

Income, Social Media Engagement, and Online Spending: Evidence from Romanian Digital Consumers

Ștefan-Ionuț ANGHEL¹[0009-0000-5261-2031], Dragoș BUJOR²[0009-0009-3549-7620] Antonia-
Gabriela MALOȘ³[0009-0002-2763-3695], I and Cosmin CARACAS⁴[0009-0004-5747-401X]

The Bucharest University of Economic Studies, Bucharest, Romania

Abstract: Social media has become a central force in contemporary marketing, reshaping how consumers discover, evaluate, and purchase products. As marketing budgets shift toward digital channels, identifying the factors that genuinely drive online spending has become a priority for scholars and practitioners alike. Although the influence of social media marketing on consumer behavior is well documented, evidence from emerging digital economies such as Romania remains limited, and the relative importance of engagement intensity versus economic capacity is not well understood. Drawing on a stimulus–organism–response perspective and integrating technology-acceptance, social-influence, and uses-and-gratifications theory, this study examines how social media engagement and income relate to online purchasing among Romanian consumers. Using survey data from 130 respondents with prior online-shopping experience, collected in early 2025, the associations between income, daily time spent on social media, and monthly online expenditure are analyzed through cross-tabulations and chi-square tests of independence, with Cramér's V as the effect-size measure. The results show that income is significantly associated with both time spent on social media (Cramér's $V = 0.31$) and monthly online spending (Cramér's $V = 0.36$), whereas time spent on social media is not significantly associated with spending (Cramér's $V = 0.23$). Income therefore emerges as a stronger correlate of online expenditure than engagement intensity. Respondents also reported substantially stronger purchase influence from micro-influencers and promoted content than from organic brand posts. The findings indicate that income-based segmentation, combined with authentic, peer-based content, is more effective than strategies that merely maximize screen-time exposure, and they contribute empirical evidence on digital consumer behavior in an under-researched market.

Keywords: social media; e-commerce; social commerce; consumer behavior; influencer marketing; electronic word-of-mouth; Romania.

I. Introduction

The contemporary consumer is adaptable, constantly connected, and reliant on a wide range of digital channels when making purchasing decisions. Such consumers value convenience and immediacy, yet still seek real-world interaction and personalized engagement (Kotler et al., 2017). Over the past decade, the rapid expansion of the internet and social media has transformed how information and advertising reach consumers, turning social platforms into primary spaces for product discovery, brand interaction, and transaction (Appel et al., 2020). For marketers, social media is no longer a peripheral channel but a core arena in which competition for consumer attention and spending is decided.

Romania offers a compelling setting in which to study these dynamics. According to DataReportal (2026a), the country has continued its rapid digital expansion: by late 2025 it had approximately 12.9 million active social media user identities, equivalent to 68.3% of the population, alongside an internet penetration rate of 94.0%, while the 25.5 million active mobile connections represented about 135% of the population, underscoring a mobile-first digital environment. Industry analyses likewise point to sustained e-commerce growth in the region (Deloitte, 2023, 2024; MerchantPro, 2024; Romanian Association for Online Commerce, 2023). Despite this rapid digitalization, empirical research on how social media shapes purchasing behavior in Romania remains scarce, and most evidence derives from larger or more mature markets. In particular, the relative importance of two candidate drivers of online spending — the intensity of social media engagement and the consumer's economic capacity — has received little direct empirical attention.

This study addresses that gap by examining how social media engagement and income relate to online purchasing among Romanian consumers, drawing on a stimulus–organism–response logic and integrating technology-acceptance, social-influence, and uses-and-gratifications perspectives. Specifically, it asks: (RQ1) How is income associated with time spent on social media and with monthly online spending? (RQ2) Does time spent on social media predict online spending? (RQ3) Which forms of social media content most strongly influence purchase decisions?

The paper makes three contributions. First, it provides theory-grounded empirical evidence on digital consumer behavior in Romania, an under-researched emerging digital economy. Second, it disentangles the roles of income and engagement, showing that economic capacity is a stronger correlate of online spending than time spent online – a finding that qualifies prevailing attention-economy assumptions. Third, it offers practical, segmentation-oriented guidance for businesses designing social commerce and e-commerce strategies. The remainder of the paper develops the theoretical background and hypotheses, describes the methodology, presents the results, discusses their theoretical and managerial implications, and concludes with limitations and directions for future research.

II. Theoretical Background and Literature Review

2.1. Theoretical Framework

This study is organized around the stimulus–organism–response (S–O–R) framework (Mehrabian & Russell, 1974), which holds that environmental stimuli influence individuals' internal states, which in turn shape behavioral responses. In a digital marketing context, social media content and advertising act as stimuli, consumers' internal states (e.g., trust, perceived value, and economic appraisal) constitute the organism, and online purchasing represents the response. The framework is well suited to the present research because it accommodates both situational inputs (exposure to platforms and promotional formats) and dispositional or structural factors (such as income) that condition how stimuli translate into behavior.

