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Antecedents of Social Media Addiction and Their Links to Excessive Online Buying Tendency

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Abstract: The rapid integration of social media and commerce has raised concerns about maladaptive consumption outcomes, particularly excessive online buying tendency (EOBT). This study examines how sense of belonging, life stress, conscientiousness and openness to experience shape social media addiction (SMA) and how these factors subsequently relate to EOBT among Vietnamese social media users. Using a cross-sectional survey, collecting the data from 247 respondents and analyzing the proposed framework with PLS-SEM in SmartPLS, the study evaluates both the measurement model and the structural model to test the hypothesized relationships. The findings indicate that SMA is positively associated with EOBT. Life stress increases both SMA and EOBT, while conscientiousness reduces both SMA and EOBT. Sense of belonging and openness to experience are positively associated with SMA, whereas their direct relationships with EOBT are weaker and not consistently supported, suggesting that their influence on EOBT is primarily transmitted through SMA. Overall, the results highlight SMA as an important behavioral mechanism linking psychological needs, stress, and personality traits to excessive online buying, offering implications for digital well-being initiatives and responsible social commerce practices.

Keywords: social media addiction; excessive online buying tendency; life stress; openness to experience, sense of belonging

I. Introduction

Over the past decade, the rapid diffusion of digital technologies and social networking platforms has reshaped the global retail landscape. Consumers increasingly rely on online environments for information search, entertainment, and purchase decisions, and this trend accelerated during the COVID-19 pandemic as shopping habits shifted and dependence on digital channels intensified (Al-Hattami, 2021; Penagos et al., 2025). The continued rise of e-commerce is also supported by widespread smartphone use, high-speed internet adoption, and algorithm-driven personalization that makes online shopping more seamless and persistent in everyday life (Dwivedi et al., 2021). As a result, digital consumption today often emerges from repeated exposure to content streams that blend leisure, social interaction, and product discovery within a single ecosystem. Within this environment, social media has become a central hub where communication and commerce converge. Platforms such as Facebook, Instagram, and TikTok increasingly embed shopping functions through livestream sales, influencer-led content, and targeted advertisements, enabling users to move quickly from social interaction to purchase behavior. These platform affordances can enhance convenience and engagement, yet they also increase exposure to persuasive stimuli that may trigger impulsive and excessive buying behaviors (Zafar et al., 2019). As social media evolves into a hybrid space for social life and consumption, concerns grow about users' vulnerability to problematic purchasing tendencies that are reinforced by continuous connectivity and highly curated content feeds.

Prior research has identified several psychological and behavioral drivers of online buying tendencies, emphasizing mood regulation, social comparison processes, stress, and personality traits as important predictors of online impulsiveness and compulsive consumption (Verplanken & Sato, 2011; Atalay & Meloy, 2011). A parallel stream has examined Social Media Addiction (SMA), commonly conceptualized as excessive and difficult-to-control engagement

with social networking platforms (Andreassen & Pallesen, 2014; Kuss & Griffiths, 2017). Although SMA is frequently linked to negative outcomes for well-being and daily functioning, its role in shaping excessive online buying remains comparatively underexplored. Existing studies often investigate predictors of SMA or drivers of online purchasing behavior separately, which limits understanding of how problematic engagement with social platforms may translate into maladaptive consumption outcomes, especially beyond the contexts most commonly studied.

To address this gap, the present study examines how social media addiction relates to excessive online buying tendency and considers key psychological and dispositional correlates that may contribute to these behaviors within a social commerce environment. The study is situated in Vietnam - an emerging economy context where social media is tightly intertwined with everyday consumption practices, making it important to understand both the behavioral risks and the pathways through which these risks may develop. By analyzing these relationships in an integrated way, the study aims to clarify whether addiction-like engagement with social media is meaningfully associated with excessive buying tendency and to provide evidence that is informative for both research and practice.

II. Literature review & Hypotheses development

Excessive Online Buying Tendency (EOBT) refers to a persistent inclination to make online purchases beyond functional needs and personal control, with buying episodes often driven by affective motives rather than deliberate evaluation (Dittmar, 2005; Ridgway et al., 2008). Building on self-regulation and compensatory consumption perspectives, EOBT reflects how consumers may use purchasing to manage negative affect, repair threatened self-views, or obtain short-term mood enhancement (Mandel et al., 2017). Digital commerce environments can intensify this tendency because ubiquitous access, frictionless transactions, and algorithmic personalization lower resistance and increase exposure to buying cues (Chen et al., 2019). Over time, excessive buying is linked to financial strain, guilt, and psychological distress, making it a salient outcome for consumer well-being research (Vohs & Faber, 2007). In the present model, EOBT is positioned as a downstream behavioral outcome shaped by stress-related coping, personality-based self-regulation, and addiction-like engagement with social media.

