rubin, 1993), the current study posits that young adults, while socially interacting with their peers on social media platforms, may encounter enjoyable commercial posts, advertisements, or endorsements. These commercial contents may evoke positive emotions, such as enjoyment or pleasure, satisfying their innate desire for entertainment and driving them to explore more commercial features in a hedonic manner. Additionally, based on conceptualizations in scholarly articles (e.g., Liu et al., 2019; Van Tran et al., 2023) with theoretical support from the SCT (Collins, 1996; Festinger, 1954), this study surmises that young adults' social interactions with other social media users expose them to personalities projecting superiority in terms of possessions, attractiveness, and accomplishments, triggering upward social comparison. Therefore, the following hypotheses are proposed:

H1: Social interaction motives positively affect hedonic browsing.

H2: Social interaction motives positively affect upward social comparison.

2.3 Hedonic Browsing

Hedonic browsing refers to engaging in online activities, including exploring commercial content, primarily for pleasure, enjoyment, or entertainment rather than fulfilling a specific functional or utilitarian need (Park et al., 2012). While empirical evidence on the influence of hedonic browsing on upward social comparison is lacking, a synthesis of existing literature suggests a link. For instance, Wirtz et al. (2021) conceptualized that active users across various social media platforms engage in upward social comparison while browsing enjoyable content. Additionally, Wadsley et al. (2022) found a correlation between prolonged social media content checking and heightened levels of upward social comparison. Lengthy and enjoyable content exploration constitutes hedonic browsing that exposes users to individuals who are famous for endorsing products or displaying their attractive possessions (Liu et al., 2019; Van Tran et al., 2023; Zafar et al., 2021). Exposure to such online personalities who are often perceived as more successful and attractive elicits upward social comparison (Liu et al., 2019; Van Tran et al., 2023).

Unlike the connection between hedonic browsing and upward social comparison, which lacks empirical support, previous studies have provided ample evidence of the impact of hedonic browsing on impulse buying on s-commerce platforms. For instance, Shahpasandi et al. (2020) discovered that hedonic browsing on social media's commercial content correlates with impulse buying behaviors. This finding is consistent with the results of Kimiagari and Malafe's (2021) analysis, which indicated a robust causal link between hedonic browsing and impulse buying within s-commerce.

Drawing on insights from the empirical literature (e.g., Wadsley et al., 2022; Van Tran et al., 2023; Zafar et al., 2021) and support from the SCT (Collins, 1996; Festinger, 1954), this study posits that individuals engaging in hedonic browsing on s-commerce platforms encounter attractive personalities (e.g., celebrities promoting self-enhancing products and other users showcasing desirable possessions) and subsequently compare themselves to them. Additionally, in line with the premises outlined by the U&G theory (Katz et al., 1973; Rubin, 1993) and findings from previous studies (e.g., Kimiagari & Malafe, 2021; Shahpasandi et al., 2020), this study surmises that the gratification experienced through hedonic browsing contributes to an amplification of impulse buying tendencies. Thus, it is hypothesized that:

H3: Hedonic browsing positively influences upward social comparison.

H4: Hedonic browsing positively affects impulse buying.

2.4 Upward Social Comparison

Upward social comparison refers to the act of comparing oneself with others perceived as superior or more successful in certain aspects, such as achievements, abilities, or possessions (Collins, 1996). Studies on s-commerce platforms have revealed that upward social comparison predicts impulse buying, with several psychological variables playing significant roles. For instance, in their investigation of the consequences of upward social comparison, Liu et al. (2019) found that it has both a direct and indirect effect on impulse buying. The indirect effect passes through the mediation of negative affect. Upward social comparison has been found to reduce self-esteem (Aubry et al., 2024), generating a mediated positive impact on impulse buying in s-commerce platforms, which was observed to be more pronounced among individuals with low self-esteem (Van Tran et al., 2023).

In line with the findings mentioned above and drawing upon theoretical support from SCT (Collins, 1996; Festinger, 1954), the present study hypothesizes that young adults, when comparing themselves with other s-commerce users or personalities perceived to be more attractive and successful, may experience negative affect and diminished self-esteem due to the perceived disparity between themselves and their comparison targets. Consequently, they may desire to acquire items similar to those owned by these individuals to mitigate the perceived discrepancy. Upon encountering such items available for purchase on s-commerce platforms, they may feel compelled to engage in impulsive purchases. Thus, the following hypothesis was formulated:

H5: Upward social comparison positively affects impulse buying.

2.5 Mediations of Hedonic Browsing and Upward Social Comparison

As discussed earlier, the current study proposes that social interaction motives influence hedonic browsing and upward social comparison. It is also posited that hedonic browsing affects upward social comparison. In this framework, hedonic browsing is positioned between social interaction motives and upward social comparison. Thus, this study surmises that the browsing variable mediates the relationship between motives and comparison. Additionally, as hypothesized earlier, hedonic browsing and upward social comparison could positively influence impulse buying. Given that upward social comparison is also hypothesized as an outcome of hedonic browsing, it is located along the causal pathway between the browsing and buying variables. Therefore, this study also suggests that the comparison variable mediates the relationship between browsing and buying. Consequently, the mediation hypotheses were formulated as follows:

H6: Hedonic browsing mediates the effect of social interaction motives on upward social comparison.

H7. Upward social comparison mediates the effect of hedonic browsing on impulse buying.

2.6 Moderations of Frequency of Social Media Use

Previous research in s-commerce has indicated that the frequency of social media usage can play a moderating role in the relationship between consumers' attitudes or behaviors and their antecedents. For instance, Lee et al. (2020) conducted a study on a prominent social networking platform, finding that reaction icons, such as 'like' and 'unlike,' exert a significant influence on electronic word-of-mouth (eWOM) intentions, moderated by usage frequency. Additionally, Molinillo et al. (2021) determined that the frequency of usage on s-commerce websites or pages moderates the effects of service quality on perceived value and the effects of perceived value on customer loyalty.

Building upon the above findings and drawing from the recommendations of Namazi and Namazi (2016) regarding the utilization of moderators in business research, the present study hypothesizes that the frequency of social media use moderates the relationships among hedonic browsing, upward social comparison, and impulse buying. Specifically, these moderation hypotheses suggest that the impacts of hedonic browsing on upward social comparison and impulse buying are stronger for young users with high usage than for those with low usage. Similarly, the influence of upward social comparison on impulse buying is expected to be greater among individuals who spend more time on social media than among those who spend less time. Therefore, three mediation hypotheses are proposed:

H8. Frequency of usage moderates the effect of hedonic browsing on upward social comparison.