Within this overarching logic, several mid-range theories inform the study. Technology-acceptance perspectives – the Technology Acceptance Model (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003) – explain why consumers adopt and continue to use digital commerce channels, while the Theory of Planned Behavior (Ajzen, 1991) frames purchase intention as a function of attitudes, subjective norms, and perceived control. Trust is a critical antecedent of online transactions, integrating with technology acceptance to predict e-commerce behavior (Gefen et al., 2003). Complementing these adoption-oriented theories, the uses-and-gratifications perspective (Katz et al., 1973) explains why individuals engage with social media in the first place – for entertainment, information, and social connection – and why such engagement need not translate directly into spending.

Finally, the study draws on social-influence and source-effects theory to explain the persuasive power of social media content. Source-credibility theory (Ohanian, 1990) identifies expertise, trustworthiness, and attractiveness as drivers of endorsement effectiveness, while the concept of parasocial interaction (Horton & Wohl, 1956) describes the one-sided yet emotionally real relationships that audiences form with media figures, including influencers. Together, these perspectives suggest that credible, relatable sources exert disproportionate influence on purchase intent – a proposition central to the study's treatment of influencer and peer-based marketing.

2.2. Social Media and Consumer Behavior

Social media platforms such as Facebook, Instagram, and YouTube are no longer merely social spaces; they have become powerful marketing tools that allow businesses to engage directly with consumers and personalize the customer experience (Kaplan & Haenlein, 2010; Appel et al., 2020). With the proliferation of choice available to consumers, the presence of marketing on social platforms and the interaction between brands and customers have become central to organizational strategy (Lindermann, 2004), underpinning brand value and credibility (Oliveira & Sullivan, 2003; Golden, 2011). Wiktor and Sanak-Kosmowska (2021) find a clear link between online content communication and brand competitiveness, arguing that effective communication fosters customer loyalty and strengthens a brand's market position. This view is echoed by Dwivedi et al. (2021) and by Momen et al. (2020), who stress that web-based marketing communication is crucial for establishing brand value, and by Alvarado-Karste and Kidwell (2021), who underscore the role of communication in cultivating brand–consumer relationships. Beyond communication, scholars increasingly frame the relationship between consumers and brands on social media in terms of engagement: Hollebeek et al. (2014) conceptualize and validate consumer brand engagement in social media as a multidimensional construct encompassing cognitive, emotional, and behavioral facets, highlighting that engagement is distinct from, and does not automatically convert into, transactional outcomes.

2.3. Electronic Word-of-Mouth and Influencer Marketing

A defining feature of social media is its capacity to amplify electronic word-of-mouth (eWOM) – consumer-to-consumer communication about products and brands. Hennig-Thurau et al. (2004) developed an influential typology of the motives that drive consumers to articulate themselves online, and subsequent work has synthesized how eWOM shapes attitudes and purchase intentions (Cheung & Thadani, 2012). In emerging markets, eWOM and paid social advertising jointly influence purchase intention, with consumers often perceiving advertisements as useful sources of product information (Chetioui et al., 2021).

Influencer marketing has become a particularly potent form of social media persuasion. By associating digital opinion leaders with a brand, it encourages followers to co-create brand image (Vrontis et al., 2021), and influencers on platforms such as Instagram play a crucial role in inspiring purchasing decisions (Brown et al., 2019). The effectiveness of influencer endorsements is grounded in source credibility and message value: Lou and Yuan (2019) show that the informativeness of influencer-generated content, together with the influencer's trustworthiness, attractiveness, and similarity to followers, drives consumer trust and behavioral response. Characteristics of the influencer and the endorsement also matter; De Veirman et al. (2017) find that follower counts and product-influencer congruence shape brand attitudes, while Schouten et al. (2020) demonstrate that influencers can outperform traditional celebrities when identification and product-endorser fit are high. A comprehensive meta-analysis of 53 studies (250 effect sizes) confirms that source-credibility theory remains the most robust explanatory framework for influencer impact, with expertise and trustworthiness as the principal antecedents of consumer attitudes (Han & Balabanis, 2024). As the field has matured, scholars have mapped the strategic commercialization of social media stars (Hudders et al., 2021).