Social Media Addiction (SMA) is commonly conceptualized as a behavioral addiction characterized by excessive, uncontrolled, and persistent engagement with social networking platforms that interferes with everyday functioning (Andreassen & Pallesen, 2014). Drawing on behavioral addiction components, SMA involves salience, mood modification, tolerance, withdrawal, conflict, and relapse, whereby platform use becomes increasingly difficult to regulate (Griffiths, 2000, 2005). Although there remains debate about whether SMA should be regarded as a formal addiction due to the lack of substance-like physiological dependence, empirical evidence consistently associates problematic social media use with adverse psychological outcomes and impaired functioning (Kuss & Griffiths, 2017; Primack et al., 2017; Yu et al., 2024). Importantly, in social commerce contexts, heavy and compulsive social media engagement may also increase exposure to persuasive buying cues (e.g., influencer content, advertising, and social proof) and facilitate rapid transitions from browsing to purchasing, making SMA a plausible proximal driver of EOBT (Andreassen et al., 2012; Zafar et al., 2019).

Sense of belonging represents the need to feel connected to and accepted by others (Baumeister & Leary, 1995). From a compensatory Internet use perspective, individuals may rely on social media to satisfy unmet belonging needs or to restore social connection when offline belonging feels insufficient, which can reinforce repeated use and increase vulnerability to SMA (Kardefelt-Winther, 2014). Empirical work links belonging-related motives and perceived connectedness with more intensive engagement and problematic use, suggesting that seeking affiliation and validation can be an important driver of addiction-like patterns (Guo et al., 2014; Gao et al., 2017; Teo et al., 2003; Miranda et al., 2023). At the same time, belongingness may also shape buying tendencies directly because social media communities can transmit consumption norms and amplify peer influence; when acceptance and "fit" are salient, consumers may be more willing to purchase to signal membership or conform to group expectations, thereby increasing susceptibility to EOBT in social-commerce environments.

- **H1a:** Sense of belonging positively affects social media addiction.
- **H1b:** Sense of belonging positively affects excessive online buying tendency.

Life stress reflects perceptions that life circumstances are unpredictable, overloaded, or difficult to manage, and stress is frequently linked to increased reliance on readily available digital activities for distraction and mood regulation (Ostovar et al., 2016). In social media settings, coping-oriented use under stress can become reinforcing because it offers immediate relief and social reassurance, which may gradually shift usage from voluntary to excessive and difficult to control (Hwang et al., 2014; Naqvi et al., 2020; Raza et al., 2020; Brailovskaia et al., 2018). Stress also depletes self-regulatory resources, increasing short-term reward seeking and weakening inhibitory control (Heatherton & Baumeister, 1991), which can elevate impulsive consumption and make excessive buying more likely as an emotion-focused coping strategy (Atalay & Meloy, 2011; Sneath et al., 2009).

- **H2a:** Life stress positively affects social media addiction.
- **H2b:** Life stress positively affects excessive online buying tendency.

Conscientiousness captures responsibility, organization, and self-discipline, and is strongly associated with self-regulatory capacity and planful behavior (Costa & McCrae, 1992). Individuals high in conscientiousness typically manage time more effectively and set clearer behavioral boundaries, reducing the likelihood of prolonged, unstructured browsing that can develop into addiction-like platform engagement (Mikołajczak-Degrauwe et al., 2012). Prior studies position conscientiousness as a protective factor against problematic social media use and related addictions (Andreassen et al., 2015; Otero-López et al., 2021; Ahmed et al., 2022). The same self-control mechanism implies a negative association with EOBT because conscientious consumers are more likely to follow budgets, delay gratification, and evaluate purchases more deliberately, thereby resisting convenience-driven and impulse-triggered online shopping.

- **H3a:** Conscientiousness negatively affects social media addiction.
- **H3b:** Conscientiousness negatively affects excessive online buying tendency.

Openness to experience reflects curiosity, novelty seeking, and preference for variety (Costa & McCrae, 1992). Social media platforms provide continuous streams of novel information, trends, and interactions that can match open individuals' exploratory tendencies and potentially increase engagement frequency and time spent online (Otero-López et al., 2013). In this sense, openness may increase vulnerability to persistent engagement patterns that can contribute to SMA, particularly when novelty seeking is satisfied by endless personalized content. Openness can also shape EOBT because consumers high in openness may be more inclined to explore new products, experiment with emerging brands, and respond to innovative offerings online, which may increase purchase frequency and susceptibility to excessive buying in environments characterized by constant novelty and easy purchasing.

- **H4a:** Openness to experience positively affects social media addiction.
- **H4b:** Openness to experience positively affects excessive online buying tendency.

Moreover, SMA is expected to increase EOBT because addiction-like engagement intensifies exposure to commerce cues embedded in social feeds (e.g., advertising, influencer marketing, and peer purchase signals) and can lower resistance to impulsive purchasing through repeated immersion and habitual reward-seeking (Andreassen et al., 2012; Zafar et al., 2019). As dependence on platforms grows, users may encounter persuasive triggers more frequently and move more quickly from browsing to buying within social commerce settings, increasing the likelihood of excessive online buying tendencies.

- **H5:** Social media addiction positively affects excessive online buying tendency.

