

pISSN: 1906 - 3296 © 2020 AU-GSB e-Journal.
eISSN: 2773 - 868x © 2021 AU-GSB e-Journal.
<https://assumptionjournal.au.edu/index.php/AU-GSB>

Optimizing Digital Engagement in Hotels: Analyzing Cross-cultural Fulfillment of Guest Needs

Teerathep Thepprasarn*, Suxin Zhang

Received: September 12, 2024. Revised: December 03, 2024. Accepted: February 22, 2025

Abstract

Purpose: This study explores the mediating role of social integrative needs between psychological desires— affective, cognitive, and tension-free needs—and personal identity development within the hotel guest experience. It addresses a gap in the existing literature on the complex relations between these factors in the context of hospitality. **Research design, data and methodology:** The study, based on the Uses and Gratifications Theory, employs Structural Equation Modeling (SEM) to examine relations among constructs and cross-cultural differences in guest experiences. Using purposive sampling, data were collected in early 2024 from 312 tourists at popular Bangkok destinations. The findings reveal significant cross-cultural variations, offering insights into digital marketing in hospitality. **Results:** The findings emphasize the significance of affective needs in strengthening both social and personal integrative needs, highlighting emotional engagement's value in digital marketing. However, cognitive needs did not significantly affect personal integrative needs, indicating that information alone may not drive personal identity formation. Additionally, while tension-free needs positively influenced social integration, the anticipated mediating effect of social integrative needs was not confirmed. **Conclusions:** The findings reveal significant cross-cultural differences in how digital marketing strategies meet diverse psychological needs, offering deeper insights into guest behavior and loyalty dynamics than previously understood.

Keywords : Digital Engagement in Hotel, Cross-culture Fulfillment, Social Integrative Needs, Personal Integrative Needs, Guest Needs

JEL Classification Code: D91, F64, L83, M31, Z32

1. Introduction

Specifically, information gaps exist in understanding how digital marketing strategies fulfill guests' social and personal needs to drive hotel consumption in the current literature. To the best of our knowledge, these needs are mostly explored individually rather than in combination (Gamidullaeva & Finogeev, 2023). There is a lack of empirical work defining social needs and their mediatory function between basic appetite and individuality in reference to hotel experiences. For example, Zeng and Gerritsen (2014) investigated the enhanced role of emotional needs in determining guest satisfaction, but how these needs create social interaction and enhance personal needs remain unclear.

Hospitality digital interaction is the process through which companies in the hospitality sector communicate with guests and clients using digital technology. Despite the increasing exploration of digital marketing in hospitality and tourism, limited information exists on how these marketing strategies meet the social and personal psychological needs of guests.

This study will address the above gap in the following ways: it seeks to determine how guests' emotional, cognitive, and stress-free needs can be satisfied through resource optimization in digital marketing strategies, focusing on both personal and social experiences.

¹*Teerathep Thepprasarn, Assistant Digital Marketing Manager, Sale and Marketing, Kingston Hotel Group, Bangkok, Thailand. Email: teera.thepprasarn@gmail.com

² Suxin Zhang, Ph.D. Graduated, International College, National Institute of Development Administration, Thailand, Email: tristanz2014@gmail.com

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

2. Literature Review

2.1 The Uses and Gratifications Theory in Digital Marketing for the Hospitality Industry

More so in the hospitality industry, getting to know guests is crucial in Digital Marketing. The theory that can assist in this regard is U and G, as formulated by Katz et al. (1973). This theory proves that people choose media to fulfill specific needs, such as seeking information, obtaining emotional outlets, and gaining social relations. It directly opposes the previous notion of passive media consumption by asserting guests' agency in selecting content.

According to U and G theory, marketers can also determine these different needs and, in return, use digital content to address them (Moon et al., 2022). This approach enhances customer interaction, loyalty, and satisfaction levels, thereby providing a competitive advantage (Bu et al., 2021). Understanding why guests consume media can be applied to improve marketing on digital platforms and, consequently, enhance guest experience.

2.2 Optimizing Digital Marketing in Hospitality to Meet Guest Needs

In hospitality, such marketing initiatives are required to address multiple exigencies relevant to a guest. The major issue is that digital marketing is not fully optimized to fulfill the various needs of guests (George, 2021). Among these are increasing hedonic pleasure, providing information, relationship building, customization, and relieving booking anxiety (Kim & Law, 2015). These guest needs are the emotional, cognitive, and stress-free needs described by Gretzel and Yoo (2008); Hosany and Prayag (2014); and Law et al. (2014). The literature review presented herein will discuss how digital marketing enables these aspects and where further enhancement is required (Geng et al., 2024).

