

Fear of Missing Out (FOMO) Marketing and Its Influence on Impulse Buying Behaviour

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Abstract—In today's digital world, psychological triggers play a big role in shaping how people make buying decisions. One of the most talked-about triggers is the Fear of Missing Out (FOMO) — a feeling that you might miss out on something valuable if you do not act quickly. E-commerce platforms and social media channels have given marketers powerful tools like countdown timers, flash sales, limited stock alerts, and social proof cues that are designed to create a sense of urgency and push consumers toward fast, often unplanned purchases.

This study looks at how FOMO-oriented marketing practices lead to impulse buying behaviour. Impulse buying here means buying something on the spot, without really planning to, driven more by emotion than logic. The research traces the psychological path through which FOMO triggers — such as excitement, anxiety, and a sense of urgency — end up turning into an unplanned purchase.

A quantitative survey method was used, and primary data were collected from 50 consumers who regularly shop online and engage with digital advertising. The analysis looks at the link between specific FOMO marketing elements (scarcity cues, time-bound offers, social validation) and self-reported impulse buying tendencies. The findings aim to help marketers design better promotional strategies while also making consumers more aware of the emotional forces driving their purchase decisions.

Keywords— Fear of Missing Out (FOMO), FOMO-Based Marketing, Impulse Buying Behaviour, Consumer Psychology, Scarcity and Urgency Perception, Digital Marketing Strategies, Online Consumer Behaviour

I. INTRODUCTION

Consumer decision-making has changed a lot in the age of digital commerce. In the past, people took time to research, compare, and think before buying. Today, emotions and social pressures play a much bigger role. One psychological concept that has become especially relevant in this shift is Fear of Missing Out, or FOMO — broadly defined as the worry that others are enjoying experiences or getting deals that you are missing.

Przybylski et al. (2013) were among the first to formally study FOMO as a psychological construct, linking it to feelings of social anxiety and unmet needs for belonging. In the marketing world, this vulnerability is actively exploited. Tactics like limited-time offers, low-stock warnings, real-time trending notifications, and social proof signals are specifically designed to make consumers feel like they will lose out if they do not act right now.

The internet and smartphones have made this even more effective. With one-click checkout, personalised recommendations, and constant promotional messages, the barrier between seeing a product and buying it has become almost invisible. Good and Hyman (2020) showed that consumers who already feel high FOMO tend to make more emotionally-driven purchases and are more likely to buy on impulse. Dinh and Lee (2022) further confirmed that the combination of scarcity and time pressure in digital retail significantly increases unplanned buying.

Social media adds another layer. Azzahra and Fachira (2023) found that regular exposure to promotional content on platforms like Instagram and Facebook intensifies FOMO, which then leads to more impulse purchases. Younger consumers are particularly affected because their sense of identity and social belonging is closely tied to what they buy and own (Santoso, 2024).

This study looks at the specific mechanisms linking FOMO marketing stimuli to impulse purchase outcomes. It also examines the emotional states — like excitement and anxiety — that act as the bridge between seeing a FOMO-based ad and making an unplanned purchase.

1.1 Significance of the Study

This study provides useful insights for several different groups who are either affected by or involved in FOMO-based marketing.

1.1.1 For Consumers

Many consumers do not realise how much their emotions influence their spending decisions. By

understanding how FOMO triggers work, they can become more aware of when they are making a genuinely considered purchase versus an impulsive one. This kind of awareness can help people avoid buyer's remorse and manage their money more carefully.

1.1.2 For Digital Marketers and E-Commerce Platforms

Marketers who understand how FOMO influences consumer psychology are in a better position to design campaigns that are both effective and ethical. The data in this study can help them identify which types of FOMO cues drive genuine interest and purchase intent versus those that simply create short-term anxiety without meaningful conversion.

1.1.3 For Consumer Advocacy Bodies and Regulators

As FOMO-based tactics become more sophisticated, there is a growing concern about their ethical implications. Consumer bodies and policymakers need empirical evidence to evaluate whether certain marketing practices cross the line into manipulation. This study contributes ground-level data that can inform discussions around digital advertising standards and consumer protection.

1.1.4 For Academics

This study adds to the growing body of research on digital consumer behaviour, specifically within the Indian context. It offers a replicable methodology for future research exploring how FOMO interacts with other psychological and demographic variables in shaping purchase decisions.

1.2 Background of the Study

The idea of FOMO is not entirely new. People have always worried about missing out on social events, opportunities, or experiences. But the rise of the internet — and especially social media — gave this anxiety a much larger stage. Suddenly, people could see in real time what others were buying, wearing, eating, or experiencing. Platforms like Instagram and Facebook essentially turned everyday life into a performance, where what you own and do signals your social status.

The concept was formally defined by Przybylski et al. (2013), who described FOMO as a type of social anxiety rooted in self-determination theory. People who feel that their core needs — for relatedness, autonomy, and achievement — are not being met are

more likely to experience FOMO when they see others enjoying rewards they are missing.

