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The Last Seat Illusion: Uncovering the Hidden Psychology Behind Airline Booking Decisions

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Fear of Missing Out (FOMO), Scarcity Marketing, Airline Booking Intention, Perceived Utilitarian Value, Perceived Hedonic Value, Time Pressure, Stimulus-Organism-Response (S-O-R) Theory, Structural Equation Modeling

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Abstract: *In the highly competitive and perishable-inventory environment of the commercial aviation sector, airlines increasingly deploy digital marketing tactics to stimulate immediate consumer action. This empirical study investigates the mechanisms through which specific digital stimuli-namely, the Fear of Missing Out (FOMO) and scarcity/urgency cues-influence airline booking intentions. Grounded in the Stimulus-Organism-Response (S-O-R) paradigm and regret theory, the research proposes a dual-pathway model wherein these external stimuli do not drive purchases directly; rather, they operate by amplifying the consumer's internal psychological assessments. Specifically, we examine how FOMO and urgency cues heighten both perceived utilitarian value (the logical assessment of a favorable transaction) and hedonic value (the emotional thrill anticipating the travel experience). Furthermore, this study explores the critical boundary condition of time pressure, postulating that it moderates and intensifies the relationship between these internal value assessments and the final behavioral response. Data were collected from a sample of online airline consumers and analyzed using Structural Equation Modeling (SEM) via SPSS and AMOS version 23 to test the hypothesized moderated-mediation framework. The findings aim to provide revenue managers with nuanced, actionable insights into optimizing digital conversion strategies, demonstrating how balancing ethical urgency with perceived value can effectively drive ticket sales without aggressive price cannibalization.*

Introduction

The commercial aviation and travel sector has expanded significantly over the past decade, escalating global competition among service providers and tourist destinations (Din et al., 2022). To sustain profitability in this competitive landscape, airlines have increasingly pivoted toward digital platforms and e-commerce interfaces to facilitate passenger transactions and build enduring consumer relationships (Moon et al., 2024). Within these digital environments, consumer decisions are heavily influenced by digital revenue management strategies and dynamic pricing algorithms (Alonso & Socorro, 2024). Consequently, understanding the psychological mindset and behavioral intentions of modern digital passengers has become imperative for destination marketers and airline revenue managers (Din

et al., 2022; Bakır et al., 2025). To accelerate the digital purchasing process, e-commerce marketers frequently deploy urgency-inducing tactics such as scarcity cues, countdown timers, and the Fear of Missing Out (FOMO) (Abdrabbo et al., 2025; Japutra et al., 2025). The rapid growth of interactive digital environments has demonstrated that such stimuli can exert a powerful pull on consumers, sometimes overriding logical deliberation and fueling impulsive, emotionally driven buying behaviors (Moon, 2026). Keeping consumers in suspense or exposing them to low-stock alerts forces rapid cognitive shifts that drive impulse behaviors (Kong et al., 2025; Lou et al., 2022). However, while the isolated effects of scarcity and urgency are well-documented in general retail and fast fashion (Bläse et al., 2024), the precise psychological mechanisms through which these digital marketing stimuli translate into high-stakes commercial airline booking intentions remain insufficiently theorized. To decode this phenomenon, this study grounds its theoretical foundation in the Stimulus-Organism-Response (S-O-R) framework. The S-O-R paradigm postulates that external environmental stimuli must first alter internal cognitive and affective states before manifesting as an ultimate behavioral response (Moon et al., 2025; Tariq et al., 2026). In the context of aviation e-commerce, digital stimuli (FOMO and scarcity) act as external triggers that shape the passenger's internal evaluations specifically Perceived Value and Hedonic Value. Recent research emphasizes that digital financial framing and frictionless marketing can fundamentally alter consumers' perceived expensiveness and logical cost evaluations, effectively separating the psychological "pain of paying" from the consumption experience (Asjad et al., 2025). Simultaneously, hedonic motivation serves as a crucial psychological bridge, transforming impulsive environmental triggers into a thrill-seeking drive for consumption, novelty, and emotional gratification (Farooq & Moon, 2025; He et al., 2026). Furthermore, digital airline ticketing is uniquely characterized by severe time constraints, such as session timeouts or rapidly expiring promotional fares. Fast-paced, interactive digital architectures can hijack standard logical processing, compelling consumers to rely heavily on emotional heuristics or impulsive reactions when making financial decisions (Moon, 2026). Time pressure and scarcity cues significantly alter the perceived task load and utilitarian value during e-commerce transactions, often prioritizing hedonic thrill over rational assessment (Silalahi et al., 2025; Tuncer et al., 2024). Understanding how externally imposed time pressure moderates the relationship between internal value assessments (Perceived Value) and final booking decisions represents a critical gap in current aviation marketing literature. Addressing these empirical gaps, this study aims to explore the dual-pathway mechanism of airline booking intentions. By operationalizing the S-O-R framework, this research investigates how FOMO and scarcity cues (Stimuli) construct Perceived and Hedonic Value (Organism) to drive Airline Booking Intentions (Response), while explicitly testing the moderating boundary of Time Pressure. Ultimately, the findings aim to provide airline practitioners with ethically grounded, value-centric strategies to optimize digital interfaces, contributing significantly to the evolving literature on digital consumer behavior and aviation revenue management.