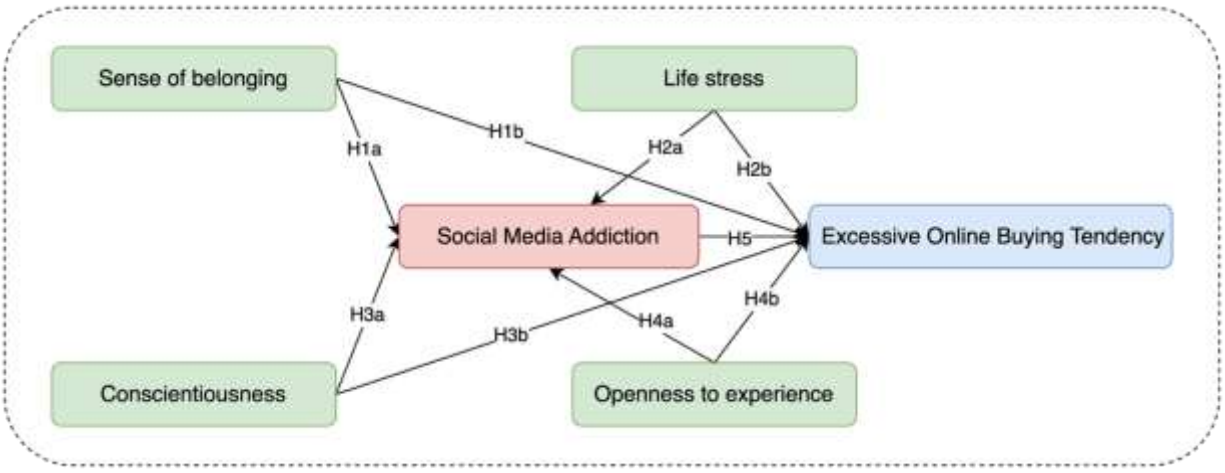

Fig. 1. Proposed reseach model

III. Methods

This study adopts a cross-sectional survey design to examine how Sense of Belonging (SB), Life Stress (LS), Conscientiousness (C), and Openness to Experience (OE) influence Social Media Addiction (SMA), and how these variables (together with SMA) relate to Excessive Online Buying Tendency (EOBT) in Vietnam. The conceptual model is estimated using Partial Least Squares Structural Equation Modeling (PLS-SEM) because it is appropriate for simultaneously assessing the measurement model and the structural relationships in a multi-construct framework and is suitable for prediction-oriented analysis with moderate sample sizes (Hair et al., 2016).

Data were collected using a structured questionnaire consisting of two parts. The first part captured respondents' demographic information (e.g., age, gender, education, occupation, and income) and basic background information related to social media use and online purchasing. The second part measured the latent constructs in the model SMA,

EOBT, SB, LS, C, and OE using established items adapted from prior studies and assessed on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). SMA items were adapted from Nikolinakou et al. (2024), Olivencia - Carrio et al. (2018), Andreassen et al. (2012), and Caplan (2010); EOBT items were adapted from Nyrhinen et al. (2023), Mason et al. (2022) and Sharif & Yeoh (2018); SB items were adapted from Miranda et al. (2023), Gao et al. (2017), and Teo et al. (2003); LS items were adapted from Huang et al. (2020), Hou et al. (2017), and Cohen (1988); C items were adapted from Kircaburun et al. (2018) and Rammstedt & John (2007); and OE items were adapted from Alan and Kabadayı (2016), and Rammstedt & John (2007) . A pilot test (n = 50) was conducted to assess clarity and initial reliability, after which minor wording adjustments were made before launching the official survey.

The target population comprises social media users in Vietnam who have experience with online purchasing via social media platforms or e-commerce channels. Data collection was implemented in Hanoi as an accessible sampling frame. Following Hair et al. (2016), the minimum sample size requirement for PLS-SEM was satisfied, and the final valid sample used for analysis meets the recommended threshold for estimating the revised structural model. Due to time and accessibility constraints, convenience sampling was employed; the questionnaire was administered to eligible participants approached at public locations (e.g., community centers and shopping malls) and shared in online buying groups on social media to reach respondents relevant to the research context. The sample is relatively young. Respondents aged 18–27 account for the largest share (55.06%), followed by those aged 27–42 (27.53%), while participants under 18 represent 6.07% and those above 42 account for 11.38%. Regarding gender, female respondents comprise 55.47% and male respondents 44.53%. In terms of occupation, students form the majority (53.84%), followed by office workers (23.07%), freelancers (8.50%), public servants (6.88%), and other occupations (7.71%). Income levels vary: 38.05% report monthly income of 2–5 million VND, 22.67% report 5–10 million VND, 18.62% report below 2 million VND, 11.35% report above 10 million VND, and 9.31% report having no income. Overall, the respondent profile reflects a diverse yet youth-dominated sample, which is relevant for examining social media use and online consumption behaviors in the Vietnamese context.

IV. Results

Collected data were analyzed using PLS-SEM in two stages. First, the measurement model was assessed for reliability and validity using indicator outer loadings, Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE), following Hair et al. (2019); discriminant validity was evaluated using the Fornell and Larcker (1981) criterion. Second, the structural model was evaluated to test the hypothesized paths in the revised model by estimating standardized path coefficients and their statistical significance using bootstrapping (Hair et al., 2016).

4.1. Assessment of the Measurement Model

The measurement model was assessed in terms of indicator reliability (outer loadings), internal consistency reliability, convergent validity, and discriminant validity. To evaluate indicator reliability, outer loadings were inspected using the recommended threshold of 0.70. One indicator (EOBT2) did not satisfy this criterion and was removed. After removing EOBT2, all retained items exhibited acceptable loadings, indicating that the indicators adequately represent their respective latent constructs.