Marketers were quick to recognise this. Hodgkinson (2019) documented how businesses systematically embedded urgency and scarcity cues into promotional communications — countdown timers, messages like 'Only 3 left in stock,' and 'This offer ends in 2 hours.' These are not accidental design choices. They are deliberately engineered to cut short the consumer's deliberation time and trigger a quick purchase.

The shift to mobile-first shopping accelerated this further. With most consumers carrying a smartphone and using apps for everything from grocery shopping to luxury purchases, the window for a FOMO-triggered impulse buy is open almost every hour of the day. In India specifically, the explosive growth of platforms like Meesho, Flipkart, Myntra, and Nykaa — combined with near-universal smartphone penetration and expanding digital payment infrastructure — has created a market that is especially susceptible to these dynamics.

1.3 Need for the Study

While there is growing international research on FOMO and consumer behaviour, studies focused specifically on Indian digital shoppers remain limited. Most global studies are based on Western consumer data, and the findings may not fully apply in the Indian context, where digital commerce is still expanding rapidly and first-time online buyers are entering the market every year.

There is also a gap in research specifically linking FOMO marketing tactics — such as countdown timers, scarcity alerts, and social proof signals — to measurable impulse buying outcomes. Most studies look at either FOMO as a psychological state or impulse buying as a behaviour, but not the direct path between them in a digital retail context.

This gap matters because brands are spending an increasing portion of their marketing budgets on exactly these kinds of urgency-based digital promotions. Without clear empirical evidence of their effects on consumer behaviour — both positive and negative — it is difficult to have informed conversations about responsible marketing practices. This study aims to fill that gap by collecting primary data from a sample of online consumers and testing specific hypotheses about the relationship between

FOMO marketing exposure, emotional responses, and impulse buying behaviour.

II. LITERATURE REVIEW

The existing body of research on FOMO and consumer behaviour provides important context for understanding how marketing triggers shape buying decisions. The following section looks at the key findings from academic scholarship and industry reports, drawing on twenty primary sources. A narrative overview of the three most substantial contributions comes first, followed by a consolidated reference table.

2.1 Przybylski et al. (2013) — Defining FOMO

Przybylski and his colleagues provided the first rigorous academic definition of FOMO, placing it within the framework of self-determination theory. They argued that people who feel their needs for relatedness, competence, and autonomy are not being met are more susceptible to social comparison anxiety. Their research established FOMO as a measurable psychological construct with real consequences for behaviour — and laid the groundwork for all subsequent research on the subject in the consumer context.

2.2 Hodgkinson (2019) — FOMO as a Marketing Tool

Hodgkinson examined how FOMO is deliberately used in commercial communications. His work demonstrated that tactics such as countdown timers, limited availability warnings, and time-sensitive discounts are specifically designed to reduce the window for rational decision-making. By generating low-level anxiety, these tools accelerate purchasing decisions and reduce the likelihood of the consumer pausing to reconsider. This paper is particularly relevant because it bridges the academic definition of FOMO and its practical application in marketing strategy.

2.3 Good and Hyman (2020) — FOMO and Impulse Buying

Good and Hyman offered empirical evidence that consumers with elevated FOMO scores systematically favour emotional, fast-paced decision making over careful analysis when they encounter buying opportunities. This emotional orientation substantially increases the probability of impulse purchasing, particularly in digital retail settings where promotions are constant and the barrier to purchase is minimal. Their findings form the theoretical core of this study's third hypothesis.

Table 2 — Literature Review Summary: Key Sources and Contributions

#	Author(s)	Title / Publication	Year	Key Contribution
1	Przybylski et al.	Motivational, Emotional, and Behavioral Correlates of FOMO — Computers in Human Behavior	2013	Formally defined FOMO; linked it to self-determination theory and social comparison anxiety.
2	Hodgkinson	FOMO Marketing Appeals: A Conceptual Model — Journal of Marketing Communications	2019	Documented deliberate use of urgency/scarcity cues in marketing; showed how they compress consumer deliberation.
3	Good & Hyman	FOMO: How the Fear of Missing Out Drives Consumer Purchase Intentions — Journal of Marketing Theory and Practice	2020	Empirical evidence linking high FOMO to affective (emotional) over cognitive decision-making and impulse buying.

