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THE INFLUENCE OF VIRTUAL EXPERIENCE ON VISIT INTENTION THROUGH FEAR OF MISSING OUT (FOMO) : A Quantitative Study On The Mount Bromo In The Roblox Platform

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Abstract

This study examines the effect of virtual experience on visit intention toward Mount Bromo, with fear of missing out (FOMO) as a mediating variable, using the Mount Bromo map on Roblox as the research context. The research applies a quantitative explanatory approach using a questionnaire survey with a Likert scale. Data analysis includes instrument testing, regression analysis, and mediation testing using a bootstrapping approach. The findings indicate that virtual experience positively influences visit intention, and FOMO has a significant effect on visit intention. Moreover, FOMO is found to partially mediate the relationship between virtual experience and visit intention. These results suggest that immersive virtual experience can strengthen intentions to visit real-world tourism destinations, particularly when such experience trigger psychological pressure to keep up with popular trends and experience.

Keyword*: Virtual Experience, FOMO, Visit Intention, Immersive Virtual Experience*

I. INTRODUCTION

The development of digital technology has changed how people experience tourism destinations, because tourism experience today does not always have to start from direct physical visits, they can also begin through immersive virtual experience. In this context, the metaverse has emerged as a new space that can transform how destinations and tourism organizations interact with potential tourists, including through experience simulations, communities, and social activities in virtual environments (Buhalis et al., 2023). From a marketing perspective, the metaverse is also considered to shift the relationship pattern between companies and consumers, so that destination experience may feel more "real" compared to conventional digital platforms (Giang Barrera & Shah, 2023). In addition, metaverse avatars are often designed to reflect users' real characteristics, which enables platforms such as Roblox to function not only as games, but also as spaces for experience and social interaction (Keegan et al., 2024).

In tourism studies, strong virtual experiences are often associated with increased visit intention because users feel as if they had a preview experience of the destination before actually visiting it. Experimental research shows that exposure to VR can increase mental imagery and happiness forecasting when imagining a vacation, which then leads to higher travel intention compared to ordinary visual media (Skard et al., 2021). More broadly, a meta-analysis of AR or VR in tourism found that presence is a core feature that shapes tourism experience, either directly or through perceived value and psychological responses and its effects can become stronger when social interaction is included in the virtual experience (Fan et al., 2022). On the other hand, VR is not necessarily a replacement for real travel, but rather a trigger of interest because telepresence and enjoyment in VR can raise intentions to visit real-world destinations (Hoang et al., 2023). Taken together, the strongest pattern across prior studies suggests that high-immersion experience that generate presence are among the most effective approaches for stimulating tourism-related intentions, because they help users imagine, emotionally anticipate and feel the destination before a real visit.

The phenomenon becomes increasingly relevant when considering that internet use and virtual platforms have become part of everyday life, especially among younger generations. Indonesia's internet penetration survey in 2025 reported that 80.66% of the population was connected to the internet, indicating massive exposure to digital content (APJII, 2025). At the same time, Roblox, known as a social virtual experience platform, reported an average daily active users (DAU) in 2024 of 82.9 million with 73.5 billion hours engaged, showing very high user involvement (Roblox, 2025). In shaping tourism interest, social media affordances have been proven to play a role in forming destination image, which then influences tourist responses (Liu et al., 2024). Short-video platforms also can encourage travel intention through destination attitudes affected by source credibility and show research trends moving toward consumer behavior, engagement and brand experience, meaning destinations also have strong opportunities to enter this space through structured virtual experience (Wasiq et al., 2024).

These conditions can be contextualized through destinations with strong attraction, such as Mount Bromo in East Java, which is known as an iconic

nature tourism destination. Data from BB TNBTS reported by ANTARA shows that tourist visits to the Bromo area throughout 2023 reached 368,507 people, indicating stable and real demand (ANTARA, 2024). More broadly, domestic travel statistics show East Java became the province with the highest destination trips in 2024, totaling 218.71 million trips, making tourism promotion in the region highly competitive (Kemenpar, 2025). In this context, virtual travel experience can function as a pre-visit strategy because sense and information quality in VR can trigger flow, which leads to satisfaction and visit intention (An et al., 2021). Destination advertising also affects visit intentions through psychological processes such as self-congruence, self-confidence and destination reputation (Guo et al., 2024). In addition, VR experience can build destination image that later encourages travel intention (Kieanwatana & Vongvit, 2024).