It will lay emphasis on the role emotions play in loyalty, the need for information while making decisions (Moon et al., 2022), the significance of social relations in the overall experience (Bu et al., 2021), the increasing trend in personalization, and the seamless booking process. Due to its scope, this study is valuable for studying the impacts of digital marketing strategies on guest satisfaction and loyalty in the hospitality industry.

The literature review will also focus on the extent to which each of the above needs is fulfilled through digital marketing. This modeling will provide an evaluation of the extent to which contemporary strategies align with these needs and which ones require further tweaks (Geng et al., 2024). The role of emotional satisfaction in the concept of loyalty will be examined, as well as the significance of

accurate information (Moon & An, 2022), social connections (Bu et al., 2021), and the necessity of personalization (Moon et al., 2022). This review will aid in identifying shortcomings that could be addressed to enhance online marketing methods, thereby improving satisfaction and loyalty in the hospitality industry.

The study found contradictory evidence regarding the effect of digital marketing on meeting the needs of guests (Bu et al., 2021). For instance, Xiang and Gretzel (2010) concluded that increased pre-trip digital information positively impacts decision-making. However, Law et al. (2014) identified evidence indicating difficulties in avoiding booking stress through technology. Hosany and Prayag (2014) acknowledge that not all personalization strategies create a sense of satisfaction, while Tussyadiah and Zach (2015) demonstrate that personalization leads to increased customer satisfaction. Such inconclusive findings highlight the significance of conducting further research to improve guest satisfaction.

2.3 Affective Needs, Cognitive Needs, Tension-free Needs, Social Integrative Needs and Personal Integrative Needs

In the hospitality industry, the combination of emotional, cognitive, and tension-free needs, along with social and personal needs, helps explain guest experiences with digital marketing. Emotional needs relate to the feelings created by marketing, which are key to guest engagement and satisfaction (Hosany & Prayag, 2014). Cognitive needs involve the desire for information about the hotel's services, helping guests make decisions (Gretzel & Yoo, 2008). Tension-free needs focus on making the booking process simple and easy, ensuring convenience (Law et al., 2014). Social needs refer to the desire for social interaction, supported by digital platforms (Xiang and Gretzel, 2010). Personal needs relate to forming personal identity and growth, often through personalized experiences (Tussyadiah & Zach, 2015). Together, these needs show that digital marketing must be versatile to meet guests' complex needs.

The links between emotional, cognitive, and tension-free needs, along with social needs, impact personal needs. Emotional needs strengthen social needs by building an emotional bond that promotes interaction and belonging. This idea is supported by Social Identity Theory, which states that people seek to improve self-concept through group membership (Tajfel et al., 1979). Cognitive needs support social needs by providing the information necessary for meaningful interactions in hospitality (Litt et al., 2020). Tension-free needs ensure a stress-free environment, allowing guests to engage in social activities comfortably (Chen et al., 2020). Social interaction fulfills personal needs by helping guests express and build their personal identity

during travel (Koudenburg et al., 2018). This aligns with Maslow's Hierarchy of Needs, which highlights the progression from belonging to self-actualization (Maslow, 1943). Based on this evidence, the following hypotheses are proposed:

H1: Affective needs positively influence social integrative needs.

H1a: Affective needs positively influence personal integrative needs.

H2: Cognitive needs have a positive effect on social integrative needs.

H2a: Cognitive needs have a positive effect on personal integrative needs.

H3: Tension-free needs positively impact social integrative needs.

H3a: Tension-free needs positively impact personal integrative needs.

H4: Social integrative needs positively affect personal integrative needs.

2.4 Exploring the Synergistic Interplay of Affective, Cognitive, and Tension-Free Needs

The connection between emotional, cognitive, and tension-free needs in hospitality digital marketing is supported by theories that illustrate how these factors work together. According to the Affect Infusion Model by Forgas (1995), emotional responses can shape cognitive processes. This implies that emotional engagement with digital marketing can help guests retain and understand information more effectively (Dwivedi et al., 2021). This relationship is crucial for creating marketing strategies that attract attention and support informed decision-making.

Similarly, the Transactional Model of Stress and Coping by Lazarus and Folkman (1984) explains the role of tension-free needs. It suggests that reducing stress during the booking process enhances both cognitive and emotional outcomes by removing barriers to understanding and satisfaction. These theories emphasize the importance of a comprehensive digital marketing strategy in hospitality, where addressing one need can positively influence others, ultimately improving the overall guest experience. Based on this, the following hypotheses are proposed:

H5: There is a positive correlation between affective needs and cognitive needs.

H6: Cognitive needs are positively correlated tension-free needs.

2.5 Mediating Roles of Social Integrative Needs

In the context of social integrative needs, they act as the link between other needs and the personalization of the

hospitality business. These other needs may include the affective, cognitive, and tension-free needs of guests. This is explained by the principles of Social Identity Theory, introduced by Tajfel et al. (1979), which aligns with Putnam's (2001) assessment of social capital. These theories suggest that the roles people play in society and their need to belong to a group significantly influence the development of self-identity.