4	Dinh & Lee	Scarcity and Urgency Cues in Digital Commerce — Journal of Retailing and Consumer Services	2022	Confirmed that co-presence of scarcity and time pressure amplifies impulse buying in e-commerce settings.
5	Azzahra & Fachira	Social Media Advertising and Impulse Buying through FOMO — Journal of Consumer Behaviour and Digital Commerce	2023	Demonstrated causal relationship between social media promotion exposure and intensified FOMO leading to impulse buying.
6	Aziz et al.	FOMO, Hedonic Motivation and Flash Sales — Asian Journal of Marketing Research	2024	Combined effect of FOMO, hedonic motives, and flash sale mechanics produces synergistic impulse buying amplification.
7	Santoso	Digital FOMO and Impulsive Buying Among Young Consumers — Indonesian Journal of Consumer Studies	2024	Identified younger consumers as disproportionately susceptible to FOMO marketing due to social approval orientation.
8	Ayyasy et al.	Live-Stream Commerce and Real-Time Urgency — Journal of Interactive Marketing	2025	Real-time stock depletion in live commerce creates heightened urgency and significantly elevates impulse purchasing.
9	Astuti & Pratiwi	Shopping Lifestyle and FOMO-Driven Purchasing Behaviour — Journal of Youth Consumer Research	2025	University students show strong FOMO sensitivity shaped by peer comparison and discount-driven promotions.
10	Deliana et al.	Hedonic Motivation, FOMO and Unplanned Purchases — International Journal of Consumer Psychology	2025	FOMO combined with hedonic motivation creates a reinforcing loop that elevates susceptibility to FOMO triggers.
11	Karunia et al.	Time-Limited Promotions and Perceived Urgency — Journal of E-Commerce Research	2026	Updated empirical evidence: temporal scarcity framing reliably elevates perceived urgency and impulse purchases.
12	Kurniawati & Umam	Flash Sales, Countdown Timers and Emotional Buying	2025	Flash sales with countdown mechanisms generate acute emotional excitement and consistently precipitate unplanned buying.

		— Asian Marketing Journal		
13	Mahena et al.	Emotional Excitement as a Moderator of FOMO and Impulse Buying — Behavioural Sciences in Commerce	2025	Intensity of emotional excitement during FOMO episodes moderates the FOMO–impulse buying relationship.
14	Maharani et al.	Limited-Edition Products and Consumer Impulsivity — Journal of Luxury and Retail Studies	2025	Exclusive/limited products create psychological rarity that intensifies FOMO and motivates immediate acquisition.
15	Mahmood et al.	Short-Video Marketing and FOMO-Induced Impulse Buying — Digital Marketing Quarterly	2025	Short-form video platforms emerged as significant vectors for FOMO-driven impulse buying.
16	Pane et al.	Fear of Missing Out and Impulse Buying: A Systematic Review	2025	Systematic review confirmed robust positive association between FOMO and impulse buying across cultures and categories.
17	Tresna et al.	Ethical Implications of FOMO-Based Marketing — Journal of Business Ethics in Digital Contexts	2025	Raised ethical concerns about fear-based marketing as a form of psychological manipulation.
18	Walia	Algorithmic Personalisation, Anxiety and Consumer Urgency — Journal of Digital Commerce Psychology	2025	ML-powered recommendation engines intensify anxiety and urgency by surfacing contextually relevant time-sensitive offers.
19	Wulan et al.	FOMO as Mediator: Social Media Advertising and Gen Z Impulse Buying — Youth Marketing Journal	2025	Identified FOMO as significant mediating variable between social media ad exposure and Gen Z impulsive purchases.
20	Mahmood et al.	Short-Form Video Content and Impulse Buying Behaviour — Digital Marketing Quarterly	2025	High-engagement algorithm-curated short video format effectively stimulates product interest and purchase urgency.

III. RESEARCH METHODOLOGY

3.1 Research Design

This study uses a descriptive, quantitative research design. This approach helps in systematically measuring and analysing consumers' digital behaviour, emotional responses to FOMO marketing, and impulse buying tendencies. A cross-sectional design was adopted, meaning that data were collected at a single point in time to capture a snapshot of current consumer attitudes and purchase patterns.

3.2 Population and Sampling

The target population consists of consumers who regularly shop online and engage with digital marketing content, with a particular focus on individuals aged 18 to 35 — the age group most active on social media platforms and most frequently exposed to FOMO-based promotional tactics. A non-probability, convenience sampling method was used, and a total of 50 respondents were surveyed via an online questionnaire. The sample includes students, working professionals, and self-employed individuals across different age categories.

3.3 Data Collection Methods

Primary data were collected through a structured online questionnaire distributed digitally to the target demographic. The questionnaire captured responses on exposure to FOMO marketing elements, emotional reactions, and self-reported impulse buying behaviour. Secondary data were sourced from academic journals, industry reports, and published research papers on FOMO, digital marketing, and consumer psychology, which together form the theoretical backbone of this study.

3.4 Research Instrument

The questionnaire was structured into four thematic sections designed to isolate key variables:

- **Demographics:** Age group, gender, and occupation of the respondent.
- **Digital Engagement:** Frequency of online shopping and time spent on social media platforms daily.
- **FOMO Marketing Exposure:** How often respondents encounter flash sales, countdown timers, and limited-stock notifications while browsing online.
- **Emotional and Behavioural Response:** Emotional reactions to time-limited deals,

concern about missing offers, influence of scarcity cues and social proof, and frequency of unplanned purchases triggered by FOMO marketing.

The questionnaire consisted of fifteen questions, with responses recorded on five-point ordinal scales (e.g., Never to Always, Not at all to Very Strongly) for questions related to behaviour and perception. Demographic questions used nominal categorical response options.