Of particular relevance to this study is the rise of micro-influencers and peer-based endorsement. Because micro-influencers are perceived as more authentic and relatable, they can foster parasocial relationships (Horton & Wohl, 1956) that enhance persuasive impact. Sokolova and Kefi (2020) show that influencer credibility and parasocial interaction jointly drive purchase intentions, and Liu and Zheng (2024), applying the elaboration likelihood model, demonstrate that the informative value, authenticity, and homophily of influencer content strengthen parasocial relationships, which in turn raise purchase intention and perceived brand credibility. The intensity of parasocial interaction and the perceived value of an influencer's posts are similarly associated with stronger parasocial bonds on Instagram (Zhou et al., 2024). Crucially for the present context, evidence from the Romanian market indicates that product involvement moderates these effects: primarily followers with high involvement develop the strong parasocial relationships that translate into purchase intention (Balaban et al., 2022). Together, this body of work provides a theoretical basis for expecting peer-based and micro-influencer content to outperform organic brand messaging, motivating the study's focus on the comparative influence of micro-influencer and promoted content versus organic brand posts.

2.4. Social Commerce and E-Commerce

Social media plays a pivotal role in shaping the e-commerce landscape, particularly for small and medium-sized enterprises (SMEs), which leverage these platforms to strengthen customer relationships, expand market reach, and improve operational efficiency (Abed et al., 2015; Papadopoulos et al., 2020). Yadav and Rahman (2018) show that social media marketing exerts a significant positive influence on customer loyalty in e-commerce. Building on this, the concept of social commerce describes the integration of traditional e-commerce with social interaction, enabling consumers to transact online while exchanging user-generated content. Hajli (2015) introduces and validates social commerce constructs – ratings and reviews, recommendations and referrals, and forums and communities – and demonstrates that these constructs build trust, which in turn raises consumers' intention to buy. A recent systematic review of 60 studies consolidates this fragmented evidence, showing that user-generated content shapes social commerce outcomes through five interrelated dimensions – trust, authenticity, perceived risk, engagement, and loyalty – that operate largely through mediating psychological mechanisms such as trust, social presence, and community identification (Bunčić, 2026). The adoption of such services depends on factors including perceived usefulness and social presence (Mamonov & Benbunan-Fich, 2017), and the broader phenomenon has been theorized along people, management, technology, and information dimensions (Wang & Zhang, 2012; Wang & Xie, 2020). Social commerce has grown rapidly, accelerating during the COVID-19 period and giving rise to formats such as livestream shopping (Wang & Oh, 2023), with continued emphasis on leveraging social platforms for sustainable competitive advantage (Fitriani et al., 2023).

2.5. The Romanian Digital Context

In Romania, social media is increasingly embedded in the consumer journey. By late 2025, approximately 12.9 million Romanians were active social media user identities (68.3% of the population), internet penetration had reached 94.0%, and

mobile connections were equivalent to roughly 135% of the population (DataReportal, 2026a). Facebook, Instagram, and YouTube dominate usage for both leisure and commercial purposes, consistent with global trends in which some 5.79 billion people engage with social media worldwide (DataReportal, 2026b). Romanian consumers use social media not only to socialize but also to discover and purchase products, with the global daily average time spent on social platforms standing at roughly two hours and twenty minutes (DataReportal, 2026b).

Social commerce is among the fastest-growing online channels in the country, as more businesses promote products and interact with customers on Instagram and Facebook. Influencer marketing is a key driver of this growth: as Brown et al. (2019) note, influencers exert considerable power over purchasing decisions, and many Romanian consumers trust influencer recommendations more than traditional advertisements. On Instagram in particular, local influencers collaborate with brands to promote products in a more authentic and relatable manner, reinforcing the link between influencer marketing and customer loyalty identified by Yadav and Rahman (2018) and Vrontis et al. (2021). Recent Romanian evidence reinforces these patterns: among Romanian online shoppers, online customer service, store ambiance, and store technology significantly shaped consumer experience and the willingness to revisit a preferred online store, with the ethics of online selling exerting an additional positive influence (Tiutiu et al., 2025). Moreover, as consumers increasingly move between online and offline channels, omnichannel research shows that shopping habits strengthen with usage and are moderated by income, with higher-income consumers developing stronger habits – underscoring the role of economic capacity that is central to the present study (Sharma et al., 2024). These contextual features make Romania an informative case for examining how engagement and income jointly shape online purchasing in a rapidly digitalizing economy.

2.6. Hypothesis Development

Building on the theoretical framework, this study investigates how income and engagement relate to digital behavior and spending. Consistent with lifestyle segmentation and opportunity-cost reasoning, higher-income individuals may spend comparatively less time on social media because of busier offline schedules and different lifestyle patterns, while the uses-and-gratifications perspective (Katz et al., 1973) implies heterogeneous engagement across groups. This suggests an association between income and engagement intensity:

H1. Income is significantly associated with time spent on social media.

Classical economic theory and Maslow's (1943) hierarchy of needs imply that greater disposable income expands discretionary spending, such that economic capacity should scale with online expenditure:

H2. Income is positively associated with monthly online spending.