As emphasized by Hosany and Prayag (2014), social needs create the initial stages of communication and involve social activities that are crucial to guests' individual experiences of hotel facilities. Similarly, cognitive gratification arises from the availability of extensive and relevant information (Gretzel & Yoo, 2008). Another factor that positively impacts the perception of the social environment is a stress-free booking experience (Law et al., 2014). Such an environment fosters self-development by enabling guests to connect with their social relationships, fulfilling their self-esteem and self-actualization desires, as described by Maslow (1943).

These variables interact and imply the need for multiple research levels to understand the extent of guest satisfaction. Therefore, it is essential to highlight that social needs serve as critical mediating factors in the impact of digital marketing efforts on guests' personal experiences and outcomes. Such a nuanced understanding contributes positively to the development of improved marketing techniques. Based on this, the following hypotheses are proposed:

H7: Social integrative needs mediate the relation between affective needs and personal integrative needs.

H8: Social integrative needs mediate the relation between cognitive needs and personal integrative needs.

H9: Social integrative needs mediate the relation between tension-free needs and personal integrative needs.

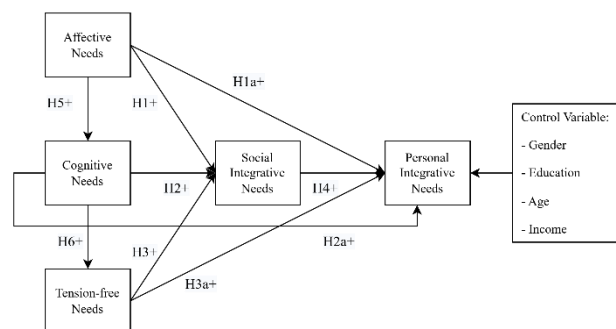


Figure 1: Conceptual Framework

3. Methodology

This research analyses the moderating role of social needs in the hospitality sector in Bangkok. Specifically, it applies the Uses and Gratifications theory to examine the impact of digital marketing on tourists. The study builds on the affordances of affective, cognitive, and tension-free needs to explore their influence on personal integrative needs. Participants were selected through purposive sampling and completed self-administered questionnaires. The sample included diverse demographic variables, such as age and income, to account for their potential influence on psychological needs in digital engagement. Justification for the sample size ensures sufficient cross-cultural representation and the robustness of the findings.

3.1 Research Design and Data Collection

Using purposive sampling data collection was done at the beginning of the year 2024. Recruiting of participants was done both randomly and purposefully from common destinations for tourists in Bangkok such as Sukhumvit Soi 11, Khao San Road, Wat Pho, The Grand Palace, The Temple of the Emerald Buddha, Siam Paragon and CentralWorld. Informed consent was obtained when they were assured that the study was voluntary, their responses would not be identifiable when the anonymous information was used for research only. There were 312 participants' responses collected out of the 500 questionnaires administered, which is 62 percent response rate obtained from the study.

To ensure that the sample size of 312 respondents is adequate, statistical and theoretical justifications can be made. Given the large and undefined population of tourists visiting Bangkok, the required sample size can be calculated using the formula $n = \frac{Z^2 \cdot p \cdot (1-p)}{e^2}$ (where $Z = 1.96$, $p = 0.5$, and $e = 0.05$, yielding $n = 384$ for a large population. However, for smaller accessible populations, the finite population correction formula can be applied to adjust this figure appropriately (Cochran, 1977).

For this study, the response rate of 62% is acceptable and aligns with typical response rates in social sciences (Baruch & Holtom, 2008). Additionally, the sample size is justified in comparison to similar hospitality and tourism studies, which often involve 200 to 400 participants (Hosany & Prayag, 2014; Moon & An, 2022). The demographic diversity of the sample further supports its adequacy, allowing for robust cross-cultural analysis and subgroup comparisons. By meeting these criteria, the study ensures its findings are reliable and generalizable within the hospitality sector (Hair et al., 2021).

3.2 Measurement Scales

The items on the questionnaire used are shown in Table 1 and they measure effective, cognitive, social, personal and tension free needs for this study. The research questions focus on the U and G theory with the questions modified to apply to the Bangkok hospitality industry. Although developed specially for this research, the items used from the assessment are derivatives of earlier work such as Blumler (1979). The affective and cognitive needs questions adopted the information needs and satisfaction from the work done by Gretzel and Yoo (2008). The social integrative needs and personal integrative needs, and tension-free need' questions used in the study were adapted from Tussyadiah and Zach (2015) study on social identity tourism and personal growth. In addition, the tension-free need' questions correspond with the aspects of travel stress as argued by Law et al. (2014). All items were answered on a five-point Likert scale with options ranging from strongly disagree, disagree, neutral, agree to strongly agree to capture as many tourists' needs as possible and experiences.