Choosing Roblox as the research context is reasonable because the platform enables users to experience places through avatars, spatial exploration and social interaction, making the virtual experience potentially more personal. Empirical evidence shows that in VR based metaverse contexts on Roblox, telepresence and brand avatar social presence can encourage brand anthropomorphism and foster brand love, meaning virtual experience can form emotional bonds (Vernuccio et al., 2025). At the behavioral level, metaverse marketing models also suggest social presence can trigger attachment, engagement and visit intentions in metaverse engagement models highlight the need for adaptive strategies to build loyalty and closeness through immersive interactions (Bilgihan et al., 2024). This indicates that Roblox is not only a technical container for virtual content, but also a socially meaningful environment where experience, interaction and community dynamics can shape users' psychological responses and behavioral intentions.

However, in many digital experience, behavioral intentions not only formed by experience quality but also by socio-psychological drivers such as fear of missing out (FOMO). In tourism-related content, FOMO may arise when individuals see others' activities and feel left behind, research on travel posts shows envy and FOMO can be influences by Instagram sources and types of landmarks displayed (Kim & Kim, 2024). In digital behavior, FOMO also has a darker side because it can lead to social media stalking, social comparison and media fatigue (Tandon et al., 2022). This mechanism is reinforced by findings that FOMO mediates the relationship between social media use and social media fatigue, meaning FOMO is not merely a feeling but can influence evaluations and psychological stamina (Hattingh et al., 2022). Even in simple situations like smartphone presence, cognitive effects may depend on individual FOMO levels, showing that FOMO is a strong psychological factor in shaping responses (Niu et al., 2022). Therefore, in highly social and trend-driven platforms, FOMO can plausibly become a bridge mechanism that translates an enjoyable virtual experience into a stronger urgency or motivation to pursue the real experience offline.

Although research on VR and metaverse tourism has grown, a gap remains when the context involves social game platforms like Roblox and focuses on a specific influence pathway. A systematic review of VR in tourism and hospitality notes that technology-oriented studies often underemphasize impacts on real-world activities, even though this is crucial to understand whether virtual experience truly drive physical visits (Calisto & Sarkar, 2024). In museum contexts, literature reviews show most visitors have positive distinctions are still needed to clarify behavioral outcomes (YiFei & Othman, 2024). Meanwhile, recent studies on the metaverse and sustainable tourism highlight opportunities but also challenges such as government and sustainability issues, suggesting more context-based studies are needed (Ahmadi Zahrani et al., 2025). Even studies clustering VR tourism users using extended TAM often stop at intention to use VR, rather than testing psychological pathways like FOMO that may bridge virtual experience to real-world visit intention (Wiangkham et al., 2025). In other words, prior work is often limited in three practical ways, the platform context is commonly general VR or AR rather than social-gaming metaverse settings such as Roblox, the outcome is frequently technology usage instead of real-world visit intention and the mechanism is rarely tested through a clear psychological mediation pathway that explains how virtual experience translate into offline tourism intention.

Therefore, this study is important to explain a mechanism that more realistic and relevant to current digital generation behavior. From a marketing perspective, advertising and destination or brand activities in the metaverse are developing rapidly and require clearer understanding of implications for consumers and society (Doligalski et al., 2024). Psychologically, FOMO-based communication approaches are not always safe, research suggests FOMO appeals can negatively affect consumers who are already prone to FOMO, so understanding FOMO as a mediator becomes crucial to prevent counterproductive promotional strategies (Morsi et al., 2025). Users participations in the metaverse is also influenced by specific intention factors, reinforcing that metaverse contexts have their own behavioral logic and should be tested quantitatively (Singh et al., 2025). Finally, evidence from AR marketing studies shows consumers responses are shaped by complex psychological mechanisms, so testing the model virtual experience → FOMO → visit intention recommendations for promoting destinations such as Bromo. Accordingly,