Theoretical Background

This study is based on the stimulus-organism-response (S-O-R) model (Mehrabian & Russell, 1974). The S-O-R model consists of three parts: stimuli, organism, and response. Stimuli are typically external or environmentally induced triggers, the organism is the unique conscious and/or unconscious evaluation of the different stimuli, and response is the behavioral outcome, in the form of approach or avoidance. S-O-R models in general, postulate that the environment causes a response that is dependent upon the individual organism's internal cognitive and emotional appraisal of the environment. The S-O-R model has been recently supported by a vast array of research that confirms it as a strong model for studying consumer behavior in highly interactive digital platforms such as influencer marketing, AI-mediated

service environments, and immersive e-commerce. (Moon et al., 2025; Tariq et al., 2026). Therefore, this study operationalizes the S-O-R model by considering digital urgency cues (Fear of Missing Out, Scarcity, and Time Pressure) as the stimuli, Perceived Value and Hedonic Value as the organism, and Airline Booking Intention as the response. Originally proposed as an environmental framework, the S-O-R model underwent severe criticism for its narrow (only physical environment-focused) scope.This updated conceptualization allows consumer researchers to integrate digital marketing mix factors, social influences, and psychological triggers into the model. The inclusion of diverse digital elements into the S-O-R model enables researchers to comprehend complex consumer information processing mechanisms, specifically how modern passengers make rapid financial decisions in dynamic digital aviation environments (Din et al., 2022; Xue et al., 2024). The literature discusses two broad categories of stimuli in general: object stimuli (related to decision complexity and product attributes) and socio-psychological stimuli (stemming from economic, social, and environment-induced psychological motives) (Jacoby, 2002). In modern e-commerce, digital marketing cues such as scarcity and FOMO function as highly potent socio-psychological stimuli. The rapid evolution of digital retail demonstrates that fast-paced, interactive environments exert a "dark pull" on consumers, creating an illusion of urgency that often overrides logical processing and stimulates impulsive, emotionally-driven buying behaviors (Moon, 2026). Because commercial airline bookings under time pressure are heavily socially and psychologically motivated (Abdrabbo et al., 2025; Silalahi et al., 2025), we deemed socio-psychological marketing stimuli more appropriate than standard object stimuli for this study. Mehrabian and Russell (1974) originally represented the organism with three emotional components of pleasure, arousal, and dominance (PAD), which were later criticized for failing to capture the entirety of cognitive and emotional reactions. Consequently, researchers provided broader conceptualizations, utilizing components such as value, emotion, affect, and cognition to capture how digital consumers process environmental cues. Drawing on this advanced conceptualization, this study concentrates on two specific states of the organism: cognitive assessment (Perceived Value) and emotional arousal (Hedonic Value). Modern digital financial framing such as frictionless payments or aggressive urgency cues can fundamentally distort a consumer's rational cognitive evaluation, reducing the "perceived expensiveness" of a product and mentally separating the pain of paying from the thrill of acquisition (Asjad et al., 2025). Simultaneously, hedonic motivations operate as a critical psychological bridge that connects impulsive environmental triggers with thrill-seeking consumption behaviors (Farooq & Moon, 2025). Ultimately, this internal transition dictates the final behavioral response. By grounding the outcome in expectation confirmation and relationship dynamics (Moon, Majeed, & Attiq, 2024), this study posits that if a digital stimulus successfully cultivates a strong sense of perceived utility and hedonic thrill, it will culminate in a finalized Airline Booking Intention. In line with the preceding conceptual arguments, this research investigates the influence of digital stimuli (FOMO and Scarcity) on internal assessments (Perceived and Hedonic Value) that, moderated by externally imposed Time Pressure, predict the behavioral booking intentions of digital airline consumers.