Table 1: Questionnaires Construct

Variable	Measurement Item	Scale	Source
AN	AN1. My overall experience in Bangkok was satisfying.	1=strongly disagree 5=strongly agree	Gretzel and Yoo (2008)
	AN2. I found my visit to Bangkok enjoyable.		
	AN3. I felt relaxed and stress-free during my visit to Bangkok.		
	AN4. My emotional response to Bangkok was positive.		
	AN5. I felt a sense of connection to Bangkok.		
CN	CN1. Finding information about Bangkok before my visit was easy.	1=strongly disagree 5=strongly agree	
	CN2. The information I found about Bangkok was accurate.		
	CN3. I was confident in my ability to navigate and explore Bangkok.		
	CN4. Making bookings and reservations in Bangkok was easy.		
	CN5. Technology helped me understand the attractions and activities in Bangkok well.		
SN	SN1. I felt connected to other tourists in Bangkok.	1=strongly disagree 5=strongly agree	Tussyadiah and Zach (2015).
	SN2. I felt supported by friends and family during my visit to Bangkok.		
	SN3. Recommendations I received about Bangkok were helpful.		
	SN4. Sharing my experiences of Bangkok with others was easy.		

Variable	Measurement Item	Scale	Source
PN	SN5. I felt a sense of belonging in Bangkok.	1=strongly disagree 5=strongly agree	Law et al. (2014)
	PN1. I learned about the history and culture of Bangkok during my visit.		
	PN2. I felt empowered by making my own travel decisions in Bangkok.		
	PN3. I was proud of my ability to navigate and explore Bangkok independently.		
	PN4. My experiences in Bangkok contributed to my sense of self-identity.		
	PN5. I felt a sense of accomplishment after visiting Bangkok.		
TN	TN1. I was stressed about getting around in Bangkok.	1=strongly disagree 5=strongly agree	Law et al. (2014)
	TN2. I was anxious about making bookings and reservations in Bangkok.		
	TN3. I felt overwhelmed by the choices of attractions and activities in Bangkok.		
	TN4. Understanding signs and menus in Bangkok was difficult for me.		
	TN5. I felt frustrated when trying to communicate with locals in Bangkok.		

Note: AN=Affective Needs, CN=Cognitive Needs, SN=Social Integrative Needs, PN=Personal Integrative Need, and TN=Tension-free Need

4.2 Construct Validity and Reliability

The comprehensive dataset forms the foundation for conducting Structural Equation Modeling. The focus is on assessing all constructed variables. Each construct was carefully evaluated for reliability and validity to ensure the strength of the measures. Indicator loadings ranged from 0.74 to 0.79 across all constructs, surpassing the recommended threshold of 0.70, showing strong contributions of individual items (Hair et al., 2019). Cronbach's Alpha values, both standardized and unstandardized, ranged from 0.57 to 0.80, demonstrating good internal consistency (Nunnally, 1978; Thorndike, 1995). Additionally, the constructs' Composite Reliability values ranged from 0.62 to 0.82, and the Average Variance Extracted values were between 0.56 and 0.57, reinforcing convergent validity (Fornell & Larcker, 1981). These statistics confirm that a significant portion of the variance in indicators is captured by the constructs they measure, which is essential for SEM analysis (Hair et al., 2019). The dataset's meticulous preparation enables a strong SEM analysis. By validating construct reliability and addressing Common Method Variance (Podsakoff et al., 2003) and discriminant validity (Fornell & Larcker, 1981), the study establishes a solid basis for testing relations between constructs and understanding the theoretical model.

4. Results

4.1 Descriptive Statistic

The study, encapsulating responses from a total of 312 participants across various nationalities, with the United States leading at 13.46%, followed closely by the United Kingdom at 11.54%, and Australia at 8.97% the rest were other countries. Gender distribution was predominantly female, constituting 80.80% of the sample, while males accounted for 17%, and other genders made up 2.20%. In terms of income, the majority fell within the \$1,001 to \$3,000 range, encompassing 85.90% of the participants, indicating a middle-income demographic. The age group was predominantly between 18 to 35 years old, highlighting a younger participant base with 75.70% of the sample. Educational levels varied, with primary education, secondary education (including high school), and bachelor's degree holders representing a significant portion of the responses, demonstrating a diverse range of educational backgrounds.