the objective of this study is to examine the direct effect of Virtual Experience on Visit Intention, the effect of Virtual Experience on FOMO, the effect of FOMO on Visit Intention and whether FOMO mediates the relationship between Virtual Experience and Visit Intention in the context of the Mount Bromo map on Roblox. The scientific contribution of this paper lies in explicitly testing a mediation mechanism within a social-gaming metaverse platform (Roblox) and focusing on real-world tourism visit intention rather than only intention to use the technology. This provides a clearer explanation of why and how virtual experience may stimulate offline travel interest, while also offering practical implications for destination promotion that are sensitive to the psychological risks of FOMO-based engagement.

II. RESEARCH METHODS

This study uses a quantitative approach with an explanatory research design. This design was chosen because the main focus is to test the effect of X on Y using numerical data obtained from questionnaire respondents. In this context, quantitative survey-based metaverse studies are commonly used to test relationships between digital experience and intention or behavior, because variables such as experience are better captured through users' perceptions that can be measured in structured way (Payal et al., 2024). Explanatory research was selected because this study does not only describe a phenomenon, but explains the causal relationship between Virtual Experience (X) and Visit Intention (Y) and also tests whether this relationship occurs through the mediator Fear of Missing Out/FOMO (Z). In metaverse tourism research user involvement and experience in virtual environments are often tested for their influence on travel intention, therefore an explanatory design is relevant to test both direct and indirect effects (Yoon & Nam, 2024).

Because virtual experience arises when users interact directly with a virtual environment, the measurement in this study was based on respondents' perceptions using experience indicators such as enjoyment, engagement, and a sense of immersion. Studies in virtual tourism also show that experiential elements such as telepresence and affective experience construct in visit intention research (Cheng & Huang, 2022). FOMO was positioned as a mediating variable because psychologically, FOMO can occur when individuals feel left behind, they missed an important or interesting experience, including tourism experience or popular trends. In this study, the FOMO concept was operationalized through statements that measure anxiety about missing out, the urge to stay connected, and concerns about missing certain moments. Psychometric-scale measurement of FOMO also emphasizes that FOMO can appear as a situational state (Holte, 2023). Since this study examines mediation, the analysis focuses not only on the significance of direct effects but also on indirect effects. Current mediation practices emphasize the importance of interpreting the paths and using bootstrap confidence intervals to strengthen mediation conclusions and avoid misinterpretation of mediation effects (Bozkurt et al., 2026). Overall, a quantitative explanatory method is the most suitable choice for this study, because it allows the researcher to test hypotheses, estimate effect sizes and explain the mechanism of influence (direct and mediated) using statistical evidence.

A. Research period and Location

The study was conducted for approximately two months, from November 2025 to January 2026, meaning that the data were collected within the same time period in order to capture respondents' actual perceptions when they were getting familiar with or exploring the virtual map being studied. The research location was online, because the object is located in a virtual environment. Therefore, the research activities focused on users' experience within the Roblox platform and the completion of an online questionnaire. This online approach is consistent with virtual tourism research, which often relies on digital experience and the measurement of users' perceptions through online surveys (Verma et al., 2022). Specifically, the research setting refers to the Mount Bromo map in Roblox as platform provides an interactive 3D space that enables users to build experience through avatars, exploration and feature interaction, so this context is appropriate as a research location for virtual-experience-based studies. Other studies also show that Roblox can be used as a realistic study environment to measure and evaluate user experience in virtual-based activities (Sangamuang et al., 2026). In this study, the term research location refers to a digital location rather than a physical place. In other words, the field observed is the Mount Bromo virtual map on Roblox, while the data collection environment is the online survey platform used to record respondents' perceptions.

