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Advertisements that Follow Users Online and Their Effect on Consumers' Satisfaction and Expectation Confirmation: Evidence from the Tourism Industry

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1 Introduction

The Internet and social media have changed consumer behavior and how tourism companies conduct their business (Dwivedi et al. 2021). The massive potential audience available, spending many hours a day using social media across various platforms, pushed marketers to embrace social media as a marketing channel and develop new marketing strategies (Appel et al. 2020).

Retargeting has emerged as an online advertising strategy (Varnali 2019). According to Berman (2018), retargeting advertisements allow e-tourism companies to create highly personalized travel plans and offer competitive deals based on their previous browsing history. However, this kind of strategy is very sensitive as it may affect how consumers view their travel-related purchases and thus their post-purchase satisfaction. For example, better-placed deals than the one consumer purchased can negatively affect their post-purchase satisfaction. Further, its effect can be different on diverse consumer groups defined by sociodemographic variables such as gender, age, education, or the amount of time the consumer spends online daily.

Research has already analyzed the retargeting effect on consumer behavior. However, most of the literature on retargeting has been focused on pre-purchase topics such as ethical and regulatory concerns (Aalberts et al. 2016; De Lima and

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Legge 2014; Leenes and Kosta 2015), consumer perceptions of retargeting (Smit et al. 2014; Ur et al. 2012), and best practices for campaign effectiveness in terms of timing, delivery, and repetition (Bleier and Eisenbeiss 2015; Lambrecht and Tucker 2013; Li et al. 2021; Sahni et al. 2019). Limited research has been conducted on the impact of post-purchase retargeting on consumer behaviour, and there is a lack of evidence regarding potential variations in this effect across diverse consumer groups. Thus, it remains crucial that the role of retargeting is studied and viewed beyond website visits in response to post-purchase satisfaction levels among e-tourism industry consumers and their expectation confirmation.

Using the expectation confirmation theory (Bhattacharjee 2001) as a framework in this chapter, we relate three main constructs: expectation confirmation, satisfaction, and repurchase intention, with retargeting intended as a measurement of how competing the post-purchase retargeted ads consumers experienced compared to their purchase. The retargeting construct was developed considering the model of consumer's buying decision (Dubrovski 2001) and including four indicators (price, features, value, and company reputation).

In this chapter we assume that the effect of more competitive retargeting advertisement acts as a violation of consumers original expectations, thus affecting their levels of expectations confirmation according to violated expectation model (Pinquart et al. 2021). Also, it is assumed to have effects toward satisfaction as suggested in previous retargeting literature (Baek and Morimoto 2012; Lambrecht and Tucker 2013; Li et al. 2021).

This chapter contributes to and extends existing research on online advertising and retargeting in the tourism sector by (1) analyzing the effect of retargeting on the causal chain expectations-satisfaction-repurchase intention of online consumers and (2) exploring the existence of different consumer groups identified by gender, age, education, and daily time spent on social media where the effect of retargeting on expectations and satisfaction is different.

2 Methodology

E-tourism online buyers in Saudi Arabia with an active account on social media platforms, who purchased tourism services online and experienced post-purchase retargeted ads, were sampled, surveyed, and analyzed using measurements of the four constructs (see Table 1). A total of 402 samples was achieved, and the demographic profile of respondents for this chapter showed that consumers were 45.52% female and 54.58% male. The most frequent age was 25–34 years (37.8%). Furthermore, most respondents hold a bachelor's degree (51.99%) and used social media between 1 and 5 hours daily (65.67%).