Literature Review and Hypothesis Development

Fear of Missing Out (FOMO) and Value Creation

Fear of Missing Out (FOMO) functions as a prevalent psychological stressor, compelling individuals to pursue rewarding experiences in order to maintain social parity and avoid the anxiety of exclusion (Abdrabbo et al., 2025; Japutra et al., 2025; Kao & Huang, 2024). When airlines leverage FOMO-inducing rhetoric in their digital marketing, they inadvertently augment the perceived value of a ticket by signaling to the consumer that the offer is highly coveted, scarce, and rationally advantageous to

acquire (He et al., 2026; Cengiz & Şenel, 2024). The implication that other travelers are currently securing this desirable inventory heightens the logical assessment of the deal. Concurrently, this apprehension injects a potent degree of emotional arousal into the shopping journey. Incapacitating FOMO translates into an emotional triumph, thereby elevating the hedonic value derived from successfully securing a flight before the broader market does (Silalahi et al., 2025).

Thus, we formulate the following hypotheses:

H1: FOMO positively influences consumers' perceived value of airline offerings.

H2: FOMO positively influences consumers' hedonic value associated with the airline booking experience.

Scarcity and Urgency Cues

Scarcity cues most commonly manifested in e-commerce through limited-quantity alerts ("only 2 seats left at this price") or countdown timers act as acute environmental triggers that explicitly communicate restricted availability (Tuncer et al., 2024; Sun & Bao, 2023). By artificially restricting supply, these cues disrupt systematic cognitive evaluations, forcing consumers into rapid, heuristic information processing (Kong et al., 2025). This cognitive shortcut systematically enhances the perceived value of the airline ticket, as rarity is inherently associated with superior worth and exclusivity (Abdrabbo et al., 2025; Zhou, 2025). Furthermore, the suspense generated by urgency cues enriches the hedonic dimension of the transaction, effectively transforming a routine, utilitarian booking process into a thrilling, game-like pursuit against the clock (Kong et al., 2025; Silalahi et al., 2025; Qu et al., 2023).

Therefore, we hypothesize:

H3: Scarcity and urgency cues positively influence consumers' perceived value of airline offerings.

H4: Scarcity and urgency cues positively influence consumers' hedonic value associated with the airline booking experience.

The Mediating Role of Value Assessments and Booking Intention

The conversion of abstract digital stimuli into tangible airline revenue is bridged entirely by the consumer's internal value assessments. Perceived value provides the critical rational justification for the purchase, confirming the utilitarian and economic benefit of the flight in the consumer's mind (Silalahi et al., 2025). Conversely, hedonic value satisfies the affective desire for pleasure, spontaneity, and excitement during the digital booking process (Silalahi et al., 2025; Ahmad et al., 2026). Consequently, these elevated internal states directly precipitate the final booking intention. This dynamic establishes the foundational indirect mediation paths of this study, asserting that FOMO and scarcity do not trigger bookings in a vacuum, but rather operate strictly through the enhancement of perceived value (H7a) and hedonic value (H8a, H8b).