3.5 Statistical Tools Used for Analysis

The statistical tools used in this study are directly matched to the nature of the data and the research hypotheses formulated:

- **Chi-Square (χ^2) Test of Independence** — used to test the association between FOMO sensitivity level and impulse buying propensity (H1).
- **Mann-Whitney U Test** — a non-parametric test used to compare impulse buying frequency between high-arousal and low-arousal consumer groups (H2).
- **One-Sample Z-Test for Proportions** — used to test whether the proportion of respondents making FOMO-driven impulse purchases is significantly greater than 50% (H3).
- **Descriptive Statistics** — frequencies and percentages used to summarise demographic profiles, digital engagement patterns, and marketing exposure levels.

3.6 Objectives of the Study

This research aims to address the following primary questions:

- To critically examine the concept of Fear of Missing Out (FOMO) and its application within contemporary digital marketing frameworks.
- To assess the influence of FOMO-based promotional strategies on consumers' tendency towards spontaneous and unplanned purchasing.
- To identify and analyse the primary FOMO-triggering mechanisms — including perceived scarcity, time pressure, and social conformity cues — and their effects on buying behaviour.
- To investigate the emotional and cognitive processes through which FOMO marketing stimuli translate into impulse purchase decisions.
- To derive actionable insights for marketers, consumers, and consumer protection bodies based on empirical evidence.

3.7 Hypotheses

Based on the research objectives and the existing literature, three hypotheses are formulated for this study:

- H1: Consumers with higher FOMO sensitivity — defined as those who frequently worry about missing out on deals — are significantly more likely to engage in impulse buying compared to consumers with lower FOMO sensitivity.
- H2: Consumers who experience higher emotional arousal (excitement or anxiety) when encountering FOMO marketing exhibit significantly higher impulse buying frequency than those with neutral or low emotional responses.
- H3: A majority of respondents in this sample exhibit FOMO-driven impulse buying behaviour, defined as making unplanned purchases due to limited-time offers sometimes, often, or very often.

3.8 Data Analysis Plan

Raw survey data were cleaned and tabulated to ensure consistency and remove any incomplete or duplicate entries. Descriptive statistics, including frequencies and percentages, were first used to summarise the demographic and behavioural profiles of respondents. The analysed data were then used to evaluate the relationships between FOMO marketing exposure and impulse buying behaviour, and to test the three hypotheses outlined above. Tables and brief interpretations are presented in sequence in the following section.

IV. DATA INTERPRETATION AND ANALYSIS

The survey data reveal a cohort of consumers that is digitally active and regularly exposed to FOMO-based marketing, but varies considerably in how much it responds emotionally and behaviourally to such stimuli. The tables and commentary below walk through the key findings in sequence.

4.1 Demographics and Shopping Profile

Table 4.1 — Sample Demographics

Category	Sub-Group	Count	Percentage (%)
Age Group	Below 18 years	3	6.0%
	18–24 years	36	72.0%
	24–34 years	9	18.0%
	35 years and above	2	4.0%
Gender	Male	31	62.0%
	Female	15	30.0%
	Prefer not to disclose	4	8.0%
Occupation	Student	28	56.0%
	Employed (Salaried/Professional)	12	24.0%
	Self-employed / Entrepreneur	10	20.0%

The sample is heavily concentrated in the 18–24 age group, which accounts for 72% of respondents. This demographic is also the most active on social media and is widely regarded in the literature as the most susceptible to FOMO-based marketing. Males make up 62% of the sample. Students form the largest

occupational segment at 56%, followed by employed individuals at 24% and the self-employed at 20%. This mix reflects a realistic cross-section of young urban consumers engaged with digital retail platforms.

4.2 Online Shopping and Social Media Engagement

Table 4.2 — Online Shopping Frequency and Social Media Usage

Metric	Count	Percentage (%)
Online Shopping Frequency		
Rarely	5	10.0%
Occasionally	13	26.0%
Sometimes	14	28.0%
Frequently	13	26.0%
Very Frequently	5	10.0%
Social Media Hours Per Day		
Less than 1 hour	8	16.0%
1–2 hours	24	48.0%
3–4 hours	11	22.0%
More than 4 hours	7	14.0%

The majority of respondents shop online with some regularity — 64% report doing so sometimes, frequently, or very frequently. On the social media side, 84% spend at least one hour per day on platforms, with 48% spending 1–2 hours and 22% spending 3–4 hours. Given that FOMO-based

promotions are heavily distributed through social media channels, this level of exposure means that most respondents in the sample are routinely encountering these kinds of marketing stimuli in their daily lives.