Partial least squares structural equation modeling (PLS-SEM) was used to fit our model (Hair et al. 2017). Several scholars indicate that the PLS-SEM method is the most adequate when conceptual variables are estimated as composites (i.e., linear combination of indicators) (Cepeda-Carrion et al. 2019). The hybrid multigroup

Table 1 Definitions and sources of constructs

Construct	Definition	Source
Expectations confirmation	Degree to which perceptions match (confirmation) or differ from (disconfirmation) expectations	Bhattacharjee (2001), Oliver (1980)
Satisfaction	A measurement that determines how happy customers are with their purchase	Del Bosque and San Martín (2008), Bhattacharjee (2001), Oliver (1980)
Repurchase intentions	Degree of likelihood of making another purchase with the e-tourism website or application	Bhattacharjee (2001), Hellier et al. (2003)
Retargeting	A measurement of how competing the post-purchase retargeted adverts consumers experienced	New scale developed and drawn from consumer buying-decision model (Dubrovski 2001)

approach (Lamberti 2021) was used to explore gender, age, education, and daily time spent on social media as possible sources of heterogeneity in consumer behaviors. This approach combines classical multigroup analysis (MGA) with Pathmox analysis (Lamberti et al. 2016). The most significant different groups are first identified using Pathmox. The obtained groups are then compared using the PLS-MGA test (Henseler et al. 2009) after assuring measurement invariance by applying the MICOM procedure (Henseler et al. 2016). The statistical analysis was performed using SmartPLS 3.3 (Ringle et al. 2015) and the R software genpathmox package V.0.5 (Lamberti 2014).

3 Results

After validating the measurement model following Hair et al. (2019) (see Tables 2, 3, and 4), our results showed (see Fig. 1 and Table 5) a significant relationship between retargeting on expectation ($\beta = -0.324$), while surprising, retargeting on satisfaction was low and not significant ($\beta = -0.032$). As was expected, expectation positively affects satisfaction ($\beta = 0.655$), and satisfaction increases consumers' intention to repurchase ($\beta = 0.670$), corroborating previous findings (Alghamdi et al. 2018; Rajeh et al. 2021; Zhong et al. 2015). In addition, the model's predictive power (see Table 6) was moderate-high according to the PLSpredict procedure (Shmueli et al. 2019).

However, the effect of retargeting was not homogenous. Instead, it varied primarily according to the time spent online and the age of the consumers. The hybrid multigroup analysis revealed the presence of three different groups of consumers labeled, respectively, as heavy social media users (LM1), younger-moderate social users (LM2), and older-moderate social users (LM3) that were characterized by differences in how retargeting affect expectation and satisfaction (see Table 7). After assuring invariance of constructs between groups (see Table 8) following the

Table 2 Reliability and validity criteria

Constructs/items	Factor loadings	2.50%	97.50%	Cronbach's alpha	CR	AVE
Expectation confirmation (EC)				0.845	0.906	0.763
EC1	0.870	0.827	0.902			
EC2	0.885	0.846	0.915			
EC3	0.865	0.817	0.902			
Satisfaction (ST)				0.720	0.876	0.78
ST1	0.872	0.839	0.901			
ST2	0.887	0.847	0.919			
ST3	0.889	0.846	0.921			
ST4	0.848	0.794	0.894			
Repurchase intentions (RI)				0.866	0.909	0.713
RI1	0.904	0.874	0.926			
RI2	0.862	0.813	0.898			
Retargeting (RE)				0.897	0.929	0.765
RE1	0.814	0.747	0.864			
RE2	0.879	0.844	0.908			
RE3	0.867	0.824	0.899			
RE4	0.816	0.764	0.860			

Table 3 Heterotrait-monotrait (HTMT)

	Value	2.50%	97.50%
Repurchase intentions → expectation confirmation	0.719	0.602	0.830
Retargeting → expectation confirmation	0.375	0.223	0.518
Retargeting → repurchase intentions	0.206	0.073	0.369
Satisfaction → expectation confirmation	0.763	0.680	0.832
Satisfaction → repurchase intentions	0.828	0.741	0.904
Satisfaction → retargeting	0.271	0.137	0.403

Table 4 Assessment of common method bias

	Expectation confirmation	Repurchase intentions	Retargeting	Satisfaction
VIF	1.962	1.908	1.108	2.352

MICOM procedure (Henseler et al. 2016), we compared the three consumer groups using the MGA-PLS test (Henseler et al. 2009).