Population and Sample

The population in this study was active Roblox users in Indonesia, especially Gen Z aged 18 to 28 years who had played or knew the Mount Bromo map and also knew Mount Bromo as a real tourism destination. This ensures that

respondents truly have both the virtual experience context and the real destination context relevant to this study. Focusing on users who experience virtual presence is relevant because studies on tourist behavior in the metaverse emphasize that virtual experience and perceived presence play an important role in encouraging behavioral responses such as visit intention (Linh et al., 2025). The sampling technique used in this study was non-probability sampling with a purposive sampling method, meaning respondents were selected-based on specific criteria that fit the research objectives. In metaverse studies that develop or test experience-based constructs, purposive sampling is commonly used to ensure respondents are actual users who understand the virtual interaction context, which improves contextual validity (Boo & Suh, 2024).

The sample size used in this study was 150 respondents. This number was considered sufficient for quantitative analysis, including instrument testing, assumption testing, regression and mediation, and also adequate to produce stable reliability and validity estimates in questionnaire-based studies. In quantitative instrument validation studies, sample sizes above 100 are often used and considered practically sufficient for reliability and validity testing, therefore 150 respondents can support the stability of the analytical results (White, 2022).

B. Data Collection Technique

This study used primary data collected through an online questionnaire with a Likert scale (1-5), ranging from strongly disagree to strongly agree. The questionnaire was developed based on the operationalization of the variables Virtual Experience, FOMO and Visit Intention so each indicator was converted into statements that are easy to understand while still measuring the intended constructs. VR-based instrument development practices highlight the importance of consistent scaling and clear item wording to reduce misunderstanding among respondents (Bareišytė et al., 2024). Measurement of Virtual Experience was designed to capture users' experience during interaction with the Mount Bromo in Roblox, including aspects such as ease, information gained, engagement (flow), interactivity, sense of presence (telepresence) and enjoyment during exploration. In online game contexts, the combination of gameplay experience and community interaction is proven to influence users' psychological responses, therefore perception-based measurement after the virtual activity is a relevant approach (Shi et al., 2024).

FOMO measurement was designed to capture fear of missing out experience, worries about missing moments or trends and the urge to stay connected to information or activities that are currently popular. In many digital contexts, FOMO is often triggered by content exposure and social dynamics on platforms, so FOMO items should capture social comparison and anxiety about being left behind more specifically (Brailovskaia & Margraf, 2024). In addition, FOMO is understood as a phenomenon influenced by both internal and external factors, therefore the FOMO statements in this study should include both personal and social aspects in a balanced way to represent variations in FOMO experience among respondents (Piko et al., 2025). Visit intention measurement aimed to capture respondents' intention to visit the real destination after experiencing the virtual environment in Roblox, including motivation to search for more information, consider visiting and the likelihood of recommending the destination. Metaverse-based research also shows that instrument development usually begins with adapting items to the platform context, followed by instrument testing to ensure the items truly match respondents' experience (López-Belmonte et al., 2022). The materials used in this study include the Mount Bromo Virtual map on Roblox as the experience stimulus, the online questionnaire as the main measurement instrument and the dataset and statistical outputs produced from the questionnaire responses that support interpretation in the Results and Discussion section.

C. Data Analysis Technique

The data were analyzed quantitatively through editing, coding and scoring and then continued with statistical analysis. Instrument quality was tested using validity and reliability tests, because there are commonly used to evaluate whether items are consistent and suitable for measuring constructs. Reliability literature also emphasizes that internal consistency testing is important to ensure construct scores are stable and not random across items (Malkewitz et al., 2023). After instrument testing, the study continued with classical assumption test as requirements for regression analysis, including normality, multicollinearity, and heteroscedasticity. These tests are important because assumption violations may affect estimation accuracy and coefficient significance decisions, so they should be detected before drawing statistical conclusions (Atchadé & Tchanati P., 2022).