At the same time, exposure does not equal conversion. The Theory of Planned Behavior (Ajzen, 1991) and source-credibility research (Lou & Yuan, 2019) suggest that purchase intent is shaped by attitudes, norms, and message credibility rather than by mere time on platform, qualifying attention-economy assumptions:

H3. Time spent on social media does not significantly predict monthly online spending.

Because eWOM and social commerce constructs operate through widely used platforms (Hennig-Thurau et al., 2004; Hajli, 2015), the platforms most central to Romanian consumers should be associated with product discovery and purchase:

H4. Use of WhatsApp, YouTube, and Instagram is associated with product discovery and purchase.

Source-credibility theory (Ohanian, 1990; Han & Balabanis, 2024) and parasocial interaction (Horton & Wohl, 1956; Sokolova & Kefi, 2020; Liu & Zheng, 2024), together with evidence on micro-influencer authenticity (De Veirman et al., 2017), suggest that credible, relatable sources are more persuasive than organic brand messaging:

H5. Content from micro-influencers and promoted posts influences purchase intent more strongly than organic brand content.

Finally, if income structures both engagement and spending, usage and expenditure patterns should differ systematically across income groups, supporting income-based segmentation:

H6. Social media usage and spending patterns differ significantly across income groups.

III. Methodology

3.1. Research Design

The study adopts a quantitative, cross-sectional design based on an online survey, using an empirical approach aimed at testing the hypotheses derived from prior theory (Leavy, 2017). Primary data were collected at a single point in time, at the beginning of 2025, and were complemented by secondary sources such as DataReportal and Statista to contextualize the findings.

3.2. Sampling and Procedure

A convenience sampling strategy was used to recruit participants. The questionnaire was administered via Google Forms and distributed through social media and messaging channels, including WhatsApp, Facebook, and Instagram, as well as personal contacts. Eligibility was based on a single criterion: participants must have made at least one online purchase, ensuring that all respondents had firsthand experience with e-commerce. The final sample comprised 130 respondents. While convenience sampling limits the external generalizability of the findings, it provides high internal validity for examining the digital behavior of Romanian online shoppers. To protect confidentiality, respondents' identities and responses were anonymized and not shared with any third party.

3.3. Measures

The questionnaire was organized into two parts. The first captured sociodemographic characteristics, including gender, age, occupation, education, and place of residence. The second measured online shopping activity and perceptions of social media marketing, including monthly income band, average daily time spent on social media, monthly online expenditure, platform usage and recognition, preferred promotion formats, and purchase decision speed. Income, time, and spending were recorded as ordered categorical bands to facilitate cross-tabulation analysis and to accommodate respondents' reluctance to disclose precise financial figures.

3.4. Data Analysis

Data were processed and analyzed in Python. The analysis began with a descriptive profile of the sample (Kaur et al., 2018), followed by an examination of data distributions and a check for data-entry accuracy. To test the hypotheses, cross-tabulations and Pearson chi-square tests of independence were conducted for the key variable pairs (time $\times$ income, spending $\times$ income, and time $\times$ spending). The chi-square test is appropriate for assessing association between categorical variables and should be accompanied by a strength measure (McHugh, 2013); accordingly, the strength of association was assessed using Cramér's V. Following Cohen (1988), values of approximately 0.10, 0.30, and 0.50 were interpreted as small, moderate, and large effects, respectively, recognizing that Cramér's V tends to yield relatively conservative values even for highly significant results (McHugh, 2013).

IV. Results

4.1. Sample Profile

The sample skewed slightly female (56.2%) relative to male respondents (43.8%), and over half of participants (52.3%) fell within the 25–39 age bracket, indicating a predominantly young-adult sample with purchasing power. Half of the respondents (50%, $n = 65$) reported spending between one and three hours per day on social media. Most participants were employed (78.5%), and the most common level of education was a bachelor's degree (56.9%), followed by master's degrees (18.5%) and MBA/CFA qualifications (16.9%).

4.2. Platform Usage and Online Shopping Behavior

Although Facebook enjoys near-universal recognition, WhatsApp was the most widely used platform (73.8%), followed by YouTube (69.2%), with Facebook and Instagram tied at 64.6%. Facebook, YouTube, WhatsApp, and TikTok all recorded recognition rates above 90%. Notably, 82.3% of respondents had purchased products promoted on social media, and 83.1% had discovered brands they now use regularly, underscoring the role of these platforms in product discovery. In terms of frequency, 42.3% of respondents shop online at least once a month and 37.7% do so weekly, while 46.9% spend between 1,001 and 2,000 lei per month. Satisfaction with online shopping was high: 59.2% reported being satisfied and 33.1% very satisfied.