We found that the effect of retargeting on expectations confirmation and satisfaction was significant when comparing the LM1 and LM3. Furthermore, it was significant and higher for the LM1 compared with LM3. This finding can be explained by the fact that heavier social media users who spend longer periods of time are more likely to be retargeted more frequently. We also found that the effect on expectation on satisfaction was significant and higher for LM2 than LM1.

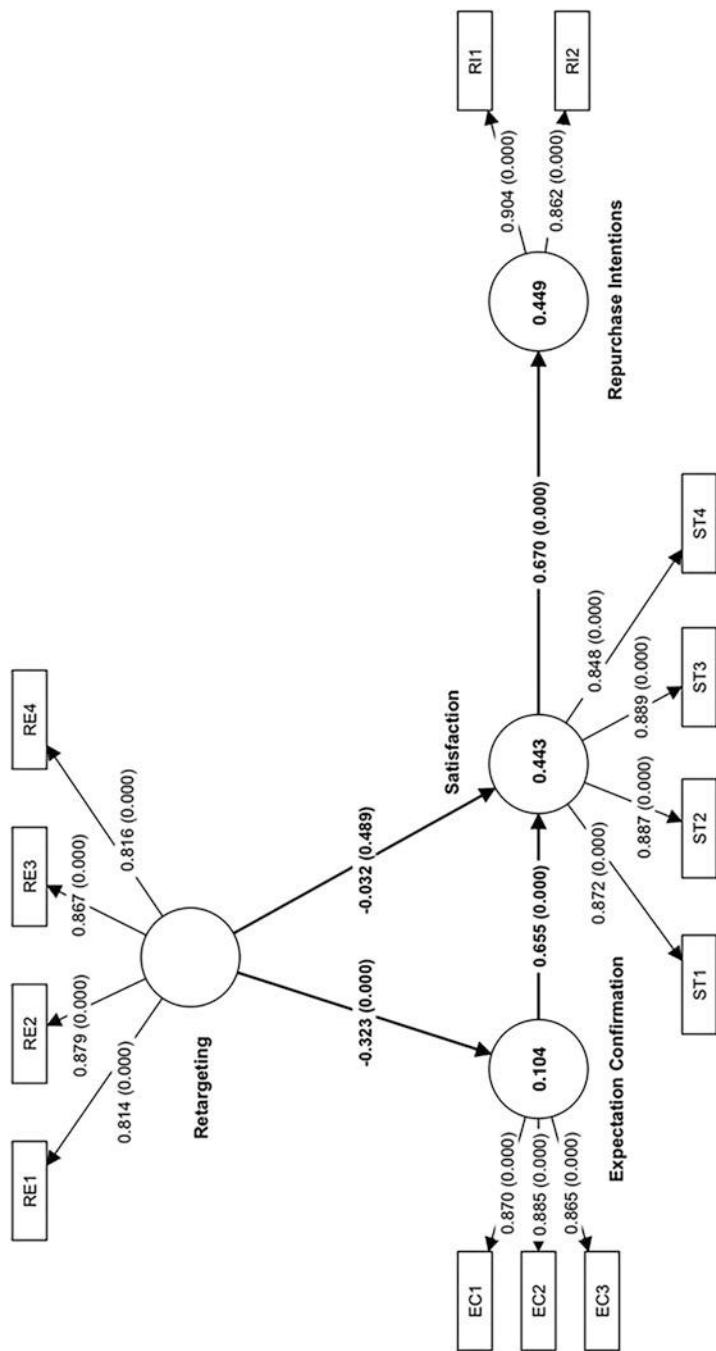


Fig. 1 Path diagram results

Table 5 Path coefficients, bootstrap IC R^2 , Q^2 , and SRMR

H	Path coefficients	β	2.50%	97.50%	p -value	Sig.
H1	Expectation confirmation on satisfaction	0.655	0.587	0.737	0.000	Yes
H2	Satisfaction on repurchase intentions	0.670	0.594	0.738	0.000	Yes
H3	Retargeting on expectation confirmation	−0.324	−0.444	−0.196	0.000	Yes
H4	Retargeting on satisfaction	−0.032	−0.126	0.053	0.489	No
Repurchase intentions $R^2 = 0.449$; $Q^2 = 0.345$						
Satisfaction $R^2 = 0.443$; $Q^2 = 0.335$						
SRMR = 0.054						