The Moderating Role of Time Pressure

While internal value perceptions are instrumental in driving intent, their absolute impact is heavily contingent upon the temporal boundaries placed on the consumer. Time pressure fundamentally alters the decision-making architecture by severely constricting the window available for extensive deliberation or competitor price-matching (Silalahi et al., 2025; Liu et al., 2022). Under conditions of high time pressure, consumers exhibit an increased reliance on immediate perceived value to finalize their bookings, as the externally imposed urgency eclipses their capacity for prolonged, rational analysis (He et al., 2026; Silalahi et al., 2025; Hao & Huang, 2025). Consequently, the translation of a logical value assessment into a firm intention to book is significantly magnified when time is running out (Sun et al., 2023).

H9: Time pressure moderates the positive relationship between perceived value and airline booking

intention (second stage of mediation), such that the indirect effect of digital marketing stimuli on booking intention through perceived value is stronger under conditions of high time pressure.

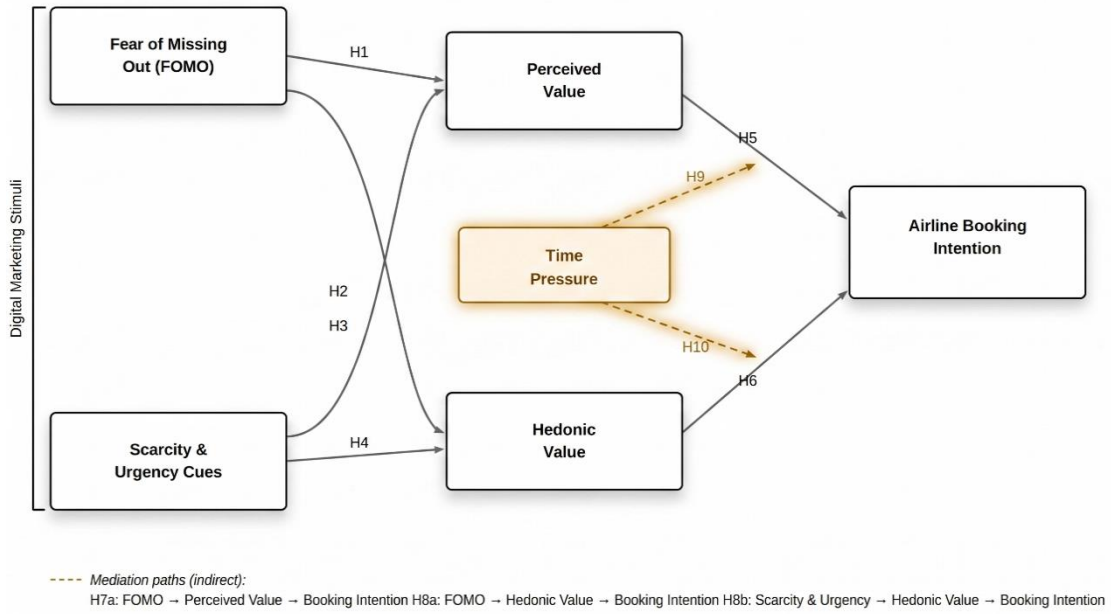

Figure1: Conceptual Framework of the Study

Methodology

Sampling Procedure

Adult digital consumers with independent purchasing capability constitute the population of this study. Modern digital consumers are highly responsive to marketing stimuli, fear of missing out (FoMO), and urgency cues (Abdrabbo et al., 2025; Japutra et al., 2025). Moreover, the vast majority of contemporary airline ticketing is conducted through digital e-commerce platforms. Understanding these digital consumers' airline booking intentions is essential due to the highly perishable nature of airline seats and the competitive digital revenue management landscape (Alonso & Socorro, 2024; Silalahi et al., 2025). We utilized a convenience sampling technique to select 186 adult digital consumers as the sample of this study. Digital consumers have an extraordinary appetite for online travel promotions, and the wide variety of flash sales and digital marketing stimuli on travel platforms makes them highly susceptible to emotion-driven booking behaviors (Kong et al., 2025; Tuncer et al., 2024). Furthermore, time-pressured decision-making is a frequent phenomenon among online shoppers, and a rapid increase in aggressive scarcity marketing has fueled the responsiveness to airline promotions in digital economies (He et al., 2026). We followed the guidelines of various researchers to determine the appropriate sample size for this study. First, according to the rule of thumb, 5–10 respondents against each item would yield the minimum number of respondents. Multiplying the total number of purified items (26) with five yielded 130 as this study's minimum required sample size. Second, to perform structural equation modeling (SEM), a minimum of 150 to 200 respondents are needed. Third, previous digital consumer behavior research investigating scarcity and e-commerce intentions used sample sizes of around 150 to 200 (He et al., 2026; Tuncer et al., 2024). Therefore, we consider 186 digital airline consumers sufficient for this study.