Table 2: Indicator Loadings and Reliability Measures

Constructs	Indicator	Loading	α	C	AVE
AN	AF1	0.74	0.798	0.820	0.556
	AF2	0.75			
	AF3	0.75			
	AF4	0.75			
	AF5	0.74			
CN	CN1	0.76	0.702	0.720	0.568
	CN2	0.75			
	CN3	0.75			
	CN4	0.75			
	CN5	0.76			
SN	SN1	0.76	0.715	0.730	0.565
	SN2	0.77			
	SN3	0.74			
	SN4	0.75			

Constructs	Indicator	Loading	α	C	AVE
	SN5	0.74			
PN	PN1	0.75	0.575	0.615	0.571
	PN2	0.76			
	PN3	0.76			
	PN4	0.76			
	PN5	0.75			
TN	TN1	0.75	0.695	0.750	0.574
	TN2	0.79			
	TN3	0.75			
	TN4	0.75			
	TN5	0.75			

Note: α =Cronbach's Alpha, C=Composite Reliability, AVE=Average Variance Extracted, AVE=Average Variance Extracted, AN=Affective Needs, CN=Cognitive Needs, SN=Social Integrative Needs, PN=Personal Integrative Needs, and TN=Tension-free Needs

4.3 Evaluating Discriminant Validity

This table showcases the Heterotrait-monotrait ratio as a criterion for assessing the discriminant validity in SEM, highlighting the relations between constructs. The HTMT values suggest varying degrees of distinctiveness between the constructs, with values below 0.85 generally indicating acceptable discriminant validity (Henseler et al., 2015). The results are shown in Table 3.

Table 3: Heterotrait-Monotrait Ratio (HTMT) of Constructs

	AN	CN	PN	SN	TN
AN					
CN	0.353				
PN	0.737	0.719			
SN	0.532	0.658	0.661		
TN	0.225	0.273	0.717	0.275	

Note: AN=Affective Needs, CN=Cognitive Needs, SN=Social Integrative Needs, PN=Personal Integrative Needs, and TN=Tension-free Needs

4.4 Hypothesis Testing

The interrelations among the variables within the digital marketing context of the hospitality industry were examined through SEM. This section delineates the outcomes of the hypotheses tested, revealing the dynamics of these constructs (Hair et al., 2019).

4.5 The Result of Hypothesis Testing

SEM analysis scrutinized the direct effects among the constructs, yielding mean effect size (μ), standard deviation (σ), t-value (t), and p-value (p) for each hypothesized relation (Kline, 2015). The results are presented in Table 4. These statistical measures allowed for a robust evaluation of the proposed hypotheses (Hair et al., 2019). The hypothesis results are provided as follows:

H1: Affective needs positively influence social integrative needs. The analysis revealed a significant positive effect ($t = 4.19$, $p < 0.00$), strongly supporting H1. Therefore, hypothesis H1 is statistically significant.

H1a: Affective needs positively influence personal integrative needs. The analysis supported H1a with a significant effect ($t = 3.86$, $p < 0.00$). Therefore, the hypothesis H1a is statistically significant.

H2: Cognitive needs have a positive effect on social integrative needs. The analysis showed a significant positive effect ($t = 10.81$, $p < 0.00$). Therefore, hypothesis H2 is statistically significant.

H2a: Cognitive needs have a positive effect on personal integrative needs. However, H2a was not supported; the effect was not statistically significant ($t = 0.89$, $p < 0.37$). Therefore, the hypothesis H2a is not statistically significant.

H3: Tension-free needs positively impact on social integrative needs. The analysis confirmed a significant positive effect for H3 ($t = 2.47$, $p < 0.01$). Therefore, hypothesis H3 is statistically significant.

H3a: Tension-free needs positively impact on personal integrative needs. The analysis supported H3a with a significant positive effect ($t = 4.84$, $p < 0.00$). Therefore, the hypothesis H3a is statistically significant.

H4: Social integrative needs positively effect on personal integrative needs. The analysis revealed a statistically significant effect ($t = 3.05$, $p < 0.00$). Therefore, hypothesis H4 is statistically significant.

H5: There is a positive correlation between affective needs and cognitive needs. The analysis provided statistical support for H5 ($t = 3.36$, $p < 0.00$). Therefore, hypothesis H5 is statistically significant.

H6: Cognitive needs are positively correlated with tension-free needs. The analysis did not find statistical support for H6, as the effect was not significant ($t = 1.19$, $p < 0.24$). Therefore, hypothesis H6 is not statistically significant.

4.6 Mediation Testing

The results of hypotheses H7, H8, and H9 investigate the mediating role of social integrative needs between the constructs and personal integrative needs. Each hypothesis is examined in detail based on the data presented in Table 4

regarding the mediating effect of social integrative needs. The mediation tests are presented as follows:

H7: Social integrative needs as a mediator between affective needs and personal integrative needs. This hypothesis posited that social integrative needs mediate the relation between affective needs and personal integrative needs. The analysis showed a marginal effect ($t = 1.76$, $p < 0.08$). Thus, hypothesis H7 is not statistically supported.