Table 6 PLSpredict procedure

Constructs	PLS RMSE	Q^2_{predict}	LM RMSE	Difference
RI1	1.280	0.017	1.287	−0.007
RI2	1.313	0.018	1.324	−0.011
ST1	1.133	0.044	1.135	−0.002
ST2	1.121	0.039	1.129	−0.007
ST3	1.179	0.045	1.183	−0.004
ST4	1.222	0.027	1.217	0.005

Table 7 Multigroup comparison results

Paths	LM1	LM2	LM3	PLS-MGA test		
				LM1 vs LM2	LM1 vs LM3	LM2 vs LM3
				p -value		
Retargeting on expectation confirmation	−0.568***	−0.392***	−0.117 ^{NS}	0.203	0.001	0.091
Retargeting on satisfaction	−0.217***	−0.750 ^{NS}	0.090 ^{NS}	0.348	0.037	0.096
Expectation confirmation on satisfaction	0.440***	0.763***	0.609***	0.018	0.214	0.185
Satisfaction on repurchase intentions	0.697***	0.662***	0.655***	0.767	0.588	0.888

Notes: *** $p < 0.001$, NS non-significant. Italicized means significant <0.05 .

4 Discussion

In this chapter, we provide evidence on the effect of retargeting on the causality chain expectation-satisfaction-repurchase intention. Our results indicate that retargeting has a strong effect on expectation, while, regarding satisfaction, its effect is low and not significant. However, the retargeting effect can vary according to the characteristic of the consumer. In particular, we found that it varies according to the time spent online and the age of the consumer, supporting some findings in the literature (Carstensen et al. 2011; Zhang et al. 2017) and indicating that marketers have to pay attention to these two factors when implementing this online advertising

Table 8 MICOM procedure (steps 2 and 3)

		Equality of composite values				
		Compositional invariance		Mean values		Variance values
Construct	Groups	Score corr	5.00%	Mean Diff	2.5–97.5%	Variance Diff
Expectation confirmation	LM1 vs LM2	0.999*	0.997	0.132	[−0.314–0.313]*	−0.342
Repurchase intentions		0.997*	0.985	0.277	[−0.302–0.310]*	−0.528
Retargeting		0.988*	0.988	−0.292	[−0.311–0.315]*	0.089
Satisfaction		0.999*	0.999	−0.037	[−0.307–0.316]*	−0.494
Expectation confirmation	LM1 vs LM3	1.000*	0.996	0.699	[−0.252–0.242]	−0.063
Repurchase intentions		1.000*	0.997	0.498	[−0.254–0.243]	−0.211
Retargeting		0.957*	0.954	−0.875	[−0.254–0.251]	−0.050
Satisfaction		1.000*	0.998	0.590	[−0.253–0.248]	−0.188
Expectation confirmation	LM2 vs LM3	1.000*	0.997	0.519	[−0.255–0.247]	0.279
Repurchase intentions		0.998*	0.992	0.248	[−0.253–0.256]*	0.328
Retargeting		0.960*	0.793	−0.642	[−0.266–0.260]	−0.129
Satisfaction		0.999*	0.988	0.588	[−0.255–0.255]	0.315

strategy. However, this chapter is not without limitations. The main limitation of this chapter was that a non-probability sampling approach was used; therefore, the results cannot be generalized to the larger population. Also, findings are specific to e-tourism users in Saudi Arabia and needs further validation by comparing current findings with findings of consumers from other countries and markets. Furthermore, this chapter did not consider examining the impact of consumer involvement on the effects of retargeting, which future research should include to examine its impacts.

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