Regarding promotion preferences, promoted advertisements and content from followed micro-influencers were equally favored (54.6% each), followed by giveaway contests (38.5%), influencers (32.3%), and organic content from

companies or brands (27.7%). This pattern suggests that paid and peer-based formats resonate more strongly than organic brand content, and that relatable, non-celebrity sources can promote brands without provoking negative reactions. Purchase behavior was rapid: 33.3% of respondents made a purchase immediately upon finding the desired product, and up to 20% decided within one to two days. The platforms most used to connect with brands were Facebook (63.1%) and Instagram (52.3%).

4.3. Daily Social Media Usage by Income

Table 1. Daily social media usage by income group (N = 130)

Time \ Income (lei)	<3,000	3,001–5,000	5,001–9,000	9,001–14,000	>14,001	No answer	Row total
<1 hour	0	2	5	0	9	4	20
1–3 hours	4	9	35	5	7	5	65
3–6 hours	3	4	23	3	1	5	39
6–8 hours	2	1	1	0	0	0	4
>8 hours	1	1	0	0	0	0	2
Column total	10	17	64	8	17	14	130

Source: authors' survey data.

The cross-tabulation of daily social media usage by income group reveals significant variation across income levels ($\chi^2 = 48.40$, $p < .001$, Cramér's $V = 0.31$; likelihood ratio = 52.18). High-income earners (>14,001 lei) display a bimodal pattern, with 52.9% spending less than one hour daily and 41.2% spending one to three hours, suggesting distinct digital-consumption strategies within this group. Middle-income respondents (5,001–9,000 lei) show the most consistent engagement, with 90.6% spending between one and six hours daily (35 respondents at 1–3 hours and 23 at 3–6 hours), consistent with their dominant representation in product-discovery metrics. Extreme usage patterns cluster at the income margins: all heavy users (>8 hours) belong to lower-income brackets (<5,000 lei), while high-income low-engagement users (<1 hour) are over-represented relative to expectation (standardized residual $z = 3.8$). These results support H1, indicating that income is significantly associated with time spent on social media and shapes patterns of digital engagement, not merely access. The moderate effect size ($V = 0.31$) points to a meaningful but not deterministic relationship, suggesting a role for psychographic moderators in future models.

A notable limitation is that 10.8% of respondents ($n = 14$) did not disclose their income. If these individuals differ systematically from those who reported income, their exclusion may introduce bias; future research should reduce nonresponse through improved survey design or apply imputation techniques to account for missing values.

4.4. Monthly Online Spending by Income

Table 2. Distribution of monthly online spending by income group (N = 130)

Spending \ Income (lei)	<3,000	3,001–5,000	5,001–9,000	9,001–14,000	>14,001	No answer	Row total
<200	2	1	2	2	0	2	9
201–500	2	7	11	1	6	7	34
501–1,000	2	6	4	3	1	2	18
1,001–2,000	3	3	47	2	5	1	61
2,001–5,000	0	0	0	0	2	2	4
5,001–10,000	0	0	0	0	2	0	2
>10,001	1	0	0	0	1	0	2
Column total	10	17	64	8	17	14	130

Source: authors' survey data.

Table 2 reports the joint distribution of monthly income and expenditure. A systematic, positive association is evident: respondents with lower incomes (<3,000 lei) predominantly reported the lowest expenditures, whereas higher-income groups exhibited a greater propensity for higher spending. The largest single concentration occurred among respondents earning 5,001–9,000 lei whose monthly expenditure fell between 1,001 and 2,000 lei ($n = 47$), indicating that moderate spending remains prevalent even among comparatively higher earners – a pattern potentially reflecting budgeting practices, risk aversion, or saving-oriented attitudes. The highest expenditure categories (5,001–10,000 lei and >10,001 lei)

were almost exclusively associated with the top income bracket (>14,001 lei), although the absolute counts in these cells were small. Overall, the relationship between income and expenditure is positive but nuanced, with evidence that spending does not scale strictly linearly with income. These results support H2.

4.5. Bivariate Associations

Table 3. Summary of bivariate chi-square tests

Variable pair	χ^2	p value	Cramér's V	Significant ($\alpha = .05$)
Time × Spending	27.39	0.286	0.23	No
Time × Income	48.40	< .001	0.31	Yes
Spending × Income	84.72	< .001	0.36	Yes

Source: authors' analysis.

To compare the relative influence of the key variables, bivariate chi-square tests were conducted (Table 3). The association between time spent and spending was not statistically significant ($\chi^2 = 27.39$, $p = 0.286$, Cramér's $V = 0.23$), indicating that time allocation alone does not substantially influence spending within this sample. In contrast, both time × income ($\chi^2 = 48.40$, $p < .001$, Cramér's $V = 0.31$) and spending × income ($\chi^2 = 84.72$, $p < .001$, Cramér's $V = 0.36$) were statistically significant, with moderate effect sizes. Income thus emerges as the critical factor shaping both engagement and expenditure. The non-significant time × spending association supports H3, suggesting that financial decisions are anchored more in economic resources than in temporal availability.