The internal consistency reliability was then examined using Cronbach's alpha and composite reliability (rho_a and rho_c). All constructs met the recommended thresholds (≥ 0.70), confirming strong internal consistency. Convergent validity was assessed via AVE, and all AVE values exceeded 0.50, suggesting that each construct explains more than half of the variance of its indicators on average. The discriminant validity was evaluated using the Fornell–Larcker criterion. The square root of AVE for each construct (diagonal values) exceeded its correlations with other constructs, supporting that the constructs are empirically distinct and reducing concerns of overlap in measurement that could bias the structural estimates.

Table 1. Measurement model results

Construct	Outer loadings (range)	Cronbach's alpha	CR (rho_a)	CR (rho_c)	AVE
C	0.796 – 0.834	0.833	0.838	0.889	0.666
EOBT	0.732 – 0.799	0.766	0.774	0.817	0.598
LS	0.811 – 0.853	0.788	0.791	0.876	0.702
OE	0.846 – 0.872	0.820	0.821	0.893	0.736
SB	0.780 – 0.861	0.840	0.848	0.893	0.675
SMA	0.746 – 0.834	0.805	0.813	0.872	0.631

4.2. Assessment of the Structural Model

After confirming measurement adequacy, the structural model was evaluated in terms of model fit, collinearity, explanatory power (R^2), predictive relevance (Q^2), effect sizes (f^2), hypothesis testing (direct effects), and mediation (specific indirect effects). First, the model fit indices show an acceptable fit for PLS-SEM, with SRMR = 0.061 (below the

common 0.08 guideline), while NFI is 0.799, indicating moderate incremental fit. Collinearity diagnostics suggest no multicollinearity issues: all inner VIF values are low (approximately 1.198–2.017), well below the conservative threshold of 5, indicating stable estimation of path coefficients.

Table 2. Model fit

	Saturated model	Estimated model
SRMR	0.061	0.061
d_ULS	0.857	0.857
d_G	0.337	0.337
Chi-square	696.775	696.775
NFI	0.799	0.799

Regarding explanatory power, the model explains a substantial proportion of variance in the endogenous constructs, with $R^2 = 0.504$ for SMA and $R^2 = 0.670$ for EOBT (adjusted $R^2 = 0.499$ and 0.665), suggesting moderate-to-strong predictive performance. Predictive relevance is supported by blindfolding results, where Q^2 values are positive for both endogenous constructs ($Q^2 = 0.308$ for SMA and $Q^2 = 0.388$ for EOBT), confirming that the model has predictive capability beyond chance.

Table 7. Structural model results

Endogenous construct	R^2	Adjusted R^2	Q^2
SMA	0.504	0.499	0.308
EOBT	0.670	0.665	0.388

Effect-size assessment further clarifies substantive importance: SB has the strongest effect on SMA ($f^2 = 0.260$), while LS, OE, and C have small effects on SMA (0.063, 0.059, 0.046). For EOBT, LS shows the largest effect ($f^2 = 0.378$), followed by C ($f^2 = 0.211$), while SMA contributes a smaller yet meaningful effect ($f^2 = 0.088$); OE and SB contribute negligible direct effect sizes on EOBT (*0.011 and 0.005*), aligning with their weaker/non-significant direct paths in the bootstrapping results. Bootstrapping results indicate that Conscientiousness (C) has significant negative effects on both SMA ($\beta = -0.165$, $p = 0.001$) and EOBT ($\beta = -0.296$, $p = 0.001$), suggesting that higher self-discipline and self-regulation reduce addiction-like social media engagement and lower the tendency toward excessive online buying. Life Stress (LS) positively predicts both SMA ($\beta = 0.205$, $p = 0.001$) and EOBT ($\beta = 0.423$, $p < 0.001$), indicating that stress increases problematic engagement and directly increases excessive buying tendency. Openness to Experience (OE) has a significant positive effect on SMA ($\beta = 0.206$, $p = 0.001$), but its direct effect on EOBT is not significant at the 5% level ($\beta = 0.076$, $p = 0.057$), implying that openness primarily contributes through engagement processes rather than directly escalating excessive buying. Sense of Belonging (SB) strongly predicts SMA ($\beta = 0.398$, $p = 0.001$) but does not directly predict EOBT ($\beta = 0.049$, $p = 0.314$), meaning belonging-related motives are more strongly reflected in addictive engagement rather than immediate buying tendency. SMA significantly predicts EOBT ($\beta = 0.241$, $p = 0.001$), supporting the view that addiction-like social media engagement increases the likelihood of excessive online buying tendency, likely by amplifying exposure to persuasive buying cues and lowering resistance to impulsive consumption.