If there were indications of certain assumption violations, one commonly used strategy is bootstrapping to obtain confidence intervals that are more robust against non-ideal

data conditions. The bootstrap approach helps provide more stable inference because confidence intervals are formed through a resampling process that is more flexible than purely parametric assumptions (Reluga et al., 2024). To test mediation, this study used a simple mediation analysis with a bootstrap approach, where the significance of the indirect effects was evaluated from the bootstrap confidence interval. This consistent with modern mediation analysis practices that use bootstrap confidence intervals to test indirect effects more strongly, including models involving psychological mediators (Yao & Wang, 2024). This testing model is also aligned with intention studies in the metaverse context, which generally test the influence of experience of psychological factors on intention through modeled relationships between variables (Kumari et al., 2024).

The methods section is directly connected to the results and discussion section because the results are presented following the same analytical stages described above. The study reports instrument testing results first, followed by assumption testing, then regression results for direct effects and finally mediation results for the indirect effect through FOMO. Therefore, the discussion is based on the exact procedures applied in the study, ensuring consistency between what was done and what was found.

III. RESULTS AND DISCUSSION

A. Results

This chapter presents the results of questionnaire data collected from 150 respondents who used the Mount Bromo map on the Roblox platform. The study examines the effect of Virtual Experience (X) on Visit Intention (Y) and tests the mediating of Fear of Missing Out (Z). Data analysis includes instrument quality testing (validity and reliability), classical assumption tests, multiple linear regression and mediation analysis using bootstrapping/PROCESS. This approach allows the study to explain not only direct effects but also indirect effects through the mediator.

1) Respondents Characteristics

Table 1
Respondents Characteristic

	Category	Frequency	Percentage
Age	18-21 years	45	30.00%
	22-25 years	52	34.65%
	26-28 years	53	35.33%
	Total	**150**	**100.00%**
Gender	Female	88	58.67%
	Male	62	41.33%
	Total	**150**	**100.00%**
Roblox playing intensity	Very often	38	25.33%
	Often	65	43.33%
	Sometimes	34	22.67%
	Rarely	13	8.67%
	Total	**150**	**100.00%**
Roblox playing frequency	Very often	39	26.00%
	Often	59	39.33%
	Sometimes	41	27.33%
	Rarely	11	7.33%
	Total	**150**	**100.00%**

Source: Authors' survey 2025-2026

Table 1 shows that most respondents are in the 26-28 years age group 35.33%, followed by 22-25 years 34.65% and 18-21 years 30.00%. Female respondents 58.67% outnumber male respondents 41.33%. In addition, most respondents report playing Roblox often or very often, indicating that sample is relevant for evaluating virtual experience on Roblox because respondents have sufficient exposure to gameplay and map exploration.

2) Instrument Quality Testing

Table 2
Validity Test

Variable	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Virtual Experience (X)	X1_1	0.416	0.778
	X1_2	0.414	0.778
	X2_1	0.544	0.762
	X2_2	0.592	0.756
	X2_3	0.602	0.755
	X3_1	0.179	0.802

	X3_2	0.392	0.782
	X4_1	0.491	0.769
	X4_2	0.450	0.774
	X4_3	0.525	0.765
FOMO (Z)	Z1_1	0.491	0.755
	Z1_2	0.624	0.720
	Z2_1	0.512	0.750
	Z2_2	0.511	0.750
	Z2_3	0.606	0.725
	Z2_4	0.415	0.771
Visit Intention (Y)	Y1_1	0.542	0.637
	Y1_2	0.411	0.686
	Y2_1	0.410	0.691
	Y2_2	0.541	0.632
	Y2_3	0.455	0.669

Source: Authors' survey 2025-2026

Validity was assessed using Corrected Item-Total, which indicates how well each item aligns with the overall construct score. For FOMO (Z), corrected item-total correlation values range from 0.415 to 0.624, indicating moderate to strong relationships between items and the total construct score. This suggests that the items consistently represent the FOMO construct. For Visit Intention (Y) the values range from 0.410 to 0.542 showing that all items contribute consistently to the overall visit intention score. For Virtual experience (X) most items show adequate corrected item-total correlation, indicating that the items are generally relevant for measuring the virtual experience perceived by respondents. The column Cronbach's Alpha if Item Deleted is included to examine the stability of internal consistency if an item were excluded, overall the values do not indicate extreme instability. Therefore, the final instrument is considered appropriate for further analysis.