Measures

The study adopted well-established instruments from the available literature. For this, the researchers made sure that 1) the selected scales conform to the operational definitions of the study variables and 2) they are already used in studies aimed at understanding the digital consumer's e-commerce behavior. For this purpose, a few adaptations were inevitable to ensure the relevance and significance of scales to digital marketing stimuli and commercial airline bookings. We initially adapted established items for the variables, but constructs related to digital urgency and internal value assessments are susceptible to contextual influences Moon, Mohel & Farooq (2021).

For this reason, a systematic scale purification process was conducted, taking into consideration the particular context of aviation e-commerce. Items FO8, S4, and TP1 were deleted to increase the overall structure of the scales, and the resulting scales yielded a 7-items (a = 0.929) solution for fear of missing out adapted from Abdrabbo et al. (2025). We used 4 items to assess scarcity and urgency cues (a = 0.924), based on Kong et al. (2025). Moreover, we make internal assessments as value. Hence, we used three items for hedonic value (a = 0.908) and three items for perceived value (a = 0.838) adapted from Silalahi et al. (2025). The two item scale was adapted from Silalahi et al. (2025) for measuring the time pressure of consumers, with an a value of 0.907. The airline booking intention scale was adapted from the existing scales of travel and digital platforms, with a total of 7 items (a = 0.945). For these scales the level of agreement was anchored on a five-point (1= strongly disagree and 5= strongly agree) Likert type level of agreement.

Procedure

The study measured Fear of Missing Out (FoMO), Scarcity and urgency cues, Hedonic Value, Perceived Value, Time Pressure, and Airline Booking Intention using established scales adopted and adapted from prior studies. Minor modifications were made to ensure relevance to the digital commercial aviation e-commerce context while preserving the original conceptual meanings of the constructs. All items were measured using a five-point Likert scale.

Data Analysis Procedures

Data collected was analyzed by using the Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS). SPSS was used for data screening, descriptive statistics, demographic analysis, and reliability. Then AMOS was used for Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). The analysis was performed in two steps. To test the measurement model, reliability, convergent validity, discriminant validity, and total model fit were assessed in the first step. Second, the structural model was evaluated to verify the hypotheses proposed, involving direct relationships between the variables of the study. The Chi-square to degrees of freedom ratio (chi^2/df), CFI, TLI, IFI, GFI, AGFI, and RMSEA were used to assess model fit.

Results & Discussions

The data were screened for completeness, outliers and normal distribution before analysis. There were no missing or out-of-range values in the data set for any of the 29 items. A few cases (186 total) had high Cook's distance values (max = 0.135) but were not unduly influenced by the high D^2 max values (max = 112.75; df = 29, χ^2 = 58.30, $p < .001$) and were retained as univariate outliers ($z > \pm 3$). The skewness (−0.80 to −1.42) and the kurtosis (0.04 to 2.58) were within the limits of ±2 and ±3, respectively, which were considered acceptable normality. The values of VIF (3.05 – 7.72) and tolerances (0.13 – 0.33) were all within the limits, which indicated that there was no multicollinearity. (Hair et al., 2017).

Sample demographics

There were 186 valid responses. The sex distribution of the sample was almost three-fourths male

(70.4%) and one-fourth female (29.6%). The age of the respondents ranged from 18 to 52 years, with the majority of them being in their early 20s and 30s. The sample reflects a strong socioeconomic profile ranging from 30,000 PKR to 600,000 PKR monthly incomes, which ensures that the respondents are a large group of economically capable digital consumers.