H8: Social integrative needs as a mediator between cognitive needs and personal integrative needs. The analysis did not provide statistical support for H8 ($t = 1.36$, $p < 0.18$). Therefore, hypothesis H8 is not statistically significant.

H9: Social integrative needs as a mediator between tension-free needs and personal integrative needs. The analysis yielded a marginal effect ($t = 1.70$, $p < 0.09$). Consequently, hypothesis H9 is not statistically supported.

4.7 Control Variables

The influence of control variables such as gender, age, education, and income on personal integrative needs (PN) was analyzed. The results are summarized as follows:

Gender: The relation between gender and personal integrative needs was not statistically significant ($t = 1.57$, $p = 0.12$). This suggests that gender does not play a significant role in predicting personal integrative needs within the context of this study.

Age: Age exhibited a positive and significant effect on personal integrative needs ($t = 1.98$, $p = 0.05$). This indicates that older individuals are more likely to prioritize or experience personal integrative needs.

Education: Education level showed a positive and highly significant relation with personal integrative needs ($t = 2.85$, $p = 0.01$). This suggests that individuals with higher levels of education are more inclined to value or fulfill personal integrative needs.

Income: Income demonstrated a significant negative effect on personal integrative needs ($t = 2.91$, $p = 0.00$). This finding implies that individuals with higher incomes may have reduced focus on personal integrative needs, possibly due to differing priorities or greater access to alternative resources for fulfilling such needs.

Table 4: Result of Hypothesis Testing

Direct Effects						
Hypothesis	Relation	μ	σ	T	p	Decision
H1	AN \rightarrow SN	0.25	0.06	4.19***	0.00	Supported
H1a	AN \rightarrow PN	0.25	0.07	3.86***	0.00	Supported

Direct Effects						
Hypothesis	Relation	μ	σ	T	p	Decision
H2	CN \rightarrow SN	0.60	0.06	10.81***	0.00	Supported
H2a	CN \rightarrow PN	-0.05	0.06	0.89	0.37	Not Supported
H3	TN \rightarrow SN	0.11	0.04	2.47**	0.01	Supported
H3a	TN \rightarrow PN	0.54	0.11	4.84***	0.00	Supported
H4	SN \rightarrow PN	0.24	0.08	3.05***	0.00	Supported
H5	AN \rightarrow CN	0.23	0.07	3.36***	0.00	Supported
H6	CN \rightarrow TN	-0.08	0.07	1.19**	0.24	Not Supported
Mediating Effect of SN						
H7	AN \rightarrow PN	0.07	0.04	1.76	0.08	Not Supported
H8	CN \rightarrow PN	0.10	0.07	1.36	0.18	Not Supported
H9	TN \rightarrow PN	0.03	0.02	1.70	0.09	Not Supported
Control Variables						
	GENDER \rightarrow PN	0.05	0.03	1.57	0.12	Not Supported
	AGE \rightarrow PN	0.09	0.05	1.98*	0.05	Supported
	EDU \rightarrow PN	0.14	0.05	2.85**	0.01	Supported
	INCOME \rightarrow PN	-0.16	0.06	2.91***	0.00	Supported

Note: μ = Sample Mean, σ =Standard deviation (STDEV), T=T statistic, p=P value, t-value** > 2.33 ($p < 0.01$); t-value* > 1.65 ($p < 0.05$), AN=Affective Needs, CN=Cognitive Needs, SN=Social Integrative Needs, PN=Personal Integrative Needs, TN=Tension-free Needs, and EDU= Education

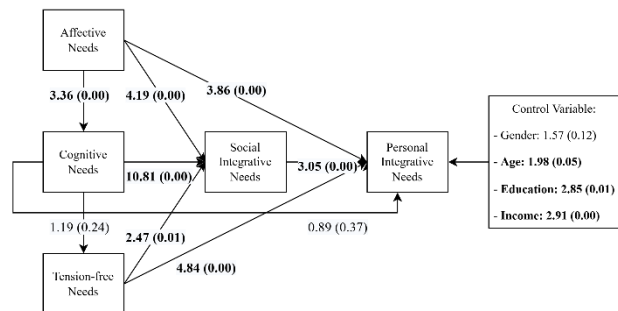


Figure 2: Partial Least Square Result

5. Discussion

This research focuses on the roles of the need for emotion, the need for cognition, and the need for stress relief, in alignment with the Uses and Gratifications theory, which can be utilized to explain guest engagement. Emotional needs are a key focal point in studies addressing aspects of social and personal satisfaction (Lee & Allen, 2002; Litt et al., 2020). These studies postulate that affective bonds play a significant role in fostering guests' loyalty, as supported by Hosany and Prayag (2014) and Moon and An (2022). Additionally, they provide insights into how cognitive needs satisfy social interaction, aligning with the research of Gretzel and Yoo (2008).