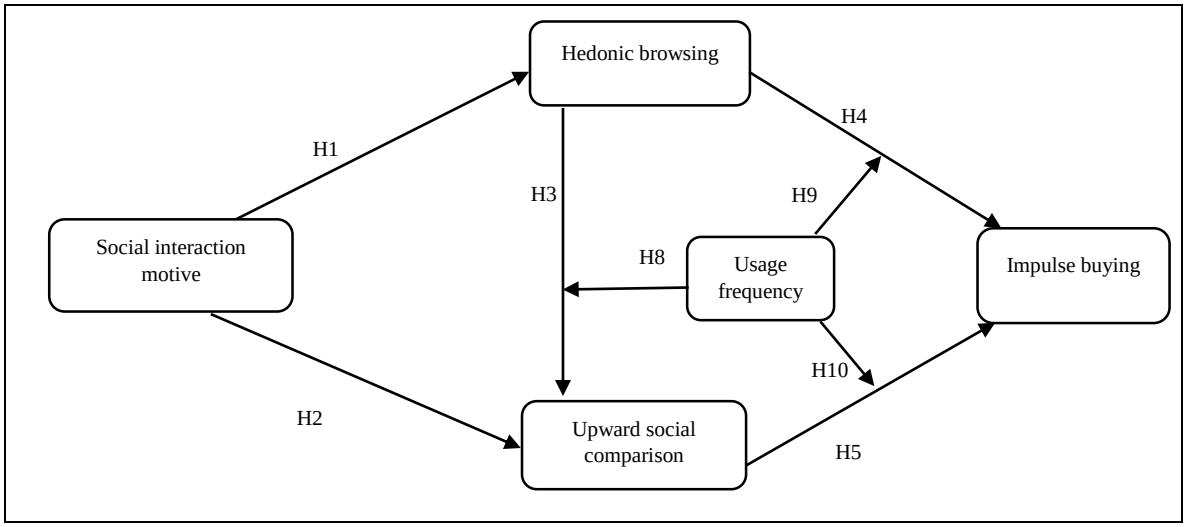
H9. Frequency of usage moderates the effect of hedonic browsing on impulse buying.

H10. Frequency of usage moderates the effect of upward social comparison on impulse buying.

2.7 Conceptual Framework

The conceptual framework formulated based on the hypothesized relationships is illustrated in Figure 1.

Figure 1 Conceptual Framework



Note. H6 and H7 are mediation hypotheses, not shown in the diagram.

3. METHODOLOGY

3.1 Data Collection and Sample

The study employed a quantitative methodology, utilizing an online survey as the primary data collection tool. The sample consisted of Thai higher education students from five universities, all of whom were active social media users and had prior experience with online purchases in s-commerce. The questionnaire was presented in English and supplemented with Thai translations. To ensure accuracy in wording and context, a back-translation technique was employed during the translation process, guaranteeing that the intended meanings were effectively conveyed to the respondents. Prior to distribution, a panel of experts from the authors' institution evaluated the study's rationale, methodology, and questionnaire content. The panel approved the research and issued a certificate of approval, affirming that the research complied with established research ethics and standards.

Initially, 437 individuals responded to the questionnaire. However, some responses were excluded due to extensive missing values in their questionnaires. Model-based estimates imputation via maximum likelihood estimation was employed for minor cases of missing values. In total, 21 responses were excluded. Therefore, the final dataset comprised 416 complete questionnaire responses. Among these, 224 respondents identified as male (53.8%) and 192 as female (46.2%). The participants' ages ranged from 18 to 29, with an average age of 20.98. Almost half (195 or 46.9%) of the participants were first-year bachelor-level students, while the remaining participants included 58 sophomores (13.9%), 54 juniors (13%), and 99 seniors (23.8%), while ten respondents (2.4%) were enrolled in master's degree programs.

3.2 Measurements

The study utilized multi-item scales adapted from existing literature to evaluate the latent variables, with some items adjusted to align with the research context. These items are listed in Table A1. Respondents rated their agreement with each item on a seven-point Likert-type scale, ranging from "strongly disagree" (1) to "strongly agree" (7).

The measurement of social interaction motives in using social media was adapted from Senkbeil (2018). The four-item scale assessed respondents' engagement in social exchange and self-presentation on social media platforms. The Cronbach's alpha for these items was 0.85.

The evaluation of upward social comparison within s-commerce was conducted using Van Tran et al.'s (2023) six-item scale. This scale assessed participants' tendency to compare themselves with s-commerce personalities they perceived as superior. The reliability analysis yielded a Cronbach's alpha of 0.93 for these items.

The hedonic browsing and impulse buying scales were adapted from Park et al. (2012). The former, comprising four items, assessed users' pleasure-seeking browsing activities in s-commerce. The latter, comprising five items, measured the respondents' impulsive purchase behavior in s-commerce. The Cronbach's alpha coefficient for the hedonic browsing items was 0.84, while for the impulse buying items, it was 0.89.

The participants' social media usage frequency was determined by calculating the number of hours they spent on these platforms each week. This was done by multiplying the number of days they reported using social media platforms each week (ranging from 0 to 7) by the estimated number of hours they spent on these platforms daily (ranging from 0 to 24). The mean weekly usage was calculated to be 64.25 hours. Subsequently, this variable was dichotomized, with usage of 64 hours or less categorized as low and usage exceeding 64 hours as high. Low usage was denoted by 0, while high usage was represented by 1.

3.3 Estimation Method

The present study's hypotheses were subjected to statistical testing using partial least squares structural equation modeling (PLS-SEM). PLS-SEM presents various advantages, such as the capability to evaluate predictive models and conduct advanced analyses, thereby increasing the probability of producing detailed findings and conclusions (Hair et al., 2019). Additionally, Hair et al. (2019) recommended the use of PLS-SEM for analyzing complex models, especially those involving moderation. In this research, PLS-SEM estimation was conducted using SmartPLS 4.

4. RESULTS

4.1 Measurement Model Assessment

The present study proposed a reflective measurement model. In a reflective model, the observed variables are considered indicators of a latent construct, assumed to be caused by the latent construct and to reflect its underlying dimensions or attributes. Evaluating a reflective measurement model in PLS-SEM analysis involves assessing the indicator loadings, Cronbach's alpha or composite reliability, average variance extracted (AVE), and the Heterotrait-Monotrait (HTMT) ratio (Hair et al., 2019).

As depicted in Table A1, the analysis unveiled that among the 19 indicators spanning the four latent constructs, their loadings ranged from 0.75 to 0.89, surpassing the recommended threshold of 0.708. Furthermore, all these loadings were significant ($p < 0.001$). These results suggest that each construct accounted for more than 50 percent of the variance in each indicator, indicating acceptable item reliability (Hair et al., 2019).