4.6. Summary of Hypothesis Tests

Table 4. Summary of hypothesis testing

Hyp.	Statement	Evidence	Result
H1	Income is associated with time spent on social media	$\chi^2 = 48.40$, $p < .001$, $V = 0.31$	Supported
H2	Income is positively associated with monthly online spending	$\chi^2 = 84.72$, $p < .001$, $V = 0.36$	Supported
H3	Time on social media does not predict monthly online spending	$\chi^2 = 27.39$, $p = .286$, $V = 0.23$	Supported
H4	WhatsApp, YouTube, and Instagram relate to product discovery and purchase	82.3% bought promoted products; 83.1% discovered brands; highest platform usage	Supported (descriptive)
H5	Micro-influencer and promoted content influence purchase intent more than organic brand content	54.6% vs. 27.7% preference	Supported (descriptive)
H6	Usage and spending patterns differ across income groups	Significant time × income and spending × income associations	Supported

Source: authors' analysis.

Taken together (Table 4), the inferential tests support H1, H2, H3, and H6. The descriptive evidence is consistent with H4 and H5: WhatsApp, YouTube, and Instagram dominate usage and product discovery, and micro-influencer and promoted content are favored roughly twice as often as organic brand content (54.6% vs. 27.7%). Because H4 and H5 were assessed descriptively rather than through inferential tests, they are reported as supported by descriptive evidence and warrant confirmatory testing in future work.

V. Discussion

The findings offer three main insights into digital consumer behavior in Romania. First, income is the dominant correlate of online behavior, shaping both how much time consumers spend on social media and how much they spend online. The strong income–spending association (Cramér's $V = 0.36$) is consistent with classical economic theory and Maslow's (1943) hierarchy of needs, in which economic security precedes discretionary consumption. Lower-income respondents concentrated in the lowest expenditure brackets, while higher-income respondents spent more, although moderate spending remained common across groups.

Second, engagement does not equal expenditure. The absence of a significant time-spending association (Cramér's $V = 0.23$, $p = 0.286$) challenges attention-economy assumptions and suggests that, in this sample, Romanian consumers make relatively deliberate rather than impulse-driven decisions. While social media is clearly important for product discovery – most respondents both bought promoted products and discovered brands they continue to use – time on platform is not in itself a reliable predictor of spending. Third, authenticity matters: the strong preference for micro-influencer and promoted content over organic brand posts is consistent with source-credibility and parasocial-interaction accounts (Ohanian, 1990; Horton & Wohl, 1956; Sokolova & Kefi, 2020), which hold that credible, relatable sources exert greater persuasive power than traditional brand messaging.

5.1. Theoretical Implications

Interpreted through the S-O-R lens (Mehrabian & Russell, 1974), the results indicate that engagement-related stimuli (time on platform) are insufficient on their own to produce the purchase response; rather, organism-level factors – economic capacity and trust in credible sources – govern the translation of exposure into spending. This reframes the relationship between social media use and consumption: in line with the uses-and-gratifications perspective (Katz et al., 1973), consumers engage with social media for gratifications that are only partly commercial, so engagement intensity is a weak proxy for purchase propensity. The pattern is also consistent with the Theory of Planned Behavior (Ajzen, 1991) and with influencer-credibility research (Lou & Yuan, 2019; De Veirman et al., 2017), which locate the drivers of purchase intent in attitudes, norms, and message credibility rather than in mere exposure. Methodologically, the moderate Cramér's V values should be read in light of the measure's tendency toward conservative magnitudes even when associations are highly significant (McHugh, 2013), reinforcing that the income effects are substantively meaningful. By extending these largely Western-developed theories to an emerging Central and Eastern European market, the study contributes external evidence on their boundary conditions and on the centrality of economic capacity in digitally emerging economies.

5.2. Practical Implications

For marketers and e-commerce managers, the results suggest a two-step approach: segment primarily by income tier, then tailor engagement strategies within each tier. Middle- and upper-middle-income consumers (5,001–14,000 lei), including freelancers, represent high-potential segments. Strategies for higher-income, time-constrained users should emphasize efficiency – fast checkout, curated content, and premium formats – while peer-based and promoted content should be prioritized over organic posts to drive purchase intent, consistent with the credibility advantage of micro-influencers (Sokolova & Kefi, 2020). Because exposure alone does not convert, post-engagement tactics such as retargeting and personalized follow-up are likely to yield stronger returns than maximizing time on platform. More broadly, firms should invest in the social commerce constructs that build trust – ratings, reviews, recommendations, and active communities (Hajli, 2015) – to shorten the path from discovery to purchase.