Table 3. Bootstrapping results (direct effects)

Path	β (O)	M	STDEV	t	p-value	Conclusion
C → EOBT	-0.296	-0.298	0.042	7.118	0.001	Supported (−)
C → SMA	-0.165	-0.168	0.050	3.312	0.001	Supported (−)
LS → EOBT	0.423	0.424	0.043	9.775	0.001	Supported (+)
LS → SMA	0.205	0.206	0.053	3.847	0.001	Supported (+)
OE → EOBT	0.076	0.077	0.040	1.906	**0.057**	**Not supported**
OE → SMA	0.206	0.207	0.051	4.036	0.001	Supported (+)
SB → EOBT	0.049	0.048	0.048	1.006	**0.314**	**Not supported**
SB → SMA	0.398	0.397	0.050	8.016	0.001	Supported (+)
SMA → EOBT	0.241	0.240	0.060	4.053	0.001	Supported (+)

Mediation analysis using specific indirect effects confirms that SMA transmits significant indirect effects from all four antecedents to EOBT: C → SMA → EOBT is negative and significant (β = −0.040, p = 0.014), LS → SMA → EOBT is positive and significant ($\beta = 0.049$, $p = 0.001$), OE → SMA → EOBT is positive and significant ($\beta = 0.050$, $p = 0.010$), and SB → SMA → EOBT is positive and significant (β = 0.096, p = 0.001). Interpreting these patterns, C and LS exhibit partial mediation because both their direct and indirect effects on EOBT are significant, whereas SB shows indirect-only mediation (SB → EOBT is non-significant but the indirect path is significant). OE similarly operates primarily through the indirect path at the 5% level because the direct OE → EOBT effect is not significant while the indirect effect is significant.

Table 4. Mediation analysis (specific indirect effects via SMA)

Indirect path	β (O)	M	STDEV	t	p-value	Conclusion
C → SMA → EOBT	-0.040	-0.040	0.016	2.471	0.014	Significant
LS → SMA → EOBT	0.049	0.049	0.015	3.191	0.001	Significant
OE → SMA → EOBT	0.050	0.050	0.019	2.578	0.010	Significant
SB → SMA → EOBT	0.096	0.096	0.028	3.466	0.001	Significant

V. Discussions and implications

5.1 Discussion

This study examined the determinants of Social Media Addiction (SMA) and Excessive Online Buying Tendency (EOBT) using PLS-SEM and found a clear pattern in which psychological strain, dispositional self-regulation, and social needs shape problematic engagement and, in turn, excessive buying. First, SMA significantly increases EOBT, supporting the idea that addiction-like engagement on social platforms can translate into higher vulnerability to excessive online buying by increasing exposure to persuasive commerce cues and by facilitating rapid transitions from browsing to purchasing in social commerce environments (Zafar et al., 2019; Andreassen et al., 2012). From a behavioral standpoint, the effect size of SMA on EOBT is small-to-meaningful, indicating that SMA contributes incremental explanatory power even when stress and personality factors are accounted for, consistent with arguments that problematic platform engagement is not only a well-being concern but also a consumption-related risk factor (Andreassen & Pallesen, 2014; Kuss & Griffiths, 2017). Second, life stress (LS) emerges as the strongest driver of EOBT and also significantly increases SMA. This dual pathway suggests that stress intensifies excessive buying both directly and indirectly via addiction-like engagement. The direct effect implies that stress-driven consumption may operate as an emotion-focused coping behavior in online contexts where shopping is constantly available and frictionless (Verplanken & Sato, 2011; Atalay & Meloy, 2011). The indirect effect is also significant (LS → SMA → EOBT), indicating complementary mediation: stress not only motivates buying directly, but also fosters problematic engagement that further increases buying propensity. Practically, this means that interventions targeting "screen time" alone may be insufficient if stress remains unaddressed, because stress can push EOBT through both behavioral and affective routes. Third, conscientiousness (C) plays a protective role against both SMA, and its mediated effect through SMA is also significant (C → SMA → EOBT). This pattern is theoretically coherent: conscientious individuals typically show stronger self-control, better planning, and clearer boundary-setting, which reduces the likelihood of compulsive platform use and impulsive consumption. Importantly, the coexistence of significant direct and indirect effects again indicates complementary mediation: conscientiousness reduces excessive buying partly by dampening addiction-like engagement, but also through a direct self-regulation mechanism that constrains excessive purchasing even beyond platform-use effects. Fourth, sense of belonging (SB) strongly increases SMA, yet it does not directly predict EOBT. However, the indirect effect through SMA is significant and substantial (SB → SMA → EOBT). This is an important nuance: belonging-related motives appear to elevate excessive buying tendency primarily by intensifying dependence on social platforms rather than by directly shaping buying propensity. In other words, SB is a strong antecedent of problematic engagement, and its consumption consequence is realized mainly when belonging-seeking translates into more intensive and less controlled platform use—precisely the condition under which users are more exposed to social commerce cues (Zafar et al., 2019). Finally, openness to Experience (OE) significantly increases SMA but does not show a statistically significant direct effect on EOBT at the 5% level. Nevertheless, the mediated effect via SMA is significant (OE → SMA → EOBT). This suggests that openness-related curiosity and novelty seeking may primarily influence excessive buying through increased engagement with content-rich social platforms rather than by directly driving excessive buying. Substantively, OE may lead users to explore more content and features, increasing time on-platform and hence exposure to buying triggers, but this exploratory trait alone may be insufficient to create excessive buying unless it is coupled with sustained, addiction-like engagement.

5.2. Implications

Theoretically, the study contributes to the social commerce and digital consumption literature by clarifying that EOBT is shaped by both (i) stable individual differences (stress and self-regulation traits) and (ii) a proximal behavioral mechanism—SMA—that translates platform engagement into consumption risk (Andreassen & Pallesen, 2014; Kuss & Griffiths, 2017; Zafar et al., 2019). Importantly, the mediation results refine theory: SB and OE exhibit primarily indirect influence through SMA, whereas LS and C affect EOBT via both direct and indirect routes. This pattern supports a dual-process interpretation in which excessive buying arises from a combination of affect-driven coping (especially under stress) and diminished behavioral control (lower conscientiousness), while social needs and exploratory tendencies mainly increase risk by intensifying problematic engagement. By explicitly distinguishing direct versus mediated paths, the

findings help reconcile why some antecedents strongly predict SMA yet do not necessarily translate into buying without the engagement mechanism.