4.3 FOMO Marketing Exposure

Table 4.3 — Exposure to Flash Sales and Countdown Timers

FOMO Element	Response Frequency	Count	Percentage (%)
Flash Sales / Limited-Time Offers	Never	3	6.0%
	Rarely	11	22.0%
	Sometimes	13	26.0%
	Often	16	32.0%
	Very Often	7	14.0%
Countdown Timers / 'Offer Ending Soon'	Never	2	4.0%
	Rarely	12	24.0%
	Sometimes	19	38.0%
	Often	11	22.0%
	Very Often	6	12.0%

A large majority of respondents are regularly exposed to FOMO-based marketing stimuli. For flash sales and limited-time offers, 72% say they encounter these sometimes, often, or very often. Countdown timers are noticed with similar frequency — 72% report seeing them sometimes,

often, or very often as well. This high level of exposure is significant because research by Hodgkinson (2019) and Kurniawati and Umam (2025) consistently shows that even passive exposure to urgency-based cues is enough to activate low-level FOMO responses in susceptible consumers.

4.4 Emotional Responses to FOMO Triggers

Table 4.4 — Emotional Response and Concern About Missing Deals

Metric	Response	Count	Percentage (%)
Emotional Response to Limited-Time Deals	No Emotion	4	8.0%
	Slightly Interested	13	26.0%
	Neutral	13	26.0%
	Excited	17	34.0%
	Very Anxious to Buy	3	6.0%
Concern About Missing a Good Deal	Never	4	8.0%
	Rarely	15	30.0%
	Sometimes	15	30.0%
	Often	12	24.0%
	Always	4	8.0%

The emotional response data is telling. When encountering a limited-time deal, 34% of respondents say they feel excited, and 6% say they feel very anxious to buy immediately — giving a combined high-arousal group of 40% of the sample. Only 8% report no emotional response at all. This pattern strongly supports the theoretical framework of Mahena et al. (2025), who found that emotional

intensity during FOMO-trigger episodes is a key driver of impulsive purchase behaviour.

On deal concern, 62% of respondents say they sometimes, often, or always worry about missing a good deal if they do not act right away. This level of FOMO anxiety is relevant not just as a data point but as the psychological foundation that makes urgency-based promotions so effective at driving purchase decisions.

4.5 Scarcity Cues and Purchase Likelihood

Table 4.5 — Influence of Scarcity Notifications and Flash Sale Purchase Likelihood

Metric	Response	Count	Percentage (%)
'Only a Few Items Left' Notification Influence	Not at All	6	12.0%
	Slightly	16	32.0%
	Moderately	13	26.0%
	Strongly	12	24.0%
	Very Strongly	3	6.0%

Likelihood to Buy During Flash Sales	Very Unlikely (1)	5	10.0%
	Unlikely (2)	6	12.0%
	Neutral (3)	18	36.0%
	Likely (4)	10	20.0%
	Very Likely (5)	9	18.0%
	Not Answered	2	4.0%

The 'Only a few items left' notification influences the purchase decisions of 56% of respondents to some degree — either moderately, strongly, or very strongly. This is consistent with Maharani et al.'s (2025) finding that scarcity framing creates a sense of psychological rarity that intensifies FOMO and motivates immediate acquisition.

When it comes to actually buying during flash sales, 38% of respondents say they are likely or very likely to make a purchase. The largest single group (36%) sits at neutral, suggesting that while many are exposed to and emotionally affected by flash sales, the conversion to actual purchase is not automatic — it is mediated by other factors like product relevance, price, and current financial capacity.

4.6 Social Proof and Social Media Trend Influence

Table 4.6 — Influence of Online Reviews, Trending Labels, and Social Media Trends

Response Category	Count	Percentage (%)
Reviews / Trending Labels Influence on Buying Decision		
Not at All	0	0.0%
Slightly	14	28.0%
Moderately	15	30.0%
Strongly	15	30.0%
Very Strongly	6	12.0%
Social Media Trends Influence on Purchases		
Never	2	4.0%
Rarely	10	20.0%
Sometimes	21	42.0%
Often	12	24.0%
Always	5	10.0%

Notably, not a single respondent in the sample says that online reviews and trending labels have no influence on their buying decision at all. In total, 72% say reviews and trending labels influence them at least moderately. This is a clear indicator of the power of social proof as a FOMO marketing mechanism — when consumers see that many others

are buying a product or that it is trending, the fear of being left out increases.

Social media trends show a similar pattern. 76% of respondents say they sometimes, often, or always find their purchases influenced by what is trending online. This reinforces Wulan et al.'s (2025) finding that FOMO acts as a mediating variable between

social media advertising exposure and impulse buying behaviour.

4.7 Impulse Buying Behaviour

Table 4.7 — Unplanned Purchases and Fear-Driven Buying

Metric	Response	Count	Percentage (%)
Unplanned Purchases Due to Limited-Time Offers	Never	2	4.0%
	Rarely	15	30.0%
	Sometimes	15	30.0%
	Often	9	18.0%
	Very Often	9	18.0%
Rapid Purchase Driven by Fear of Missing Offer	Never	3	6.0%
	Rarely	16	32.0%
	Sometimes	13	26.0%
	Often	10	20.0%
	Very Often	8	16.0%

The core impulse buying data reveals that 66% of respondents say they sometimes, often, or very often make unplanned purchases because of limited-time offers. Only 4% report never doing so. This is a significant finding — it suggests that FOMO-based marketing is not just influencing how people feel but is translating into actual buying behaviour for a majority of the sample.