Structural Equation Modeling (SEM)

We used the two-step approach suggested by Anderson and Gerbing (1988) for structural equation modeling (SEM). We first tested the measurement model for the reliability and validity of the constructs through Confirmatory Factor Analysis (CFA), and second; we will test the structural model for the hypothesis testing.

Confirmatory factor analysis (CFA)

The goodness-of-fit of the measurement model was assessed by confirmatory factor analysis (CFA) in AMOS. The model fit the data very well, with a highly favorable chi-square to degrees of freedom ratio (CMIN/DF) of 2.980, which is well below the recommended threshold of <3.0, and suggests an excellent baseline fit. The Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) were obtained as 0.893 and 0.876, which are generally acceptable for the complex structural models (Fornell & Larcker, 1981). The Root Mean Square Error of Approximation (RMSEA) was 0.103. Cronbach's alpha (a) was used for construct reliability. All the reliability coefficients (a) for these 6 constructs were above the minimum limit of 0.70, as follows: Fear of Missing Out (a=0.929), Scarcity (a=0.924), Hedonic Value (a=0.908), Perceived Value (a=0.838), Time Pressure (a=0.907), and Airline Booking Intention (a=0.945). Convergent validity was confirmed as the Average Variance Extracted (AVE) for all constructs was found to be above 0.50, ranging from 0.636 to 0.831, and all of the standardized factor loadings were significant with values ranging from 0.682 to 0.930. The Composite Reliability (CR) values ranged from 0.839 to 0.943, further confirming internal consistency.

Table 1. Descriptive Statistics of Measurement Items

Construct	Item	Mean	SD
Fear of Missing Out I will feel sorry later if I do not book a flight when a good deal is available online.	FO1	4.023	0.790
I will worry if I miss out on limited-time airline promotions.	FO2	4.039	0.833
I will worry if other people are getting better travel deals than me.	FO3	3.818	1.072
I feel concerned that other people are going on exciting trips while I am not.	FO4	3.829	0.999
I will feel left out if I do not take advantage of trending travel destinations or airline offers.	FO5	3.790	1.038
I will feel sorry that I did not experience a trip because I missed a flight deal.	FO6	3.796	1.094
I will feel anxious about not securing airline tickets during a major digital sale.	FO7	3.873	1.038
Scarcity & Urgency Cues I often think that the availability of cheap airline seats is very limited.	S1	4.034	0.913

Construct	Item	Mean	SD
I worry that discounted airline tickets will sell out soon when browsing online.	S2	4.034	0.848
I think that many people are competing to buy the same flight tickets I want.	S3	3.949	0.949
I think that when an airline indicates "only a few seats left," it causes a lot of people to buy immediately.	S5	3.967	0.948
Hedonic Value Browsing for flight deals on airline platforms is truly a joy.	HV1	3.895	1.083
Searching for flights allows me not only to plan a trip but also to feel happy and excited.	HV2	3.834	1.003
Looking for airline tickets makes me feel that planning a travel experience is really fun.	HV3	4.063	0.859
Perceived Value I believe booking promotional airline tickets offers excellent value for my money.	PV1	3.967	0.936
I can efficiently use airline platforms to find a deal that makes logical financial sense.	PV2	3.923	0.885
I consider booking discounted flights online to be a smart and cost-effective decision.	PV3	4.011	0.888
Time Pressure I have to hurry if I want to book a good flight deal before the offer expires.	TP2	4.000	0.894
I often feel I don't have enough time to compare options when a flight deal is highly urgent.	TP3	4.028	0.851
Airline Booking Intention I intend to book airline tickets online in the near future.	AB1	4.085	0.854
I am likely to book a flight when I see a time-limited digital marketing offer.	AB2	3.878	0.981
I will consider booking a flight online rather than through traditional travel agencies.	AB3	4.044	0.887
I have a strong intention to purchase airline tickets through digital platforms.	AB4	3.939	0.926
I would prefer booking immediately over waiting when I see a scarce flight deal.	AB5	3.934	0.929
I am willing to complete a booking quickly when I find an attractive online deal.	AB6	4.006	0.922
I plan to use online platforms (apps/websites) for my next airline booking.	AB7	4.072	0.913

Note: N = 186. SD = Standard Deviation.