Table 3
Reliability Test

Variable	Cronbach's Alpha	N of Items
Virtual Experience (X)	0.791	10
FOMO (Z)	0.779	6
Visit Intention (Y)	0.711	5

Source: Authors' survey 2025-2026

As shown in Table 3, Cronbach's Alpha values for Virtual Experience (0.791) and FOMO (0.779) indicate good reliability, while visit intention (0.711) indicates acceptable reliability. An alpha value above 0.70 suggest satisfactory internal consistency, meaning the items within each construct measure the same concept in a consistent manner. Therefore, the questionnaire instrument is considered reliable and suitable for subsequent inferential analyses, including regression and mediation testing.

3) Classical Assumption Tests

Figure 1
Normality Test

Tests of Normality

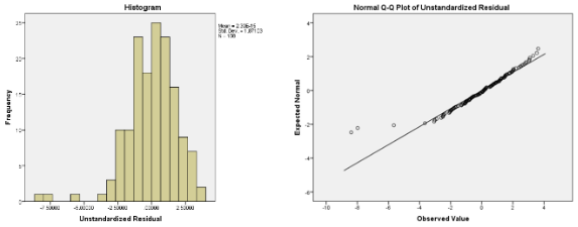
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.066	150	.200*	.933	150	.000

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Source: Authors' survey 2025-2026

Residual normality testing was conducted to ensure that the error term in the regression model does not substantially deviate from a normal distribution. The Kolmogorov-Smirnov test shows a significance value of 0.200 (>0.05), indicating that the residuals can be considered normally distributed based on this test. Meanwhile, the Shapiro-Wilk test shows a significance value of 0.000, which may occur because this test tends to be more sensitive to small deviations, especially with a relatively large sample size.

Figure 2
Histogram and Normal Q-Q Plot



Source: Authors' survey 2025-2026

In addition to statistical tests, residual normality was also examined visually using the residual histogram and the Normal Q-Q plot shows points that tend to follow the diagonal line, suggesting that deviations from normality are not extreme. Therefore, normality is considered acceptable for continuing the regression and mediation analyses. The difference between the Kolmogorov-Smirnov result (sig. 0.200) and the Shapiro-Wilk result (sig. 0.000) can occur because the Shapiro-Wilk test is highly sensitive with relatively large samples, meaning that even minor departures from normality may become statistically significant. Since the main analyses rely on regression and mediation testing and the visual diagnostic (histogram and Normal Q-Q plot) do not indicate severe non-normality, the residual distribution is considered acceptable for proceeding. In addition, the mediation analysis relies on bootstrapping, which provides more robust confidence intervals that are less dependent on strict normality assumptions, thereby improving the stability of statistical inference.

Figure 3
Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	8.024	1.564		5.132	.000		
	Total_X	.105	.051	.185	2.054	.042	.530	1.888
	Total_Z	.349	.067	.468	5.206	.000	.530	1.888

a. Dependent Variable: Total_Y

Source: Authors' survey 2025-2026

The multicollinearity results show Tolerance 0.530 and VIF 1.888 indicating that the independent variables do not have high intercorrelations. This is important because multicollinearity can lead to unstable coefficients and inflated standard errors. Thus, the individual contributions of Virtual Experience and FOMO to Visit Intention can be interpreted more clearly within the regression model.