Managerial implications for platforms and social commerce firms. The strongest risk factor for EOBT is life stress, followed by the protective role of conscientiousness, implying that user vulnerability is not purely "marketing-driven" but also psychologically grounded. Platforms and social commerce sellers can adopt more responsible design and communication practices: (1) implement friction-increasing features for high-velocity purchasing contexts (e.g., optional "cool-off" prompts, clearer spending summaries, and delayed checkout confirmations) to help users with low self-control or high stress avoid automatic buying; (2) provide user-facing tools that support self-regulation and boundary setting (time reminders, feed controls, and transparent ad labeling), which may reduce SMA and, indirectly, EOBT; and (3) tailor community features carefully, because SB strongly predicts SMA, design choices that intensify dependency (e.g., excessive streaks, constant notifications) may amplify consumption vulnerability by increasing addiction-like engagement. Because OE influences EOBT mainly through SMA, engagement-maximizing strategies that continually stimulate novelty may have downstream consumption consequences even when the direct OE → EOBT link is weak; therefore, "novelty engineering" should be accompanied by safeguards that reduce compulsive use patterns.

Practically, the results suggest that consumer well-being initiatives should integrate both financial literacy and digital well-being. For consumers, awareness that stress can directly increase excessive buying and indirectly amplify it through SMA underscores the value of stress-management routines and spending rules (e.g., budgeting, planned purchasing lists, limiting late-night browsing). For policymakers, educators, and public health stakeholders, interventions aimed at problematic digital use should recognize consumption harm as a related outcome in social commerce settings. Guidance programs may be especially valuable for younger users—who often form the largest segment of social commerce participation—by building skills around emotion regulation, impulse control, and recognizing persuasive online cues embedded in social feeds (Zafar et al., 2020).

VI. Limitations and future research

Several limitations should be considered when interpreting the findings. First, the study relies on cross-sectional self-report data, which limits causal inference and may be affected by common method bias; longitudinal or experimental designs would strengthen causal claims about the SMA → EOBT mechanism. Second, although the model demonstrates strong explanatory power ($R^2 = 0.504$ *for SMA;* $R^2 = 0.670$ *for EOBT*) and predictive relevance ($Q^2 = 0.308; 0.388$), the results may be context-specific; future studies should validate the model across different regions and demographic segments in Vietnam and compare emerging versus developed markets. Third, future work could examine moderators (e.g., age, gender, platform type, social commerce intensity) to identify boundary conditions under which SB or OE translate more strongly into EOBT. Finally, adding behavioral or digital trace measures (e.g., time-on-platform, purchase frequency) would complement self-reported SMA and EOBT and reduce reliance on perceptual measures.

References

[1] Ahmed, O., Sultana, T., Alam, N., Griffiths, M. D., & Hiramoni, F. A. (2022). Problematic Social Media Use, Personality Traits, and Mental Health Among Bangladeshi University Students. *Journal of Technology in Behavioral Science*, *7*(2), 183–191. https://doi.org/10.1007/s41347-021-00235-1

[2] Al-Hattami, H. M. (2021). Determinants of intention to continue usage of online shopping under a pandemic: COVID-19. *Cogent Business & Management*, *8*(1), 1936368. https://doi.org/10.1080/23311975.2021.1936368

[3] Alan, A. K., & Kabadayı, E. T. (2016). The Effect of Personal Factors on Social Media Usage of Young Consumers. *Procedia - Social and Behavioral Sciences*, *235*, 595–602. https://doi.org/10.1016/j.sbspro.2016.11.086

[4] Andreassen, C. S., Griffiths, M. D., Pallesen, S., Bilder, R. M., Torsheim, T., & Aboujaoude, E. (2015). The Bergen Shopping Addiction Scale: Reliability and Validity of a Brief Screening Test. *Frontiers in Psychology*, *6*(1374). https://doi.org/10.3389/fpsyg.2015.01374

[5] Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook Addiction Scale. *Psychological Reports*, *110*(2), 501–517. https://doi.org/10.2466/02.09.18.pr0.110.2.501-517

[6] Andreassen, C., & Pallesen, S. (2014). Social Network Site Addiction - An Overview. *Current Pharmaceutical Design*, *20*(25), 4053–4061. https://doi.org/10.2174/13816128113199990616

[7] Atalay, A. S., & Meloy, M. G. (2011). Retail therapy: A strategic effort to improve mood. *Psychology and Marketing*, *28*(6), 638–659. https://doi.org/10.1002/mar.20404

[8] Baumeister, R. F., & Leary, M. R. (1995). The Need to belong: Desire for Interpersonal Attachments as a Fundamental Human motivation. *Psychological Bulletin*, *117*(3), 497–529.