On fear-driven rapid purchases, 62% say they have done this sometimes, often, or very often — meaning they made a quick buying decision primarily because they feared the offer would disappear. Again, only 6% say this has never happened to them. These numbers align closely with Dinh and Lee (2022), who found that the combination of scarcity signals and time pressure in digital retail significantly amplifies impulse buying tendencies.

4.8 Psychological Perceptions Summary

Table 4.8 — Psychological Perceptions of FOMO and Impulse Buying

Statement	Agree / High Response	Neutral / Mixed	Disagree / Low Response
Feel excited or anxious when encountering limited-time deals	40.0% (20)	26.0% (13)	34.0% No/Slight (17)
Worry about missing a deal (Sometimes / Often / Always)	62.0% (31)	—	38.0% Never/Rarely (19)
Scarcity notification influences purchase (Moderately/Strongly/Very Strongly)	56.0% (28)	—	44.0% Not at all/Slightly (22)
Social media trends influence purchases (Sometimes / Often / Always)	76.0% (38)	—	24.0% Never/Rarely (12)

The most striking result in this section is how broadly social media trends and social proof mechanisms

influence purchase behaviour — 76% of respondents report being influenced by trends, and none say

online reviews have no impact. This confirms the central role of social comparison and social proof as FOMO amplifiers in the digital marketing ecosystem.

The deal-concern figure is also notable. 62% of respondents feel some level of worry about missing a good deal — this persistent background anxiety is the emotional foundation that makes urgency cues effective. Even when a consumer does not end up purchasing, the anxiety itself represents a meaningful psychological cost.

Scarcity cues affect 56% of respondents at least moderately, suggesting that low-stock notifications

remain an effective tool for activating purchase intent, particularly when combined with time pressure and social proof.

4.9 Hypothesis Testing

This section tests the three research hypotheses using the inferential statistical tools identified in the methodology. For each hypothesis, the null and alternative hypotheses are stated, the statistical test and its justification are presented, the level of significance is declared, and the decision rule is specified.

4.9.1 Hypothesis 1 — FOMO Sensitivity and Impulse Buying

H ₁	H ₀	There is no significant difference in impulse buying frequency between consumers with high FOMO sensitivity and those with low/medium FOMO sensitivity.
	H ₁	Consumers with higher FOMO sensitivity are significantly more likely to engage in impulse buying compared to low/medium FOMO consumers.

Statistical Test: Chi-Square (χ^2) Test of Independence

The Chi-Square test is appropriate here because both variables — FOMO sensitivity level (High vs. Low/Medium, based on Q9) and impulse buying propensity (Yes vs. No, based on Q14) — are categorical. The test checks whether the two variables are statistically independent or whether a significant association exists between them.

Chi-Square Observed Frequency Table

Group	Impulse Buying: Yes (Sometimes/Often/Very Often)	Impulse Buying: No (Never/Rarely)	Total
High FOMO (Often + Always)	14	2	16
Low / Medium FOMO (Never + Rarely + Sometimes)	19	15	34
Total	33	17	50

$$\chi^2 = \sum [(O_i - E_i)^2 / E_i]$$

Where O_i is the observed frequency in each cell and E_i is the expected frequency assuming independence. The expected frequencies were calculated as: $E(\text{High FOMO, Yes}) = 10.56$; $E(\text{High FOMO, No}) = 5.44$; $E(\text{Low/Medium FOMO, Yes}) = 22.44$; $E(\text{Low/Medium FOMO, No}) = 11.56$.

Computed $\chi^2 = 4.844$; degrees of freedom = 1; Critical value ($\alpha = 0.05$, $df = 1$) = 3.841; p-value ≈ 0.028 .

Decision: Since $\chi^2 = 4.844 > 3.841$ and $p = 0.028 < 0.05$, H_0 is rejected. This provides statistical evidence that FOMO sensitivity and impulse buying behaviour are significantly associated.

4.9.2 Hypothesis 2 — Emotional Arousal and Impulse Buying

H2	H ₀	There is no significant difference in impulse buying frequency between consumers who experience high emotional arousal (excitement or anxiety) and those with neutral or low arousal when encountering FOMO marketing.
	H ₁	Consumers who experience higher emotional arousal in response to FOMO marketing report significantly higher impulse buying frequency compared to neutral or low-arousal consumers.

Statistical Test: Mann–Whitney U Test

The Mann–Whitney U Test is chosen instead of an independent samples t-test because impulse buying frequency — measured on an ordinal scale (Never to Very Often) — cannot be assumed to follow a normal distribution, especially across relatively small sub-groups. This non-parametric test ranks all observations jointly and compares the rank sums between the two groups (high arousal vs. low/neutral arousal).

$$U = n_1 n_2 + [n_1(n_1 + 1)/2] - R_1$$

Where n_1 and n_2 are the sizes of the two groups and R_1 is the sum of ranks assigned to Group 1. High arousal group (Excited + Very Anxious, Q8): $n_1 = 20$; Low/neutral arousal group (No Emotion + Slightly Interested + Neutral): $n_2 = 30$.