Additional scrutiny revealed that Cronbach's alpha values for all constructs ranged from 0.84 to 0.93, while composite reliability statistics ranged from 0.85 to 0.93. These findings substantiate the reliability of the measurements, affirming high internal consistency across all latent constructs (Hair et al., 2019). The composite reliability statistics for all constructs are listed in Table 1.

Table 1 Composite Reliability (CR) Statistics**,** AVE Values, HTMT Ratios, and VIF Statistics

Variables	CR	AVE	SIM	HB	USC
Social interaction motive (SIM)	0.86	0.70			
Hedonic browsing (HB)	0.85	0.68	0.73 (1.00)		
Upward social comparison (USC)	0.93	0.73	0.65 (2.12)	0.68 (2.12)	
Online impulse buying (OIB)	0.90	0.70	0.62	0.66 (1.86)	0.71 (1.86)

Note. In the diagonal, numbers outside of the parentheses represent HTMT ratios, while numbers inside the parentheses denote VIFs.

Subsequently, the AVEs and HTMT ratios were analyzed to assess convergent and discriminant validity, respectively. Results revealed AVE values ranging from 0.68 to 0.73 for the four latent constructs, exceeding the recommended minimum of 0.50. These findings affirm convergent validity and indicate that all four constructs can explain more than 50 percent of the variances of their items (Hair et al., 2019). Furthermore, examination of HTMT ratios showed figures ranging from 0.62 to 0.73, satisfying the criterion of not exceeding 0.85 for structurally distinct constructs (Henseler et al., 2015). These figures support the presence of

the model's discriminant validity, suggesting that the constructs were empirically distinct from one another. Table 1 presents the AVE values and HTMT ratios.

4.2 Structural Model Assessment and Hypotheses Testing Results

After confirming the adequacy of the measurement model, the subsequent step in evaluating PLS-SEM results involves assessing the structural model. This assessment encompasses several criteria, including examining collinearity among the latent constructs, evaluating the coefficient of determination (R^2), analyzing the blindfolding-based cross-validated redundancy measure (Q^2), examining the model's out-of-sample predictive power, and assessing the statistical significance and practical relevance of the path coefficients (Hair et al., 2019).

The collinearity among the latent constructs in this study's model was assessed using the full variance inflation factor (VIF) statistics. The full VIF refers to the VIF calculated for all predictor constructs in the structural model. The results revealed that the VIF statistics ranged from 1.00 to 2.12. These VIF figures were ideal as they were lower than 3, indicating that multicollinearity was not a concern as the predictor constructs were not highly correlated with each other (Hair et al., 2019). These findings suggested that collinearity could not bias the regression results among the constructs in the model. The VIF statistics of all predictor constructs are shown inside the parentheses in Table 1.

Since collinearity was not an issue, we proceeded to assess the R^2 statistics. The R^2 measures the variance explained in each of the endogenous constructs and is, therefore, a measure of the model's explanatory power (Hair et al., 2019). The analysis revealed that the R^2 values for the endogenous variables ranged from 0.39 to 0.47, suggesting weak to moderate degrees of explanatory power (Hair et al., 2019). Another method to evaluate the model's predictive accuracy is calculating the Q^2 values of the endogenous constructs. The results yielded Q^2 values ranging from 0.28 to 0.38, suggesting small to medium levels of predictive relevance in the PLS-path model (Hair et al., 2019). Table 2 details the R^2 and Q^2 values of the endogenous constructs.

Table 2 R^2 and Q^2 Values of the Endogenous Constructs

Predictor	Outcome	R^2	Q^2
Social interaction motive	Hedonic browsing	0.39	0.38
Social interaction motive	Upward social comparison	0.44	0.33
Hedonic browsing	Online impulse buying	0.47	0.28
UseF			
UseF × Hedonic browsing			
Upward social comparison			
UseF			
UseF × Hedonic browsing			
UseF × Upward social comparison			

Note. UseF = Usage frequency

Since R^2 only indicates the model's in-sample explanatory power and says nothing about the model's out-of-sample predictive power, Shmueli et al. (2019) suggested using the PLSpredict method to assess the model's out-of-sample predictive power. PLSpredict estimates the model on an analysis sample and assesses its predictive performance using data separate from the analysis sample. This study's initial PLSpredict analysis showed that the Q^2predict values of all endogenous constructs' indicators were above zero, suggesting that the model outperforms the most naïve benchmark (Hair et al., 2019; Shmueli et al., 2019). Of the

two prediction metrices, mean absolute error (MAE) and root mean squared error (RMSE), the latter was chosen, as the examination of the prediction error distributions had not shown extreme values which would make them highly non-symmetric. The results showed that out of 15 endogenous constructs' indicators, only six (minority) in the PLS-SEM_RMSE analysis produced higher prediction errors than the naïve least mean RMSE (LM_RMSE) benchmarks. These results suggest that the model has a medium out-of-sample predictive power (Hair et al., 2019; Shmueli et al., 2019). Table 3 shows the constructs or variables and their indicators' codes, along with the outcomes of the PLSpredict analysis.

Table 3 Variables, Indicator Codes, Q^2predict Values, and RMSE Prediction Errors

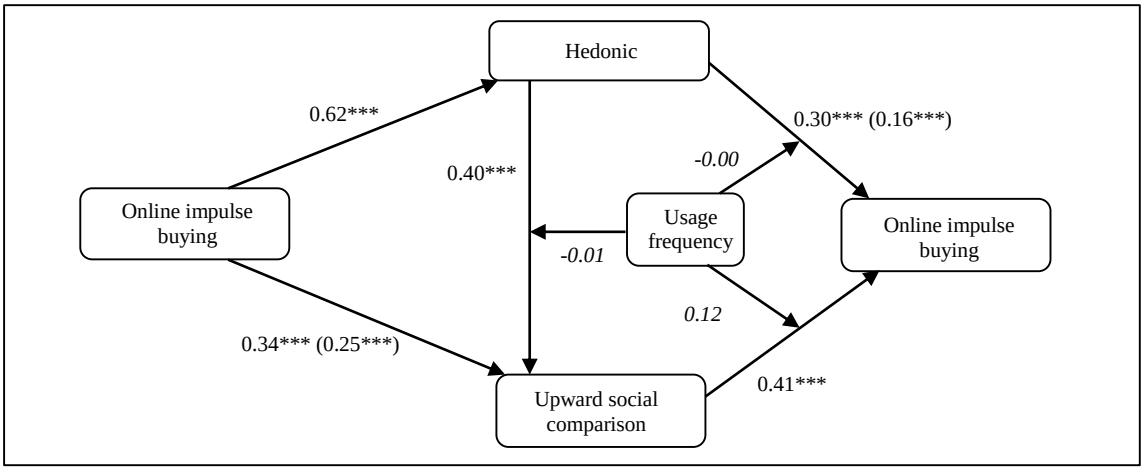
Variable / Indicator Code	Q^2predict	PLSSEM_RMSE	LM_RMSE
Hedonic browsing			
HB1	0.284	1.431	1.437
HB2	0.300	1.450	1.454
HB3	0.257	1.523	1.521
HB4	0.185	1.404	1.388
Upward social comparison			
USC1	0.244	1.687	1.696
USC2	0.221	1.644	1.655
USC3	0.287	1.652	1.652
USC4	0.228	1.618	1.633
USC5	0.199	1.784	1.783
USC6	0.261	1.662	
Online impulse buying			
OIB1	0.191	1.729	1.723
OIB2	0.209	1.718	1.702
OIB3	0.231	1.879	1.852
OIB4	0.159	1.699	1.704
OIB5	0.185	1.705	1.707