[9] Brailovskaia, J., Rohmann, E., Bierhoff, H.-W., & Margraf, J. (2018). The brave blue world: Facebook flow and Facebook Addiction Disorder (FAD). *PLOS ONE*, *13*(7), e0201484. https://doi.org/10.1371/journal.pone.0201484

[10] Chen, Y., Lu, Y., Wang, B., & Pan, Z. (2019). How Do Product Recommendations Affect Impulse buying? an Empirical Study on WeChat Social Commerce. *Information & Management*, *56*(2), 236–248. https://doi.org/10.1016/j.im.2018.09.002

[11] Cohen, S. (1988). Perceived stress in a probability sample of the United States. In *The social psychology of health.* (pp. 31–67). Sage Publications, Inc.

[12] Costa, P. T., & McCrae, R. R. (1992). Normal Personality Assessment in Clinical practice: the NEO Personality Inventory. *Psychological Assessment*, *4*(1), 5–13. https://doi.org/10.1037/1040-3590.4.1.5

[13] Dittmar, H. (2005). Compulsive buying - a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors. *British Journal of Psychology*, *96*(4), 467–491. https://doi.org/10.1348/000712605x53533

[14] Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., & Carlson, J. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, *59*(1), 1–37. https://doi.org/10.1016/j.ijinfomgt.2020.102168

[15] Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312

[16] Gao, W., Liu, Z., & Li, J. (2017). How does social presence influence SNS addiction? A belongingness theory perspective. *Computers in Human Behavior*, *77*, 347–355. https://doi.org/10.1016/j.chb.2017.09.002

[17] Griffiths, M. (2000). Does Internet and Computer "Addiction" Exist? Some Case Study Evidence. *CyberPsychology & Behavior*, *3*(2), 211–218. https://doi.org/10.1089/109493100316067

[18] Griffiths, M. (2005). A "components" model of addiction within a biopsychosocial framework. *Journal of Substance Use*, *10*(4), 191–197. https://doi.org/10.1080/14659890500114359

[19] Guo, Y., Li, Y., & Ito, N. (2014). Exploring the Predicted Effect of Social Networking Site Use on Perceived Social Capital and Psychological Well-Being of Chinese International Students in Japan. *Cyberpsychology, Behavior, and Social Networking*, *17*(1), 52–58. https://doi.org/10.1089/cyber.2012.0537

[20] Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2019). *Multivariate Data Analysis*. Cengage Learning.

[21] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage.

[22] Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*, *110*(1), 86–108. https://doi.org/10.1037//0033-2909.110.1.86

[23] Hou, X.-L., Wang, H.-Z., Guo, C., Gaskin, J., Rost, D. H., & Wang, J.-L. (2017). Psychological resilience can help combat the effect of stress on problematic social networking site usage. *Personality and Individual Differences*, *109*, 61–66. https://doi.org/10.1016/j.paid.2016.12.048

[24] Huang, F., Wang, H., Wang, Z., Zhang, J., Du, W., Su, C., Jia, X., Ouyang, Y., Wang, Y., Li, L., Jiang, H., & Zhang, B. (2020). Psychometric properties of the perceived stress scale in a community sample of Chinese. *BMC Psychiatry*, *20*(1). https://doi.org/10.1186/s12888-020-02520-4

[25] Hwang, J., Choi, J.-S., Gwak, A., Jung, D., Choi, S.-W., Lee, J., Lee, J.-Y., Jung, H., & Kim, D. (2014). Shared psychological characteristics that are linked to aggression between patients with Internet addiction and those with alcohol dependence. *Annals of General Psychiatry*, *13*(1), 6. https://doi.org/10.1186/1744-859x-13-6

[26] Kardefelt-Winther, D. (2014). A Conceptual and Methodological Critique of Internet Addiction research: Towards a Model of Compensatory Internet Use. *Computers in Human Behavior*, *31*(1), 351–354. https://doi.org/10.1016/j.chb.2013.10.059

[27] Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2018). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the big five of personality traits, social media platforms, and social media use motives. *International Journal of Mental Health and Addiction*, *18*(18), 525–547. https://doi.org/10.1007/s11469-018-9940-6

[28] Kuss, D., & Griffiths, M. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. *International Journal of Environmental Research and Public Health*, *14*(3), 311. https://doi.org/10.3390/ijerph14030311

[29] Mandel, N., Rucker, D. D., Levav, J., & Galinsky, A. D. (2017). The Compensatory Consumer Behavior Model: How self-discrepancies drive consumer behavior. *Journal of Consumer Psychology*, *27*(1), 133–146. https://doi.org/10.1016/j.jcps.2016.05.003

[30] Mason, M. C., Zamparo, G., Marini, A., & Ameen, N. (2022). Glued to Your phone? Generation Z's Smartphone Addiction and Online Compulsive Buying. *Computers in Human Behavior*, *136*(107404), 107404. https://doi.org/10.1016/j.chb.2022.107404

[31] Mikolajczak-Degrauwe, K., Brengman, M., Wauters, B., & Rossi, G. (2012). Does Personality Affect Compulsive Buying? An Application of the Big Five Personality Model. *Journal of Global Business and Technology*, *8*(2), 8–15. https://doi.org/10.5772/39106

[32] Miranda, S., Trigo, I., Rodrigues, R., & Duarte, M. (2023). Addiction to social networking sites: Motivations, flow, and sense of belonging at the root of addiction. *Technological Forecasting and Social Change*, *188*(122280), 122280. https://doi.org/10.1016/j.techfore.2022.122280