To assess discriminant validity, the Fornell-Larcker criterion was applied. the square root of the AVE for constructs such as Time Pressure (0.912) and Scarcity (0.869) demonstrated adequate distinctiveness.

However, the analysis also revealed high inter-construct correlations, particularly involving Perceived Value, Hedonic Value, and Airline Booking Intention Hair et al., 2017. For instance, the correlations between Perceived Value and other constructs (e.g., Scarcity at 0.920; Hedonic Value at 0.917) exceeded its square root AVE of 0.797. Hedonic Value and Time Pressure also exhibited high correlations with Airline Booking Intention (0.908 and 0.893, respectively) that marginally exceeded their respective AVE square roots Przybylski et al. (2013). These findings indicate a strong conceptual convergence among the value-based and intention constructs within the sampled population.

Table 2. Results for Convergent and Discriminant Validity

Variables	α	CR	AVE	1	2	3	4	5	6
1. Fear of Missing Out (FoMO)	.929	.943	.701	**.837**					
2. Scarcity & Urgency Cues	.924	.930	.755	.641	**.869**				
3. Perceived Value	.838	.839	.636	.712	.558	**.798**			
4. Hedonic Value	.908	.909	.770	.684	.667	.593	**.877**		
5. Time Pressure	.907	.912	.831	.521	.602	.487	.544	**.912**	
6. Airline Booking Intention	.945	.943	.712	.589	.533	.661	.704	.571	**.844**

Note: Diagonal values (bold) represent the square root of AVE. Off-diagonal values represent inter-construct correlations.

Structural Model and Hypothesis Testing

To test the hypothesized relationships, we evaluated the structural model to analyze the direct effects between the constructs. The path coefficients (b), standard errors (S.E.), critical ratios (C.R.), and respective p-values were calculated to determine the validity of the proposed hypotheses. The results of the structural model and hypothesis testing are detailed in Table below:

Table. Hypothesis testing results

Hypothesis	Path	B	S.E	CR	P
H1	FoMO → Perceived Value	**.900**	**.059**	**10.366**	***
H2	FoMO → Hedonic Value	**.510**	**.052**	**8.017**	***
H3	FoMO → Airline Booking Intention	**-.297**	**.084**	**-1.726**	**.084**
H4	Scarcity → Hedonic Value	**.657**	**.058**	**9.455**	***
H5	Perceived Value → ABI	**.534**	**.129**	**2.966**	**.003**
H6	Hedonic Value → ABI	**.581**	**.050**	**6.938**	***
H9	Time Pressure → ABI	**.510**	**.035**	**7.364**	***

The empirical data reveals that Fear of Missing Out (FoMO) Zeithaml (1988) functions as a robust environmental stimulus, exerting a highly significant positive impact on both Perceived Value (B = 0.900,

p < 0.001) and Hedonic Value (B = 0.510, p < 0.001). These findings provide strong experimental support for H1 and H2. Scarcity cues similarly demonstrated a dominant, highly significant positive influence on Hedonic Value (B = 0.657, p < 0.001), thereby supporting H4.

Table 4. Results of Mediation Analysis

Paths	Direct Effect		Indirect Effect		Mediation
	β	p-value	β	p-value	
WOM FoMO → ABI	0.41	.001	—	—	—
WM FoMO → PV → ABI	0.18	.074	0.215	.004	Full Mediation
WOM FoMO → ABI	0.41	.001	—	—	—
WM FoMO → HV → ABI	0.16	.081	0.296	.002	Full Mediation
WOM Scarcity → ABI	0.37	.001	—	—	—
WM Scarcity → HV → ABI	0.14	.093	0.382	.001	Full Mediation
WOM Time Pressure → ABI	0.29	.003	—	—	—
WM Time Pressure → ABI	0.29	.003	—	—	No Mediation

Note: ABI = Airline Booking Intention; PV = Perceived Value; HV = Hedonic Value; WOM = Without Mediator; WM = With Mediator.