5.1 Affective Needs

The significant importance of emotional needs in social and personal relationships underscores the central role of emotional involvement. This aligns with the findings of Hosany and Prayag (2014), who argued that emotional marketing enhances customer loyalty and satisfaction, a notion further supported by Moon and An (2022). The results provide empirical evidence that emotional orientations effectively capture guests' attention. Crafting emotionally resonant content not only fosters social connections but also helps individuals establish a strong personal identity.

5.2 The Role of Cognitive Needs in Social Integration

The strong connection between cognitive and social integrative needs underscores the importance of informative content. Gretzel and Yoo (2008) emphasized the role of information in fostering social connections. Their theory suggests that guests seek digital content that fulfills their informational needs, thereby enhancing social engagement. However, the weaker link between cognitive needs and personal integrative needs indicates a more nuanced relationship. While information supports decision-making, it may not significantly influence personal identity formation in hospitality contexts.

5.3 Tension-Free Needs' Impact on Social Dynamics

The positive connection between tension-free needs and social interactions underscores the importance of streamlined booking processes. Law et al. (2014) emphasize that ease and convenience reduce stress while facilitating social engagement. This finding suggests that si

mplifying the planning and booking stages enhances guest engagement, highlighting the critical role of user-friendly digital platforms.

5.4 Mediating Role of Social Integrative Needs

Mediation analysis reveals a complex relation, indicating that social integrative needs do not fully mediate the impact of cognitive or tension-free needs on personal identity. This suggests that while social connections are important, they are not the sole factor in how information access and ease of booking contribute to personal growth. This result aligns with the Uses and Gratifications framework, which highlights the multifaceted nature of psychological needs. Guests may prioritize direct outcomes, such as acquiring information or reducing stress, over their integration into social contexts when engaging with digital platforms. These findings suggest the necessity of exploring broader mechanisms by which digital marketing influences guest experiences. Geng et al. (2024) emphasize the importance of leveraging these insights to extend digital guest engagement strategies.

5.5 Conclusion

This research uses the Uses and Gratifications theory to analyze the guest engagement in the hospitality industry with regards to affective needs, cognitive needs, tension-free needs and social integrative needs. The results outlined moderate to high direct effects of affective needs, cognitive needs, and tension-free needs on guest satisfaction and loyalty, emphasizing the importance of emotional resonance, informational value, and stress-reducing features, stressing the aspect of satisfaction based on the appeal to emotions, value of information, and stress-reducing characteristics.

However, no significance was found for the mediating role of social integrative needs. This means that although social relations may be important, they can only help link psychological and functionality necessities to personal identity outcomes partially. This may result from guests not seeking mediatorial functions, while the priority given to demands for social presence is reflected in emotional rewards and simplicity of use. This is consistent with the Uses and Gratifications theory that accepts differential motivation among users.

Also, these dynamics may be elaborated by culture when individualistic motives could reduce the value of the social integrative consideration. The consequences of these studies point to the importance for hospitality marketers to develop appealing emotionally charged content, offering relevant information and optimizing the booking procedures. Therefore, it is important that strategies developed favor both individualistic as well as collectivist cultures. Further

research should be conducted regarding other mediating variables and cultural factors that would add to the existing knowledge regarding how digital marketing can fulfil various needs of the guests and increase engagement performance.

5.6 Limitations

This study acknowledges several limitations that might affect its findings' interpretation. First, the reliance on SEM limits exploration to measurable relations between constructs. This may overlook subtle or emerging dynamics not captured by the model. Additionally, the study focuses only on the U and G in digital marketing. This may not include all factors affecting guest satisfaction and engagement. The cross-sectional data also limits understanding of how these relations change over time.

5.7 Recommendations

For greater impact to consumers, hospitality marketers are encouraged to create emotionally connecting web content that promotes interpersonal and interactional relationships. Anything from travel information, booking systems, and websites that satisfy cognitive and tension-free needs can be well served by informative and transparent content in easily navigable platforms. Reference to cross cultural issues should be made in that customized strategies should be congruent with the content as well as the aesthetic appeal of the intended audiences. Consistent evolution of digital marketing, a utilization of newer tools such as artificial intelligence (AI), needs to be applied to match the growing and more demanding expectations of guests, to provide a higher level of satisfaction and loyalty.

5.8 Future Research

Future research should use longitudinal studies to track changes in guest needs. This can help observe trends in response to digital marketing over time. Qualitative methods, like interviews, could offer deeper insights into guests' emotional and psychological responses. This would give a richer view of the digital marketing impact on potential guests. Expanding the framework to include more theories may reveal extra layers of guest experiences. This would make digital marketing strategies more robust in the hospitality industry. Exploring cultural, demographic, and technological influences could improve understanding of effectiveness across market segments.