Figure 4
Heteroscedasticity Test (Glejser)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.992	.970		3.085	.002
	Total_X	.079	.032	.262	2.491	.014
	Total_Z	-.199	.042	-.503	-4.786	.000

a. Dependent Variable: ABS_RES

Source: Authors' survey 2025-2026

The Glejser test indicates significance values of Total X 0.014 and Total Z 0.000 both < 0.05 suggesting heteroscedasticity. Heteroscedasticity can cause biased standard errors, making significance tests under classical OLS assumptions less stable when residual variance is not constant. Therefore, to strengthen inference, especially for mediation analysis this study uses Bootstrapping/PROCESS to obtain more robust standard errors and confidence intervals (CI) under non-constant variance conditions. As a consequence, statistical significance based on standard OLS output may be less reliable because heteroscedasticity can bias standard errors when residual variance is not constant. Therefore, while OLS coefficients are reported as the baseline model, inferential conclusions, especially for the mediation effects are primarily supported by the bootstrapping/PROCESS results that rely on confidence intervals. Accordingly, the presence of direct and indirect effects is interpreted based on the bootstrap confidence interval (BootLLCI and BootULCI which is more robust under heteroscedasticity. Future research may also consider reporting robust standard errors as an additional robustness check for the regression model.

4) Multiple Linear Regression Analysis

Figure 5
Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609[a]	.371	.363	1.884

a. Predictors: (Constant), Total_Z, Total_X

b. Dependent Variable: Total_Y

Source: Authors' survey 2025-2026

The R Square 0.371 indicates that Virtual Experience and FOMO jointly explain 37.1% the variance in Visit Intention, while the remaining 62.9% is explained by other factors outside the model. The Adjusted R Square 0.363 suggests that the model's explanatory power remains relatively stable after adjusting for the number of predictors, meaning the explained variance is not merely due to adding predictors.

Figure 6
F-Test (Simultaneous Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	307.960	2	153.980	43.394	.000[b]
	Residual	521.614	147	3.548		
	Total	829.573	149			

a. Dependent Variable: Total_Y

b. Predictors: (Constant), Total_Z, Total_X

Source: Authors' survey 2025-2026

The F-test evaluates the overall fit the regression model. The significance value of 0.000 (< 0.05) indicates that model is statistically significant. Therefore, Virtual Experience and FOMO simultaneously have a significance on Visit Intention.

5) Regression Coefficients (Partial Effects) and Regression Equation

Figure 7
Regression Coefficients Test

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	8.024	1.564		5.132	.000
	Total_X	.105	.051	.185	2.054	.042
	Total_Z	.349	.067	.468	5.206	.000

a. Dependent Variable: Total_Y

Source: Authors' survey 2025-2026

Figure 7 shows that Virtual Experience has a positive coefficient of 0.105 with a significance value of 0.042 indicating that better virtual experience is associated with higher visit intention. FOMO has a larger positive coefficient of 0.349 with a significance value of 0.000, suggesting that FOMO plays a strong role in predicting visit intention.

The regression equation is Y = 8.024 + 0.105X + 0.349Z meaning that a one-unit increase in Virtual Experience increases Visit Intention by 0.105 while a one-unit increase in FOMO increases Visit Intention by 0.349 holding the other variable constant.

Although figure 7 reports the OLS coefficients as the baseline model output, heteroscedasticity was identified in the assumption testing. Therefore, the main interpretation and decision making particularly for mediation are strengthened using Bootstrapping/PROCESS which provides more robust confidence intervals and inference under assumption violations.

Table 4
Mediation Path Coefficients

Path	Relationship	Coefficient (B)	Sig
c (Total Effect)	X dan Y	0.289	0.000
a	X dan Z	0.525	0.000
b	Z dan Y	0.349	0.000
c' (Direct Effect)	X dan Y	0.105	0.042

Source: Authors' survey 2025-2026

The mediation test was conducted to examine whether FOMO serves as a mechanism linking Virtual Experience to Visit Intention. The total effect of Virtual Experience on Visit Intention is significantly (c 0.289). Virtual Experience significantly predicts FOMO (a 0.525) and FOMO significantly predicts Visit Intention (b 0.349). When the mediator is included, the direct effect of Virtual Experience on Visit Intention remains significant but decreases (c' 0.105) indicating partial mediation.