After establishing the model's explanatory and predictive power, the final step entailed examining the statistical significance of the path coefficients. This stage was also utilized to test the hypotheses. The analysis results revealed that the path coefficients and their corresponding *p*-values supported H1 and H2, confirming that social interaction motives positively influence both hedonic browsing ($\beta = 0.62$, $p < 0.001$) and upward social comparison ($\beta = 0.34$, $p < 0.001$) in s-commerce platforms. The path analyses also verified H3, as hedonic browsing positively affected upward social comparison ($\beta = 0.40$, $p < 0.001$). Regarding the impacts of hedonic browsing and upward social comparison on impulse buying, the results demonstrated significant positive effects, confirming H4 and H5, with upward social comparison exhibiting a more notable effect ($\beta = 0.41$, $p < 0.001$) than hedonic browsing ($\beta = 0.30$, $p < 0.001$).

The examination of the indirect effects revealed significant coefficients. As shown in Figure 2 and Table 4, the indirect effect of social interaction motives (independent variable or *IV*) on upward social comparison (dependent variable or *DV*) through the mediation of hedonic browsing was significant ($\beta = 0.25$, $p < 0.001$), supporting the first mediation hypothesis, H6. Similarly, H7 was supported, as the indirect effect of hedonic browsing (*IV*) on impulse buying (*DV*) through the mediation of upward social comparison was also significant ($\beta = 0.16$, $p < 0.001$). These results indicate partial mediation since the direct effects of the *IV*s on the *DV*s were also significant ($p < 0.001$).

Figure 2 presents the standardized coefficients for both the direct and indirect effects in the causal paths among the variables. The figure also illustrates the moderating effects, demonstrating how frequency of usage, acting as the moderator (*M*), influences the relationships between hedonic browsing and upward social comparison, hedonic browsing and impulse buying, and upward social comparison and impulse buying.

Figure 2 Direct, Indirect, and Moderating Effects



Notes. ***$p < 0.001$. *Italicized* coefficients = not significant ($p > 0.05$). Coefficients in parentheses = indirect effects.

The moderation analyses revealed that the interaction term UseF × HB (usage frequency multiplied by hedonic browsing) lacked a significant effect on upward social comparison (β = -0.01, $p > 0.05$). Examination of the two-way interaction plot, depicted in Figure 3, showed that the lines representing the causal relationship between hedonic browsing and upward social comparison across different levels of usage frequency were parallel. These results indicate that H8 is not supported, revealing that usage frequency does not influence the strength or direction of the relationship between hedonic browsing and upward social comparison. Similarly, H9 could not be confirmed, as the interaction term UseF × HB also demonstrated no significant effect on impulse buying (β = -0.00, $p > 0.05$), and the two-way interaction plot unveiled parallel lines (see Figure 4), demonstrating that usage frequency does not moderate the causal relationship between hedonic browsing and impulse buying.

The intersecting lines in Figure 5 indicate that as usage frequency increases, it potentially strengthens the positive causal relationship between upward social comparison and impulse buying. However, the coefficient representing the effect of the interaction term UseF × USC (usage frequency multiplied by upward social comparison) on impulse buying was found to be insignificant (β = 0.12, $p > 0.05$) at a five percent significance level. Additionally, the effect of UseF on impulse buying was also insignificant (β = -0.04, $p > 0.05$).

These findings align with prior studies that similarly observed insignificant moderation despite the presence of intersecting lines in a two-way interaction plot. For instance, Yew et al. (2023) noted intersecting lines while plotting the moderating effect of risk level on the influence of safety risk on mitigation measures. Similar to the results of the current study, their statistical analyses demonstrated that while the main effect of safety risk (*IV*) on mitigation measures (*DV*) was robust and significant (β = 0.61, $p < 0.001$), the effects of risk level (*M*) and the interaction term (risk level × safety risk) on the *DV* were statistically insignificant at the five percent significance level (β = 0.09, p = 0.42, and β = 0.17, p = 0.21, respectively). Likewise, Ahmed et al. (2021), in their investigation of the moderating effect of work ethic on the relationship between wisdom and employee loyalty, also observed intersecting lines in the

interaction plot amid an insignificant impact of the interaction term (work ethic × wisdom) on employee loyalty at the five percent significance level ($\beta = 0.07$, $p = 0.08$). Aiken et al. (1991) also discussed this phenomenon, where there is a visual indication of potential moderation (e.g., intersecting lines in the interaction plot) that does not attain statistical significance based on the output of statistical analyses.

The PLS-SEM literature recommends interpreting moderation results based on the interaction term's effect on the *DV* (e.g., Ringle et al., 2024; Hair et al., 2021). For example, Hair et al. (2021) stated that in PLS-SEM, "when interpreting the results of a moderation analysis, the primary focus is the significance of the interaction term. If the interaction term's effect on the endogenous construct is significant, we conclude the moderator *M* has a significant moderating effect on the relationship between *Y1* and *Y2*" (p. 162). Therefore, aligning with the literature, this study concludes that while there may appear to be a noticeable difference in the relationship between upward social comparison and impulse buying depending on the level of usage frequency, as indicated by the intersecting lines in the two-way interaction plot, the statistical analysis reveals that this interaction effect is not significant, leading to the rejection of H10. The results are illustrated in figures 3, 4, and 5 below.