Computed $U = 193.5$; z -approximation = 2.18; p -value = 0.029 (two-tailed).

Level of Significance: $\alpha = 0.05$

Decision: Since $p = 0.029 < 0.05$, H_0 is rejected. There is statistically significant evidence that consumers with higher emotional arousal in response to FOMO stimuli exhibit higher impulse buying frequency compared to low/neutral arousal consumers.

4.9.3 Hypothesis 3 — FOMO-Driven Impulse Buying Majority

H3	H ₀	The proportion of respondents who make FOMO-driven impulse purchases (Sometimes/Often/Very Often in Q14) is not significantly greater than 50%.
	H ₁	A statistically significant majority (>50%) of respondents in this sample make unplanned purchases due to FOMO-based marketing stimuli.

Statistical Test: One-Sample Z-Test for Proportions
This test is appropriate because H3 involves comparing a single observed sample proportion (the proportion making FOMO-driven impulse purchases) against a fixed hypothesised value ($p_0 = 0.50$). The sampling distribution of the proportion can be assumed approximately normal since both np_0 and $n(1 - p_0)$ are well above 5.

$$Z = (\hat{p} - p_0) / \sqrt{[p_0(1 - p_0) / n]}$$

Where $\hat{p}$ is the observed sample proportion of respondents who make impulse purchases sometimes/often/very often = $33/50 = 0.66$; $p_0 = 0.50$; $n = 50$.

$$Z = (0.66 - 0.50) / \sqrt{(0.50 \times 0.50 / 50)} = 0.16 / 0.0707 = 2.263$$

Level of Significance: $\alpha = 0.05$ (one-tailed, right-tailed test)

Decision: Since $Z = 2.263 >$ critical value of 1.645 and $p = 0.012 < 0.05$, H_0 is rejected. This confirms that a statistically significant majority of respondents in this sample exhibit FOMO-driven impulse buying behaviour.

4.10 Consolidated Hypothesis Testing Summary

The table below provides a concise overview of all three hypotheses, the statistical tests applied, the level of significance, and the decision reached in each case.

Table 4.10 — Consolidated Hypothesis Testing Summary

H#	Null Hypothesis (H ₀)	Alternative Hypothesis (H ₁)	Statistical Test	α	Decision Rule
H1	There is no significant difference in	FOMO-prone consumers are significantly more	Chi-Square (χ^2) Test of Independence	$\alpha = 0.05$	Reject H_0 if $p < 0.05$

	impulse buying frequency between high-FOMO and low-FOMO consumers.	likely to engage in impulse buying than low-FOMO consumers.			
H2	There is no significant difference in impulse buying frequency between high-arousal and low-arousal consumers.	Consumers with higher emotional arousal (excitement/anxiety) report significantly more impulse buying than low-arousal consumers.	Mann–Whitney U Test	$\alpha = 0.05$	Reject H_0 if $p < 0.05$
H3	The proportion of consumers who make FOMO-driven impulse purchases is not greater than 50%.	A statistically significant majority (>50%) of respondents make unplanned purchases due to FOMO-based marketing stimuli.	One-Sample Z-Test for Proportions	$\alpha = 0.05$	Reject H_0 if $p < 0.05$

Note: All three statistical tests are conducted at $\alpha = 0.05$. The Chi-Square test assumes minimum expected cell frequencies ≥ 5 — this condition is satisfied. The Mann–Whitney U test is used in place of an independent samples t-test given the ordinal nature of the impulse buying scale. H3 uses a one-tailed (right-tailed) test in alignment with the directional alternative hypothesis. All three null hypotheses are rejected at the 5% level of significance.

V. FINDINGS, RECOMMENDATIONS & CONCLUSION

5.1 Findings

The analysis produces three principal findings, each with clear implications for consumers, marketers, and anyone interested in the psychology of digital buying behaviour.

5.1.1 FOMO Marketing Activates Real Emotional Responses That Lead to Unplanned Buying

The data show clearly that FOMO-based marketing stimuli — particularly flash sales, countdown timers, and scarcity notifications — do not just go unnoticed in the background. 40% of respondents feel excited or anxious when they see limited-time deals, and over 60% report worrying about missing a good deal if they don't act immediately. More importantly, this

emotional activation has a measurable link to actual buying behaviour: 66% of respondents say they have made unplanned purchases due to limited-time offers, and 62% have made a rapid purchase specifically because they feared the offer would disappear. Hypothesis 1 and Hypothesis 2 both confirm — at the 5% level of significance — that FOMO sensitivity and emotional arousal are statistically significant predictors of impulse buying. This is consistent with the theoretical work of Good and Hyman (2020) and the empirical findings of Mahena et al. (2025).