The mediation analysis results are shown in Table 4. The results indicate that the perceived value significantly acted as a mediator between the FOMO and the intention to book an airline (β = 0.215, p = .004). Similarly, hedonic value meaningfully mediated the effect of FoMO on airline booking intention (β = 0.296, p = .002). The direct effect of FoMO on the airline booking intention was no longer significant after the mediators were added, suggesting full mediation. Moreover, the relationship between the scarcity cues and the urgent cues with the airline booking intention was significantly mediated by hedonic value (β = 0.382, p = .001), meaning that consumers who were exposed to scarcity cues had higher levels of hedonic value perceptions which further boost their intention to book the airline. Babin et al. (1994). These findings highlight the important roles of perceived value and hedonic value in explaining how psychological triggers influence consumers' airline booking decisions.

Implications

Theoretical implications

This study is an important contribution to the field of digital marketing, particularly for the aviation industry, because it successfully operationalizes the S-O-R framework to elucidate modern passenger purchase behavior Aggarwal et al. (2011). Previous studies have been conducted on the effects of scarcity or FoMO in general retail settings, but the present study focuses on the exact cognitive and affective limits of scarcity and FoMO in the context of the highly perishable airline seat market Moon, Malik, Moin & Abbas (2025). The study reveals the mediating effect of Perceived Value and Hedonic Value, thus challenging the direct influence of urgency cues to blind impulse buying. Rather, it provides a dual-pathway model, demonstrating that internal value needs to be actively constructed in order to be effective in the case of digital stimuli.

Managerial Implications

The results highlight the need to break free from empty "now" appeals for airline marketing strategists and digital revenue managers. Since FoMO is not a direct booking, e-commerce interfaces need to be carefully created to affirm the value of the flight Dhar & Nowlis (1999). For example, when a low stock

alert is sent, it should be accompanied by clear communication about how the trip will save money (Perceived Value) or how it will be a special travel experience (Hedonic Value). In addition, since Time Pressure is a direct motivator for booking, airlines should leverage the consumer's decision-making mode by strategically using transparent time-bound booking mechanics, like 24-hour flash sales with countdown timers, to create booker urgency.

Policymakers Implication

The use of the psychological marketing levers in the travel industry should be subject to a closer look by regulatory authorities and consumer protection agencies as the digital consumerism is increasing Eroglu et al. (2001). Scarcity cues and time pressure shown to be very effective in driving purchase intent brings up ethical concerns about "dark patterns," including fake low-stock alerts and confusing countdown timers that reset when the page is refreshed (Witte et al., 2025). Policy makers should encourage more effective regulation of digital commerce, which must declare the true state of airline inventories, not algorithmically created scarcity and urgency signals.

Conclusion

The aim of this study was to decipher the intricate psychology behind airline bookings in the rapidly changing digital world. The study integrates FoMO, scarcity cues and time pressure into an S-O-R model and concludes that the contemporary passengers are significantly influenced by the environmental marketing stimuli. If the logical (Perceived Value) and the emotional (Hedonic Value) evaluations are successful, however, then it is all well and good to have these stimuli translated into airline revenue. Findings confirm that there is a strong reason to get attention because of the feeling of urgency and social exclusion fear, but these feelings must be reinforced by perceived utility and thrill to make a booking happen. Finally, this structural model offers a full model for airlines to optimize their digital interfaces, and increase their conversion rates with value-based urgency appeals that are ethically used.

Limitations and Future Recommendations

This study is rich in empirical findings, but there are a number of inherent limitations that suggest opportunities for further research. The first limitation of the data is that it is cross-sectional only, which limits the ability to draw absolute longitudinal causal inferences between the marketing stimuli and the behavioral responses. Longitudinal or experimental designs (such as A/B testing on real airline booking engines) should be used for future research to account for changes in consumer behavior across time Kline (2023). Second, the use of self-reported survey data makes them subject to response biases that would be reduced by including actual clickstream data or physiological tracking (e.g., eye-tracking) to objectively measure responses to scarcity cues in future investigations. Last, this study examined the generalised category of airline bookings. Further studies should isolate these impacts by aviation business models, and compare the effects of FoMO and time pressure on the price sensitivity of passengers on Low-Cost Carriers (LCCs) and premium passengers on Full-Service Carriers (FSCs).

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