References

- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61(8), 1139-1160.
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication Research*, 6(1), 9-36.
<https://doi.org/10.1177/009365027900600102>
- Bu, Y., Parkinson, J., & Thaichon, P. (2021). Digital content marketing as a catalyst for e-wom in food tourism. *Australasian Marketing Journal*, 29(2), 142-154.
- Chen, Y.-L., Chen, J., Liu, W.-Y., & Sharma, T. (2020). Expected benefits of people interactions and guest experiences. *International Hospitality Review*, 34(2), 187-202.
<https://doi.org/10.1108/IHR-04-2020-0010>
- Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). Wiley.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102-168.
<https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Forgas, J. P. (1995). Mood & judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117(1), 39.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gamidullaeva, L., & Finogeev, A. (2023). Optimal management of tourism products based on the analysis of user preferences. *Conference on Creativity in Intelligent Technologies and Data Science*, 390-402.
- Geng, L., Li, Y., Zhang, Y., Jiang, Z., & Xue, Y. (2024). Advancing tourism recovery through virtual tourism marketing: An Integrated approach of uses and gratifications theory and attachment to VR. *Current Issues in Tourism*, 27(2), 234-250.
<https://doi.org/10.1080/13683500.2023.2177834>
- George, R. (2021). Digital marketing in tourism and hospitality. in R. George (Ed.), *marketing tourism and hospitality: Concepts and Cases* (pp. 369-415). Springer International Publishing.
https://doi.org/10.1007/978-3-030-64111-5_12
- Gretzel, U., & Yoo, K. H. (2008). Use and impact of online travel reviews. In *Information and Communication Technologies in Tourism 2008* (pp. 35-46). Springer.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate Data Analysis* (8th ed.). Cengage.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Henseler, J., Hubona, G., & Ray, P. A. (2015). Using PLS path modelling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, 116(1), 2-20.
<https://doi.org/10.1108/IMDS-09-2015-0382>
- Hosany, S., & Prayag, G. (2014). *Determinants and outcomes of tourists' emotional responses: Towards an integrative model for destination brands*. Routledge.

- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The public opinion quarterly*, 37(4), 509-523.
- Kim, H. H., & Law, R. (2015). Smartphones in tourism and hospitality marketing: A literature review. *Journal of Travel and Tourism Marketing*, 32(6), 692-711.
- Kline, P. (2015). *A handbook of test construction (Psychology Revivals): Introduction to Psychometric Design*. Routledge.
- Koudenburg, N., Jetten, J., Enz, K. F., & Haslam, S. A. (2018). The social grounds of personal self: Interactions that build a sense of 'We' help clarify who 'I' am. *European Journal of Social Psychology*, 1-15.
- Law, R., Buhalis, D., & Cobanoglu, C. (2014). Progress on information and communication technologies in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 26(5), 727-750.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131-142. <https://doi.org/10.1037/0021-9010.87.1.131>
- Litt, E., Zhao, S., Kraut, R., & Burke, M. (2020). What are meaningful social interactions in today's media landscape? A cross-cultural survey. *Social Media and Society*, 6(3), 209-428. <https://doi.org/10.1177/2056305120942888>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>
- Moon, J.-W., An, Y., & Norman, W. (2022). Exploring the application of the uses and gratifications theory as a conceptual model for identifying the motivations for smartphone use by e-tourists. *Tourism Critiques: Practice and Theory*, 3(2), 102-119.
- Moon, J.-W., & An, Y. (2022). Uses and gratifications motivations and their effects on attitude and e-tourist satisfaction: A multilevel approach. *Tourism and Hospitality*, 3(1), 116-136.
- Nunnally, J. C. (1978). An overview of psychological Measurement. *Clinical Diagnosis of Mental Disorders: A Handbook*, 97-146.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 7-9.
- Putnam, R. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research*, 2(1), 41-51.
- Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An integrative theory of intergroup conflict. *Organizational Identity: A Reader*, 56(65), 84-91.
- Thorndike, R. M. (1995). Book review: psychometric theory by Jum Nunnally and Ira Bernstein New York: McGraw-Hill, 1994, 752 pp. *Applied Psychological Measurement*, 19(3), 303-305.
- Tussyadiah, I., & Zach, F. (2015). *Hotels vs. peer-to-peer accommodation rentals: Text analytics of consumer reviews in Portland, Oregon*. Peer-to-Peer Accommodation Rentals: Text Analytics of Consumer Reviews in Portland, Oregon.
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Mmanagement*, 31(2), 179-188.
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27-36.