5.1.2 Social Proof Is a Significant and Often Underestimated FOMO Amplifier

One of the most striking findings is that not a single respondent in the sample says online reviews and trending labels have no influence on their buying decisions. 72% are influenced at least moderately by these social proof signals, and 76% say social media trends sometimes, often, or always affect what they purchase. This is important because social proof works differently from countdown timers — it is slower, more passive, and often not perceived as a 'marketing tactic' at all. But it creates the same core FOMO dynamic: seeing others buy, endorse, or trend with a product makes consumers feel they are missing out if they don't participate. This amplification mechanism is consistently highlighted

by Wulan et al. (2025) and Pane et al.'s (2025) systematic review.

5.1.3 A Clear Majority Makes Impulse Purchases Due to FOMO — Confirming H3

The third hypothesis is perhaps the most direct finding: Hypothesis 3 was confirmed with statistical significance ($Z = 2.263$, $p = 0.012$). Two-thirds of the sample make unplanned purchases due to FOMO marketing stimuli at least sometimes. This is not an outlier behaviour — it is the majority experience. It means that for most consumers surveyed here, impulse buying triggered by FOMO cues is a regular part of their online shopping life, not an occasional slip. This has significant implications for both marketing practice and consumer financial wellbeing, particularly among young adult consumers whose budgets are often limited.

5.2 Recommendations and Limitations

5.2.1 Recommendations

5.2.1.1 For Consumers

- Pause before purchasing when you feel excited or anxious about a limited-time offer. That emotional spike is exactly what these promotions are designed to create. A quick 10-minute delay is often enough to assess whether the purchase is genuinely planned or purely impulsive.
- Unsubscribe from flash sale notifications on platforms you do not intend to actively shop on. Passive exposure to urgency cues is enough to trigger FOMO, even when you are not in a buying mindset.
- Be aware that social proof (bestseller labels, trending tags, peer reviews) is a form of marketing communication, not neutral information. Products trend partly because brands invest in making them appear to trend.

5.2.1.2 For Digital Marketers

- Design FOMO campaigns that are based on genuine scarcity or real deadlines rather than manufactured urgency. Consumers are becoming increasingly aware of artificial countdown tactics, and trust erosion is a real long-term risk.
- Consider offering post-purchase tools — such as a basket review step or a short delay before checkout confirmation — that allow emotionally activated consumers to

reconsider. This builds long-term trust and reduces return rates, which is ultimately better for business.

- Balance urgency messaging with value messaging. Consumers who are purchasing because they see genuine value in a product, and not just because they are anxious about missing out, are more likely to repeat-purchase and become loyal customers.

5.2.1.3 For Platforms and Consumer Advocacy Bodies

- Consider introducing platform-level transparency requirements for urgency claims. If a product shows 'Only 2 left in stock,' that stock level should reflect reality. False scarcity is already addressed in consumer protection law in several countries, but enforcement in the digital space remains inconsistent.
- Invest in digital literacy campaigns that specifically educate consumers — particularly younger adults — about the psychological mechanisms behind FOMO marketing. An informed consumer is a better protected consumer.

5.3 Limitations and Future Scope

- The sample of 50 respondents is relatively small and is not representative of the broader Indian consumer population. Future research should expand the sample size and ensure geographic and socioeconomic diversity.
- The study is cross-sectional, capturing behaviour at a single point in time. A longitudinal study tracking the same consumers over 12–24 months would provide richer insights into whether FOMO-driven impulse buying patterns persist or change over time.
- Self-reported data on impulse buying is subject to social desirability bias — respondents may underreport impulsive behaviour. Future studies could triangulate survey responses with actual transaction data from e-commerce platforms.
- The study does not distinguish between different product categories. FOMO effects may be stronger for fashion and electronics than for groceries or services. Category-

specific research would yield more targeted insights for marketers.

5.4 Conclusion

Fear of Missing Out is not just a social media catchphrase. It is a well-documented psychological state that marketers have learned to activate deliberately — through countdown timers, scarcity alerts, social proof signals, and flash sales — with the specific goal of compressing the consumer's decision window and driving fast, often unplanned purchases. This study provides clear empirical support for that mechanism. In a sample of 50 consumers, a significant majority report regular exposure to FOMO marketing stimuli, meaningful emotional responses to those stimuli, and — most importantly — actual impulse buying behaviour triggered by them. All three research hypotheses were confirmed: high-FOMO consumers buy impulsively more than low-FOMO consumers; emotional arousal amplifies that tendency; and a majority of the sample makes FOMO-driven unplanned purchases.

What makes this finding particularly important is its generational context. The consumers most exposed to FOMO marketing — young adults in their 20s and early 30s, spending hours every day on social media and shopping apps — are also the group with the least financial cushion to absorb the consequences of repeated impulse buying. The connection between FOMO marketing and consumer financial wellbeing deserves far more attention than it currently receives in both academic literature and public policy discourse.

FOMO marketing is not going away. If anything, the rise of live commerce, algorithm-driven personalisation, and short-form video is making it more powerful. The question is whether consumers, platforms, and regulators can develop a more informed and balanced approach to it — one that preserves the genuine benefits of time-sensitive promotions while reducing the psychological manipulation of vulnerable consumer groups.

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