[33] Naqvi, M. H. A., 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). https://doi.org/10.1080/23311975.2020.1723825

[34] Nikolinakou, A., Phua, J., & Kwon, E. S. (2024). What drives addiction on social media sites? The relationships between psychological well-being states, social media addiction, brand addiction and impulse buying on social media. *Computers in Human Behavior*, *153*(153), 108086. https://doi.org/10.1016/j.chb.2023.108086

[35] Nyrhinen, J., Sirola, A., Koskelainen, T., Munnukka, J., & Wilska, T.-A. (2023). Online Antecedents for Young Consumers' Impulse Buying Behavior. *Computers in Human Behavior*, *153*(108129), 108129. https://doi.org/10.1016/j.chb.2023.108129

[36] Olivencia-Carrión, M. A., Ramírez-Uclés, I., Holgado-Tello, P., & López-Torrecillas, F. (2018). Validation of a Spanish Questionnaire on Mobile Phone Abuse. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.00621

[37] Ostovar, S., Allahyar, N., Aminpoor, H., Moafian, F., Nor, M. B. M., & Griffiths, M. D. (2016). Internet Addiction and its Psychosocial Risks (Depression, Anxiety, Stress and Loneliness) among Iranian Adolescents and Young Adults: A Structural Equation Model in a Cross-Sectional Study. *International Journal of Mental Health and Addiction*, *14*(3), 257–267. https://doi.org/10.1007/s11469-015-9628-0

[38] Otero-López, J. M., Santiago, M. J., & Castro, M. C. (2021). Big Five Personality Traits, Coping Strategies and Compulsive Buying in Spanish University Students. *International Journal of Environmental Research and Public Health*, *18*(2), 821. https://doi.org/10.3390/ijerph18020821

[39] Otero-López, J. M., & Villardefrancos, E. (2013). Five-Factor Model personality traits, materialism, and excessive buying: A mediational analysis. *Personality and Individual Differences*, *54*(6), 767–772. https://doi.org/10.1016/j.paid.2012.12.013

[40] Penagos, P., Encarnación, T., Jaramillo-Ríos, J., Gonzalez-Calderon, C. A., & Posada-Henao, J. J. (2025). Impact of the COVID-19 pandemic on e-commerce adoption in emerging economies. *Latin American Transport Studies*, *3*, 100037. https://doi.org/10.1016/j.latran.2025.100037

[41] Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. yi, Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, *53*, 1. https://doi.org/10.1016/j.amepre.2017.01.010

[42] Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, *41*(1), 203–212. https://doi.org/10.1016/j.jrp.2006.02.001

[43] Raza, S. A., Qazi, W., Umer, B., & Khan, K. A. (2020). Influence of Social Networking Sites on Life Satisfaction among University students: a Mediating Role of Social Benefit and Social Overload. *Health Education*, *120*(2), 141–164. https://doi.org/10.1108/he-07-2019-0034

[44] Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B. (2008). An Expanded Conceptualization and a New Measure of Compulsive Buying. *Journal of Consumer Research*, *35*(4), 622–639. https://doi.org/10.1086/591108

[45] Sharif, S. P., & Yeoh, K. K. (2018). Excessive social networking sites use and online compulsive buying in young adults: the mediating role of money attitude. *Young Consumers*, *19*(3), 310–327. https://doi.org/10.1108/yc-10-2017-00743

[46] Sneath, J. Z., Lacey, R., & Kennett-Hensel, P. A. (2009). Coping with a natural disaster: Losses, emotions, and impulsive and compulsive buying. *Marketing Letters*, *20*(1), 45–60. https://doi.org/10.1007/s11002-008-9049-y

[47] Teo, H.-H., Chan, H.-C., Wei, K.-K., & Zhang, Z. (2003). Evaluating information accessibility and community adaptivity features for sustaining virtual learning communities. *International Journal of Human-Computer Studies*, *59*(5), 671–697. https://doi.org/10.1016/s1071-5819(03)00087-9

[48] Verplanken, B., & Sato, A. (2011). The Psychology of Impulse Buying: an Integrative Self-Regulation Approach. *Journal of Consumer Policy*, *34*(2), 197–210. https://doi.org/10.1007/s10603-011-9158-5

[49] Vohs, Kathleen D., & Faber, Ronald J. (2007). Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying. *Journal of Consumer Research*, *33*(4), 537–547. https://doi.org/10.1086/510228

[50] Yu, Y., Wu, Y., Chen, P., Min, H., & Sun, X. (2024). Associations between personality and problematic internet use among Chinese adolescents and young adults: A network analysis. *Journal of Affective Disorders*. https://doi.org/10.1016/j.jad.2024.08.069

[51] Zafar, A. U., Qiu, J., Li, Y., Wang, J., & Shahzad, M. (2019). The impact of social media celebrities' posts and contextual interactions on impulse buying in social commerce. *Computers in Human Behavior*, *115*(0747-5632), 106178. https://doi.org/10.1016/j.chb.2019.106178

[52] Zafar, A. U., Shen, J., Shahzad, M., & Islam, T. (2020). Relation of impulsive urges and sustainable purchase decisions in the personalized environment of social media. *Sustainable Production and Consumption*, *25*, 591–603. https://doi.org/10.1016/j.spc.2020.11.020