Figure 3 Interaction Plot for Usage Frequency (*M*), Hedonic Browsing (*IV*), and Upward Social Comparison (*DV*)

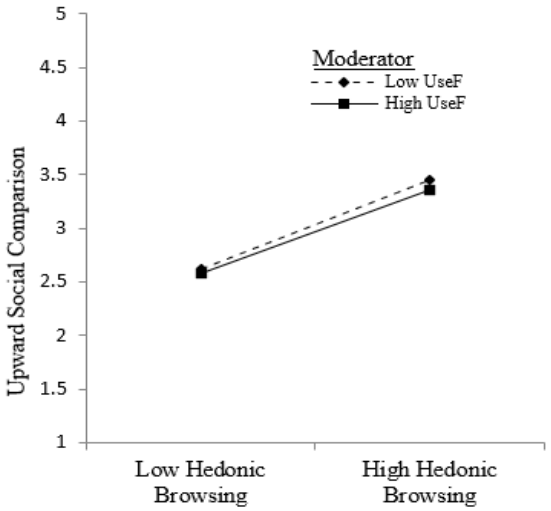


Figure 4 Interaction Plot for Usage Frequency (*M*), Hedonic Browsing (*IV*), and Impulse Buying (*DV*)

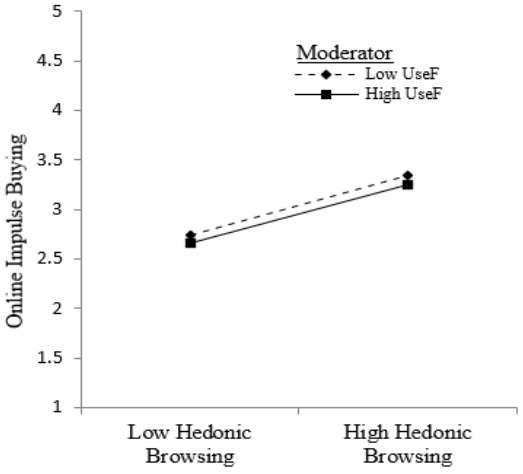


Figure 5 Interaction Plot for Usage Frequency (*M*), Upward Social Comparison (*IV*), and Impulse Buying (*DV*)

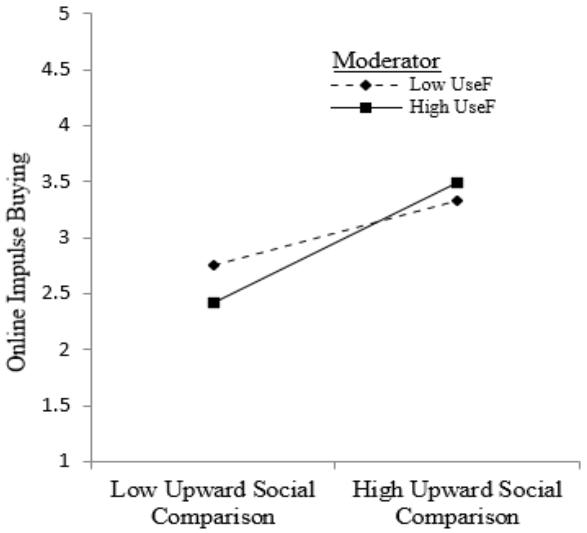


Table 4 presents a comprehensive summary of the results obtained from the hypothesis testing. It specifies all coefficients among the hypothesized relationships and their corresponding *p*-values. Furthermore, this table provides concluding remarks on the consequent support or rejection of the proposed hypotheses.

Table 4 Direct, Indirect, and Interaction Effects, *P*-values**,** and Hypothesis Testing Remarks

Hypothesis	Path	Coefficient β	*p*	Supported
		Direct effect		
H1	SIM → HB	0.62	< 0.001	Yes
H2	SIM → USC	0.34	< 0.001	Yes
H3	HB → USC	0.40	< 0.001	Yes
H4	HB → OIB	0.30	< 0.001	Yes
H5	USC → OIB	0.41	< 0.001	Yes
		Indirect effect		
H6	SIM → HB → USC	0.25	< 0.001	Yes
H7	HB → USC → OIB	0.16	< 0.001	Yes
		Interaction effect		
H8	UseF × HB → USC	-0.01	= 0.89	No
H9	UseF × HB → OIB	-0.00	= 0.99	No
H10	UseF × USC → OIB	0.12	= 0.31	No

5. DISCUSSION

The findings suggest that the motive for social interaction in social media contributes to increased hedonic browsing and social comparison in s-commerce platforms. While previous studies have hinted at these connections (e.g., Anindito & Handarkho, 2022; Liu et al., 2019; Qin, 2020; Van Tran et al., 2023), they have predominantly remained theoretical and lacked empirical testing. Therefore, this study provides empirical evidence that when young people engage in social interactions with their peers on social media platforms, they experience positive emotions that prompt them to explore the commercial aspects of these platforms in a

hedonic manner and compare themselves to attractive and successful individuals encountered within s-commerce.

The study also reveals that hedonic browsing enhances upward social comparison. Previous studies have suggested a link between these two variables, albeit without empirical justification (e.g., Wirtz et al., 2021; Van Tran et al., 2023). Hence, the current study adds to the literature by providing empirical evidence that individuals tend to compare themselves upwardly with others when engaging in hedonic browsing on s-commerce platforms. Additionally, this browsing variable partially mediates the influence of social interaction motives on upward social comparison. This mediation underscores the significant role of hedonic browsing in linking social interaction motives with the tendency for upward social comparison. Specifically, when young Thai adults engage in social media interactions, they are drawn to enjoyable content, such as commercials. With increased interaction, this browsing behavior intensifies, exposing them to more attractive personalities on s-commerce platforms. Consequently, this exposure heightens the likelihood of engaging in upward social comparison.

Importantly, the study reveals that hedonic browsing and upward social comparison are potent antecedents of impulse buying. These findings align with previous research that highlighted the tendency of individuals who indulge in hedonic browsing (e.g., Kimiagari & Malafe, 2021; Shahpasandi et al., 2020) and upward social comparison (Liu et al., 2019; Van Tran et al., 2023) to gravitate toward impulse buying on s-commerce platforms. However, this study is the first to confirm, in one analysis, these causal relationships.

Although previous studies in Thailand revealed that factors such as product attributes, information quality, and online platform quality, which can encourage hedonic browsing, predict impulse buying (e.g., Sritanakorn & Nuangjamnong, 2021; Chen et al., 2021), they have not explored the role of hedonic browsing itself in predicting such impulsive behavior. Furthermore, although past studies in Thailand recognized the potential of social comparison in intensifying social media use and encouraging self-transformation, which, in turn, triggers impulse buying (e.g., Boonchoo & Thoumrungroje, 2017; Pellegrino et al., 2022), they have not explored how upward social comparison, itself as a variable, affects impulse buying. Thus, the current study adds to the existing literature by providing statistical evidence that hedonic browsing and upward social comparison among young adults in Thailand directly influence their impulsive buying behavior in s-commerce.