Table 5
Mediation Test Bootstrapping

	Path	BootLLCI	BootULCI
Indirect Effect	X → Z → Y	0.0655	0.3028

Source: Authors' survey 2025-2026

The Bootstrapped confidence interval for the indirect effect ranges from 0.0655 to 0.3028 and does not include zero, confirming that the indirect effect is statistically significant. Therefore, FOMO mediates the relationship between Virtual Experience and Visit Intention. In addition, bootstrapping helps ensure that coefficient interpretation and confidence intervals are less affected by heteroscedasticity.

B. Discussion

The results indicate that Virtual Experience within the Mount Bromo virtual destination on Roblox significantly influences Visit Intention, suggesting that virtual exposure can function as an effective preview of a tourism destination. When respondents perceive the virtual experience as more immersive, enjoyable and informative, they tend to report a stronger intention to visit the destination in real life. This supports the view that virtual environments can serve as a form of destination communication that shapes both cognitive engagement and affective engagement. Furthermore, the regression findings show that FOMO has a stronger positive influence than Virtual

Experience in predicting Visit Intention, implying that social-psychological motivation is highly influential in driving intention, particularly within a platform that encourages social interaction and trend-based participation.

The mediation results provide further explanation regarding the mechanism of this relationship. FOMO partially mediates the effect of Virtual Experience on Visit Intention, meaning that virtual experience increases visit intention not only directly but also indirectly by increasing feelings of not wanting to miss out. In the context of Roblox, where community dynamics, trends, and virtual experience are common, users may interpret a strong virtual destination experience as a socially valuable and widely recognized. This can create a sense of urgency and social pressure to participate which then strengthens the intention to visit the real destination. Therefore, promoting destinations through virtual platforms may work through two complementary pathways an experiential-informational pathway and a social-psychological pathway. Together, these pathways explain how e well-designed virtual experience can translate into stronger real-world visit intention.

C. Limitations and Suggestions for Future Research

This study has several limitations that should be considered. First, the model explains 37.1% of the variance in Visit Intention, indicating that a substantial portion of visit intention is influenced by other factors outside the model, such as travel cost, accessibility, time availability, personal travel preferences, prior tourism experience, destination safety perceptions and offline social influence. Second, the study relies on self-report questionnaire data, which may involve subjective perceptions and potential response bias. Third, the research uses a cross-sectional design, which limits causal interpretation, even though the model direction is theoretically supported and mediation analysis provides evidence of a plausible mechanism. Fourth, generalization to other destinations or metaverse platforms should be approached carefully. Fifth, heteroscedasticity was indicated in the assumption testing, although bootstrapping was used to strengthen inference, future studies may consider additional robustness approaches such as robust standard errors or alternative modeling strategies.

Based on these limitations, future research is recommended to examine multiple virtual destinations and different platforms to test whether the relationship remain consistent. Future studies may also include additional variables to improve the model's explanatory power, such as destination image, perceived value, presence, perceived risk, social influence, trust in destination information and situational factors such as travel budget and accessibility. In addition, researchers could compare different types of virtual experience to examine whether higher immersion produces stronger FOMO and higher visit intention. Finally, future research may apply longitudinal or experimental designs, such as comparing a group exposed to a high-quality virtual experience with a control group, in order to better test causal relationships and validate the mediation mechanism more rigorously.

IV. CONCLUSION

This study investigated the influence of Virtual Experience on Visit Intention toward Mount Bromo, using Fear of Missing Out (FOMO) as a mediating variable in the context of the Mount Bromo map on the Roblox platform. Based on data from 150 Indonesian Gen Z Roblox users, the results show that virtual experience has a significant positive effect on visit intention. Virtual experience also significantly increases FOMO and FOMO has significant positive effect on visit intention. Mediation testing using bootstrapping confirms that FOMO partially mediates the relationship between virtual experience and visit intention, meaning virtual experience strengthens visit intention both directly and indirectly by increasing FOMO. Overall, the findings suggest that immersive virtual destination experience on social-gaming metaverse platforms can function as an effective pre-visit marketing strategy, while psychological and social pressure related to trends (FOMO) further amplify real-world travel intentions.

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