5.3. Limitations and Future Research

Several limitations should be noted. The study relies on a convenience sample of 130 respondents, which limits external generalizability, and on self-reported, cross-sectional data, which constrain causal inference and may introduce common-method bias. Income, time, and spending were measured as categorical bands and analyzed using chi-square tests, which establish association but not the direction or magnitude that regression-based methods would provide. In addition, 10.8% of respondents did not disclose their income, introducing potential nonresponse bias, and hypotheses H4 and H5 were evaluated descriptively rather than through inferential tests. Future research should employ larger, probability-based samples; incorporate regression, structural equation modeling, or machine-learning models to quantify predictive contributions and control for confounders; integrate psychographic moderators such as frugality, shopping motivation, and brand trust; and adopt longitudinal or experimental designs to capture causal dynamics. Examining content formats (video, image, and text), platform-specific effects, and merchant case studies, as well as emerging formats such as live-streaming commerce, AI-driven personalization, and virtual influencers, would further enrich understanding of effective social commerce strategies.

VI. Conclusions

This study examined how social media engagement and income relate to online purchasing among Romanian consumers, integrating a stimulus-organism-response perspective with technology-acceptance, social-influence, and uses-and-gratifications theory. Drawing on survey data from 130 online shoppers, it found that income is significantly associated with both time spent on social media and monthly online spending, whereas time spent on social media is not significantly associated with spending. Income therefore emerges as a stronger correlate of online expenditure than

engagement intensity, and consumers report markedly stronger purchase influence from micro-influencers and promoted content than from organic brand posts. By providing theory-grounded empirical evidence from Romania, an under-researched emerging digital economy, the study contributes to the literature on social media marketing and challenges assumptions about the direct influence of time spent online on purchase frequency. For practitioners, the results indicate that income-based segmentation, combined with authentic, peer-based content and effective post-engagement conversion, is more promising than strategies built around maximizing exposure. Future work integrating richer analytical methods, psychographic moderators, and longitudinal data can build on these findings to refine models of digital consumer behavior in emerging markets.

References

- [1.] Abed, S. S., Dwivedi, Y. K., & Williams, M. D. (2015). Social media as a bridge to e-commerce adoption in SMEs: A systematic literature review. *The Marketing Review*, 15(1), 39–57.
- [2.] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- [3.] Alvarado-Karste, D., & Kidwell, B. (2021). The rivalry effect: The influence of emotional intensity and confrontational interactions on purchase intentions. *Advances in Consumer Research*, 49, 507–509.
- [4.] Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing. *Journal of the Academy of Marketing Science*, 48(1), 79–95.
- [5.] Arora, A., Srivastava, A., & Bansal, S. (2019). Business competitive analysis using promoted post detection on social media. *Journal of Retailing and Consumer Services*, 54.
- [6.] Balaban, D. C., Szabolcs, J., & Chirică, M. (2022). Parasocial relations and social media influencers' persuasive power: Exploring the moderating role of product involvement. *Acta Psychologica*, 230, 103731.
- [7.] Brown, D., Fiorella, S., & Sadri, A. (2019). The power of social media influencers: Insights from brand partnerships. *Journal of Marketing Research*, 56(1), 117–138.
- [8.] Bunčić, S. (2026). The role of user-generated content in social commerce: A systematic review. *Sustainability*, 18(3), 1601.
- [9.] Chetoui, Y., Butt, I., & Lebdaoui, H. (2021). Facebook advertising, eWOM and consumer purchase intention: Evidence from a collectivistic emerging market. *Journal of Global Marketing*, 34(3), 220–237.
- [10.] Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461–470.
- [11.] Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- [12.] DataReportal. (2026a). *Digital 2026: Romania*. <https://datareportal.com/reports/digital-2026-romania>
- [13.] DataReportal. (2026b). *Digital 2026: Global overview report*. <https://datareportal.com/reports/digital-2026-global-overview-report>
- [14.] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- [15.] De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798–828.
- [16.] Deloitte. (2023). *Global marketing trends 2023*. https://www2.deloitte.com/content/dam/insights/articles/us175825_gmt2023/pdf/DI_GMT-2023.pdf
- [17.] Deloitte. (2024). *Global retail outlook 2024*. <https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/Global-Retail-Outlook-2024.pdf>
- [18.] Dwivedi, Y. K., Ismagilova, E., Rana, N. P., & Raman, R. (2021). Social media adoption, usage and impact in business-to-business (B2B) context: A state-of-the-art literature review. *Information Systems Frontiers*, 1–23.
- [19.] Fitriani, N., Setiawan, D., Anni Aryani, Y., & Arifin, T. (2023). Does social media affect performance in e-commerce business? The role of customer management. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4).
- [20.] Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.
- [21.] Golden, M. (2011). *Social media strategies for professionals and their firms: The guide to establishing credibility and accelerating relationships*. John Wiley & Sons.