Furthermore, the current study reveals that the comparison variable also mediates the relationship between hedonic browsing and impulse buying. This mediation indicates that hedonic browsing behavior among young Thai adults indirectly influences their impulse buying in s-commerce through upward social comparison. In other words, when these young individuals engage in hedonic browsing, they are more likely to compare themselves with others, increasing their tendency for impulse buying in the context of s-commerce.

Regarding the moderation findings, unlike previous studies which found that usage frequency moderated the relationships among s-commerce customers' behavioral intentions, attitudes, and their antecedents (e.g., Lee et al., 2020; Molinillo et al., 2021), the present study's findings suggest that this moderation does not extend to the impacts of hedonic browsing on upward social comparison and impulse buying, nor to the influence of upward social comparison on impulse buying. The lack of support in this regard suggests that among young Thai adults, engaging in hedonic browsing triggers upward social comparison regardless of their social media usage frequency. This implies that they are equally likely to compare themselves with other users they perceive as superior in possessions, attractiveness, and accomplishments when browsing s-commerce for pleasure, no matter how frequently they use social media.

The finding that usage frequency does not moderate the effect of hedonic browsing on impulse buying implies that impulse buying can occur spontaneously during hedonic browsing,

independent of usage frequency. This means that young Thai adults who enjoy browsing commercial content on social media may make impulse purchases regardless of whether their social media usage is high or low. Furthermore, since the potential for usage frequency to strengthen the effect of upward social comparison on impulse buying lacks significance, it can be inferred that impulse buying can occur without premeditation when individuals engage in upward social comparison, regardless of their social media usage frequency. Essentially, simply comparing oneself to others can lead to impulsive buying; how often someone uses social media does not affect this connection. Hence, for illustration, when young Thai adults compare themselves to social media celebrities endorsing products or acquaintances showing off attractive possessions or purchasing fashionable items from s-commerce, those who feel envy or a desire to keep up are more likely to engage in impulse buying, regardless of whether they are frequent or infrequent social media users.

Notably, these results also underscore that the triggers for impulse buying are closely tied to the inherent nature of the activity and the immediate emotional responses it elicits rather than the frequency of engagement. Hence, it can be concluded that impulse buying, characterized as spontaneous behavior driven by immediate emotional responses rather than deliberate contemplation (Park et al., 2012; Zheng et al., 2019), can manifest when social media users, regardless of their frequency of use, engage in hedonic browsing, triggering a pleasure-based urge to possess a product or engage in upward social comparison which elicits the desire to acquire items to keep pace with the personalities they are comparing themselves to on s-commerce platforms.

5.1 Theoretical Implications

The present study makes significant contributions to the theoretical literature. Firstly, it extends the U&G theory (Katz et al., 1973; Rubin, 1993) into research concerning s-commerce. By applying the foundational principles of this theory, the study illuminates how young adults employ social media to satisfy their social interaction needs and engage in hedonic browsing within s-commerce platforms when drawn in by compelling commercial content. Consequently, the gratification derived from this pleasure-oriented browsing results in impulse buying in s-commerce.

Secondly, this study extends the SCT (Collins, 1996; Festinger, 1954) to explain consumer behavior in s-commerce. By employing the foundational tenets of this theory, the research demonstrates how young adults conduct self-comparisons with individuals they perceive as superior on s-commerce platforms while indulging in hedonic browsing. These browsing behaviors and comparison processes consequently prompt impulsive buying.

5.2 Practical Implications

Apart from theoretical contributions, the findings also offer practical insights. By revealing that hedonic browsing often triggers upward social comparison and prompts impulsive buying in s-commerce among young adult consumers in Thailand, businesses can tailor their advertisements embedded in social media to evoke more hedonic browsing responses. Drawing from prior research insights (e.g., Kitjaroenchai & Chaipoopiratana, 2022; Sriram et al., 2019), s-commerce advertisers can employ visually captivating imagery, enjoyable content, and compelling descriptions rather than solely presenting factual yet uninspiring information about their business offerings to encourage browsing for enjoyment that evokes impulsive purchasing. Furthermore, drawing insights from previous studies (e.g., Liu et al., 2019; Van Tran et al., 2023; Zafar et al., 2021), businesses can leverage celebrity

endorsements to foster upward social comparison and potentially increase the likelihood of impulse buying, thereby boosting sales.

Moreover, these findings have significant implications for consumers who rely on social media for social interaction. The study suggests that the social interaction motive can lead to hedonic browsing, thereby increasing the likelihood of impulse buying. This insight sheds light on how unnecessary impulsive purchases may arise due to inattentiveness during social media use and browsing activities. Hence, in light of this revelation and a previous finding that utilitarian browsing negatively impacts impulse buying (Park et al., 2012), consumers may adopt a more functional browsing behavior, such as searching for information, completing planned online transactions, or accessing specific resources or services, rather than for leisure or pleasure, to avoid impulse buying.

Additionally, the research underscores that social interaction motives and hedonic browsing can prompt upward social comparisons with others. Previous studies have demonstrated that this type of social comparison has the potential to cultivate feelings of inadequacy and lower self-esteem, subsequently motivating individuals to engage in impulse buying as a means of alleviating these negative psychological states (e.g., Aubry et al., 2024; Liu et al., 2019; Van Tran et al., 2023). Therefore, this study's findings provide young Thais with knowledge that may empower them to be more prudent when engaging in social media for social interaction and browsing commercial content to reduce the likelihood of upward comparison. It is also recommended that they practice mindfulness when interacting with others and browsing content. Mindfulness has been found to have a negative correlation with upward social comparison (Gu et al., 2022) and a positive association with high self-esteem (Apaolaza et al., 2019), while it can also aid in reducing impulse buying (Sermboonsang et al., 2020). Thus, being mindful while using social media platforms has the potential to reduce upward social comparison and mitigate the adverse psychological states associated with it, consequently reducing the likelihood of impulse buying.

CONCLUSION

Being inherently tech-savvy and sociable, young adults primarily use social media platforms for social interaction. However, with the increasing prevalence of online commerce on these platforms, they inevitably encounter enjoyable commercial content and activities, fostering hedonic browsing. Moreover, their social media usage and engagement in hedonic browsing expose them to meticulously curated lifestyles showcased by celebrities and other influential personalities. This exposure amplifies the phenomenon of upward social comparison among these users. Consequently, heightened engagement in hedonic browsing and upward social comparison increase the propensity for impulse buying. These browsing and comparison variables also serve as mediators. Notably, hedonic browsing mediates the impact of the social interaction motive on upward social comparison. In turn, upward social comparison mediates the influence of hedonic browsing on impulse buying.

The findings of the present study also have limitations. Firstly, the study utilized a cross-sectional method. Cross-sectional studies can only provide information on the variables' causal relationships at a single point in time. Therefore, using them to make causal inferences regarding time-related changes has limited accuracy. Future research could enhance the study by employing a longitudinal approach. In longitudinal studies, researchers can observe participants at multiple time points, allowing for the monitoring of critical changes in the causal relationships among the studied variables over time, resulting in more accurate interpretations of the results.