- [22.] Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, 35(2), 183–191.
- [23.] Han, J., & Balabanis, G. (2024). Meta-analysis of social media influencer impact: Key antecedents and theoretical foundations. *Psychology & Marketing*, 41(2), 394–426.
- [24.] Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52.
- [25.] Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149–165.
- [26.] Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, 19(3), 215–229.
- [27.] Hudders, L., De Jans, S., & De Veirman, M. (2021). The commercialization of social media stars: A literature review and conceptual framework on the strategic use of social media influencers. *International Journal of Advertising*, 40(3), 327–375.
- [28.] Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68.
- [29.] Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523.
- [30.] Kaur, P., Stoltzfus, J., & Yellapu, V. (2018). Descriptive statistics. *International Journal of Academic Medicine*, 4(1), 60–63.
- [31.] Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from traditional to digital*. John Wiley & Sons.
- [32.] Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. The Guilford Press.
- [33.] Lindermann, J. (2004). *Brands and brand valuation*. Interbrand.
- [34.] Liu, X., & Zheng, X. (2024). The persuasive power of social media influencers in brand credibility and purchase intention. *Humanities and Social Sciences Communications*, 11, 15.
- [35.] Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising*, 19(1), 58–73.
- [36.] Mamonov, S., & Benbunan-Fich, R. (2017). Exploring factors affecting social e-commerce service adoption: The case of Facebook Gifts. *International Journal of Information Management*, 37(6), 590–600.
- [37.] Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- [38.] McHugh, M. L. (2013). The Chi-square test of independence. *Biochemia Medica*, 23(2), 143–149.
- [39.] Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
- [40.] MerchantPro. (2024). *eCommerce insights* 2024. https://cdn.merchantpro.com/files/content/MerchantPro_eCommerce_Insights_2024.pdf
- [41.] Momen, M. A., Sultana, S., & Haque, A. K. M. A. (2020). Web-based marketing communication to develop brand image and brand equity of higher educational institutions: A structural equation modelling approach. *Global Knowledge, Memory and Communication*, 69(3), 151–169.
- [42.] Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39–52.
- [43.] Oliveira, P., & Sullivan, A. (2003). *Creating and managing brand value*. Interbrand.
- [44.] Papadopoulos, T., Baltas, K. N., & Balta, M. E. (2020). The use of digital technologies by small and medium enterprises during COVID-19: Implications for theory and practice. *International Journal of Information Management*, 55.
- [45.] Romanian Association for Online Commerce. (2023). *European e-commerce report 2023*.
- [46.] Schouten, A. P., Janssen, L., & Verspaget, M. (2020). Celebrity vs. influencer endorsements in advertising: The role of identification, credibility, and product-endorser fit. *International Journal of Advertising*, 39(2), 258–281.

- [47.] Sharma, N., Fatima, J., Sharma, S., & Amin, S. Z. (2024). Omnichannel shopping habit development. *International Journal of Consumer Studies*, 48(4), e13072.
- [48.] Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53, 101742.
- [49.] Tiutiu, M., Nemțeanu, S., Dabija, D. C., & Pelau, C. (2025). The impact of online customer service and store features on consumer experience and willingness to revisit their preferred online store. *Humanities and Social Sciences Communications*, 12(1), 78.
- [50.] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- [51.] Vrontis, D., Makrides, A., Christofi, M., & Thrassou, A. (2021). Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies*, 45(4).
- [52.] Wang, C., & Zhang, P. (2012). The evolution of social commerce: The people, management, technology, and information dimensions. *Communications of the Association for Information Systems*, 31, 105–127.
- [53.] Wang, H. F., & Xie, J. X. (2020). A review of social media commerce research. *American Journal of Industrial and Business Management*, 10, 793–803.
- [54.] Wang, J., & Oh, J. I. (2023). Factors influencing consumers' continuous purchase intentions on TikTok: An examination from the uses and gratifications (U&G) theory perspective. *Sustainability*, 15(13).
- [55.] Wiktor, J. W., & Sanak-Kosmowska, K. (2021). The competitive function of online advertising: An empirical evaluation of companies' communication strategies in a digital world. *Procedia Computer Science*, 192, 4158–4168.
- [56.] Yadav, M., & Rahman, Z. (2018). The influence of social media marketing activities on customer loyalty. *Benchmarking: An International Journal*, 25(9), 3882–3905.
- [57.] Zhou, X., Huang, Y., & Inoue, Y. (2024). Parasocial interactions and parasocial relationships on Instagram: An in-depth analysis of fashion and beauty influencers. *Heliyon*, 10(21), e39708.