Secondly, this study employed a convenience sampling method during participant recruitment. Such a non-probability approach to sample selection raises concerns about the

findings' generalizability to Thailand's entire young adult population. Future research could have enhanced reliability and generalizability by conducting a national survey using probability sampling methods. Using such methods allows researchers to obtain a more representative sample, thereby increasing confidence in extending the study's conclusions to a broader population.

REFERENCES

Abbas Naqvi, M. H., Jiang, Y., Miao, M., & Naqvi, M. H. (2020). The effect of social influence, trust, and entertainment value on social media use: Evidence from Pakistan. *Cogent Business & Management*, *7*(1), 1723825. https://doi.org/10.1080/23311975.2020.1723825

Ahmed, A., Arshad, M. A., Mahmood, A., & Barkat, W. (2021). The impact of spiritual values on employees loyalty: the moderating role of Islamic work ethic. *International Journal of Ethics and Systems*, *37*(3), 341-355. https://doi.org/10.1108/IJOES-09-2020-0147

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Sage Publications, Inc. https://psycnet.apa.org/record/1991-97932-000

Anindito, K., & Handarkho, Y. D. (2022). The impact of personality trait and social experience on youngsters' intention to purchase impulsively from social commerce platforms. *Young Consumers*, *23*(1), 53-71. https://doi.org/10.1108/YC-02-2021-1284

Apaolaza, V., Hartmann, P., D'Souza, C., & Gilsanz, A. (2019). Mindfulness, compulsive mobile social media use, and derived stress: The mediating roles of self-esteem and social anxiety. *Cyberpsychology, Behavior, and Social Networking*, *22*(6), 388-396. https://doi.org/10.1089/cyber.2018.0681

Aubry, R., Quiamzade, A., & Meier, L. L. (2024). Depressive symptoms and upward social comparisons during Instagram use: A vicious circle. *Personality and Individual Differences*, *217*, 112458. https://doi.org/10.1016/j.paid.2023.112458

Boonchoo, P., & Thoumrungroje, A. (2017). A cross-cultural examination of the impact of transformation expectations on impulse buying and conspicuous consumption. *Journal of International Consumer Marketing*, *29*(3), 194-205. https://doi.org/10.1080/08961530.2017.1289357

Chen, J. V., Chotimapruek, W., Ha, Q. A., & Widjaja, A. E. (2021). Investigating female costumer's impulse buying in Facebook B2C social commerce: An experimental study. *Contemporary Management Research*, *17*(2), 65-96. https://doi.org/10.7903/cmr.20448

Chen, Y., Lu, Y., Gupta, S., & Pan, Z. (2020). Understanding "window" shopping and browsing experience on social shopping website: An empirical investigation. *Information Technology & People*, *33*(4), 1124-1148. https://doi.org/10.1108/ITP-12-2017-0424

Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin, 119*(1), 51–69. https://doi.org/10.1037/0033-2909.119.1.51

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*(2), 117-140. https://doi.org/10.1177/001872675400700202

Fry, R. (2016, May 24). *For first time in modern era, living with parents edges out other living arrangements for 18- to 34-Year-Olds*. Pew Research Center. https://www.pewresearch.org/social-trends/2016/05/24/for-first-time-in-modern-era-living-with-parents-edges-out-other-living-arrangements-for-18-to-34-year-olds/

Gu, C., Liu, S., & Chen, S. (2022). The effect of trait mindfulness on social media rumination: Upward social comparison as a moderated mediator. *Frontiers in Psychology, 13*, 931572. https://doi.org/10.3389/fpsyg.2022.931572

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature. https://library.oapen.org/handle/20.500.12657/51463

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. https://doi.org/10.1108/EBR-11-2018-0203

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*, 115-135. https://doi.org/10.1007/s11747-014-0403-8

Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. (2020). Impulse buying: a meta-analytic review. *Journal of the Academy of Marketing Science*, *48*, 384-404. https://doi.org/10.1007/s11747-019-00670-w

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, *37*(4), 509-523. http://www.jstor.org/stable/2747854

Kemp, S. (2024, January 31). *Digital 2024: Global overview report*. Datareportal. https://datareportal.com/reports/digital-2024-global-overview-report

Kimiagari, S., & Malafe, N. S. A. (2021). The role of cognitive and affective responses in the relationship between internal and external stimuli on online impulse buying behavior. *Journal of Retailing and Consumer Services*, *61*, 102567. https://doi.org/10.1016/j.jretconser.2021.102567

Kitjaroenchai, M., & Chaipoopiratana, S. (2022). Mixed method: Antecedents of online repurchase intention of Generation Y towards apparel products on e-commerce in Thailand. *ABAC Journal*, *42*(1), 73-95. https://doi.org/10.14456/abacj.2022.37

Leesa-Nguansuk, S. (2024, February 1). Thais among the top social media users. *Bangkok Post*. https://www.bangkokpost.com/business/general/2734744/thais-among-top-social-media-users

Lee, Y. I., Phua, J., & Wu, T. Y. (2020). Marketing a health Brand on Facebook: Effects of reaction icons and user comments on brand attitude, trust, purchase intention, and eWOM intention. *Health marketing quarterly*, *37*(2), 138-154. https://doi.org/10.1080/07359683.2020.1754049

Lewis, N. (2021). Experiences of upward social comparison in entertainment contexts: Emotions, state self-esteem, and enjoyment. *The Social Science Journal*, *58*(3), 339-354. https://doi.org/10.1016/j.soscij.2019.04.011

Liu, P., He, J., & Li, A. (2019). Upward social comparison on social network sites and impulse buying: A moderated mediation model of negative affect and rumination. *Computers in Human Behavior*, *96*, 133-140. https://doi.org/10.1016/j.chb.2019.02.003

Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Liébana-Cabanillas, F. (2021). Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use. *Journal of Retailing and Consumer Services*, *63*, 102404. https://doi.org/10.1016/j.jretconser.2020.102404

Namazi, M., & Namazi, N.-R. (2016). Conceptual Analysis of Moderator and Mediator Variables in Business Research. *Procedia Economics and Finance*, *36*, 540–554. https://doi.org/https://doi.org/10.1016/S2212-5671(16)30064-8

Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, *65*(11), 1583-1589. https://doi.org/10.1016/j.jbusres.2011.02.043

Pellegrino, A., Abe, M., & Shannon, R. (2022). The dark side of social media: content effects on the relationship between materialism and consumption behaviors. *Frontiers in Psychology, 13*, 870614. https://doi.org/10.3389/fpsyg.2022.870614

Qin, Y. S. (2020). Fostering brand–consumer interactions in social media: the role of social media uses and gratifications. *Journal of Research in Interactive Marketing*, *14*(3), 337-354. https://doi.org/10.1108/JRIM-08-2019-0138

Ringle, C. M., Wende, S., & Becker, J. M. (2024). *SmartPLS 4. Bönningstedt: SmartPLS*. Smartpls. https://www.smartpls.com

Rubin, A. M. (1993). Audience activity and media use. *Communications Monographs*, *60*(1), 98-105. https://doi.org/10.1080/03637759309376300

Santos Corrada, M., Flecha, J. A., & Lopez, E. (2020). The gratifications in the experience of the use of social media and its impact on the purchase and repurchase of products and services. *European Business Review*, *32*(2), 297-315. https://doi.org/10.1108/EBR-12-2017-0236

Senkbeil, M. (2018). Development and validation of the ICT motivation scale for young adolescents. Results of the international school assessment study ICILS 2013 in Germany. *Learning and Individual Differences*, *67*, 167-176. https://doi.org/10.1016/j.lindif.2018.08.007

Sermboonsang, R., Tansuhaj, P. S., Silpakit, C., & Chaisuwan, C. (2020). Mindfulness-based transformational learning for managing impulse buying. *Journal of Education for Business*, *95*(2), 129-137. https://doi.org/10.1080/08832323.2019.1618233

Shahpasandi, F., Zarei, A., & Nikabadi, M. S. (2020). Consumers' impulse buying behavior on Instagram: Examining the influence of flow experiences and hedonic browsing on impulse buying. *Journal of Internet Commerce*, *19*(4), 437-465. https://doi.org/10.1080/15332861.2020.1816324

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European Journal of Marketing*, *53*(11), 2322-2347. https://doi.org/10.1108/EJM-02-2019-0189

Sritanakorn, M., & Nuangjamnong, C. (2021). The factors affecting consumer traits, online marketing tools in impulsive buying behavior of online fashion stores, Bangkok, Thailand. *AU-GSB e-Journal*, *14*(1), 3-16. https://doi.org/10.14456/augsbejr.2021.1

Sriram, K. V., Phouzder, K., Mathew, A. O., & Hungund, S. (2019). Does e-marketing mix influence brand loyalty and popularity of e-commerce websites?. *ABAC Journal*, *39*(2), 64-81.

Taylor, S. E., & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review, 96*(4), 569–575. https://doi.org/10.1037/0033-295X.96.4.569

Van Tran, D., Nguyen, T., & Nguyen, D. M. (2023). Understanding how upward social comparison stimulates impulse buying on image-sharing s-commerce platforms: A moderated mediation model of benign envy and self-esteem. *Current Psychology*, *42*(22), 18777-18792. https://doi.org/10.1007/s12144-022-03042-w

Vespa, J. (2017, April). *The changing economics and demographics of young adulthood: 1975–2016 (Report No. P20-579)*. U.S. Census Bureau. https://www.census.gov/library/publications/2017/demo/p20-579.html

Wadsley, M., Covey, J., & Ihssen, N. (2022). The predictive utility of reward-based motives underlying excessive and problematic social networking site use. *Psychological Reports*, *125*(5), 2485-2516. https://doi.org/10.1177/00332941211025271

Wirtz, D., Tucker, A., Briggs, C., & Schoemann, A. M. (2021). How and why social media affect subjective well-being: Multi-site use and social comparison as predictors of

change across time. *Journal of Happiness Studies*, *22*, 1673-1691. https://doi.org/10.1007/s10902-020-00291-z

Yew, W. C., Sia, M. K., & Janet, O. Q. (2023). Safety Risks Analysis: Moderating Effect of Risk Level on Mitigation Measures Using PLS-SEM Technique. *Sustainability*, *15*(2), 1090. https://doi.org/10.3390/su15021090

Zafar, A. U., Qiu, J., Li, Y., Wang, J., & Shahzad, M. (2021). The impact of social media celebrities' posts and contextual interactions on impulse buying in s-commerce. *Computers in Human Behavior*, *115*, 106178. https://doi.org/10.1016/j.chb.2019.106178

Zheng, X., Men, J., Yang, F., & Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management*, *48*, 151-160. https://doi.org/10.1016/j.ijinfomgt.2019.02. 010

APPENDIX

Table A1 Variables, Indicators, Loadings, Standard Deviations (STDEV), and *P*-values

Variable / Indicator	Loading	STDEV	*P*-value
Social interaction motive (Senkbeil, 2018)			
SIM1. I use social media so that people can get to know me.	0.858	0.019	0.000
SIM2. I use social media in order to meet new people.	0.816	0.022	0.000
SIM3. I use social media in order to present my true self on the Internet.	0.858	0.014	0.000
SIM4. I use social media in order to show photos of myself to my friends.	0.806	0.023	0.000
Hedonic browsing (Park et al., 2012)			
HB1. While browsing s-commerce platforms, I am able to forget my problems and to feel relaxed.	0.840	0.021	0.000
HB2. While browsing s-commerce platforms, I am very excited, like playing.	0.868	0.013	0.000
HB3. I enjoy browsing s-commerce platforms enough to forget a time out.	0.831	0.019	0.000
HB4. I look around at items on s-commerce platforms just for fun.	0.748	0.029	0.000
Upward social comparison (Van Tran et al., 2023)			
USC1. On s-commerce platforms, I always like to compare myself with others who perform better than me.	0.874	0.013	0.000
USC2. On s-commerce platforms, I always pay a lot of attention on how I do things compared with how the superiors do things.	0.843	0.019	0.000
USC3. On s-commerce platforms, I often compare what I have bought with what the superiors have bought.	0.859	0.015	0.000
USC4. On s-commerce platforms, if I want to find out how exactly I have bought something, I compare it with how superiors have bought.	0.821	0.020	0.000
USC5. I am the type of person who compares often with superiors.	0.873	0.017	0.000
USC6. On s-commerce platforms, I often compare myself with superiors with respect to what I have accomplished in life.	0.852	0.019	0.000
Online impulse buying (Park et al., 2012)			
OIB1. I buy products at a whim on s-commerce platforms.	0.860	0.015	0.000
OIB2. During online shopping (on s-commerce platforms), I buy products without a lot of thinking.	0.888	0.012	0.000
OIB3. I tend to buy things I have no desire to buy during online shopping (on social commerce platforms).	0.852	0.016	0.000
OIB4. I tend to think about it (buying from social commerce platforms) after purchasing.	0.767	0.028	0.000
OIB5. When I find something I like on s-commerce platforms, I purchase it immediately.	0.824	0.020	0.000

.