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Using social media marketing to pro-tourism behaviours: the mediating role of destination attractiveness and attitude towards the positive impacts of tourism

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Abstract

Social media has recently played a highly impactful role in communication. Specifically, these channels are vital and have a substantial influence on the attitudes, behavioural intentions, and actual behaviour of tourists. Previous research showed clearly that there is an increasing number of individuals who rely heavily on social media platforms for gathering information and gaining knowledge about various issues. The current research tries to show the impact of these platforms on citizens'—as individuals—attitudes and behaviours to support tourism activities. Specifically, the current study examines three research objectives: (1) The impact of social media marketing activities on pro-tourism behaviours. (2) The impact of social media marketing activities on both destination attractiveness and attitude towards the positive impacts of tourism. (3) The mediation role of destination attractiveness and attitude towards the positive impacts of tourism in the relationships between social media marketing activities and pro-tourism behaviours. We adapted the theory of uses and gratifications and the stimulus-organism-response framework in the current research, where social media marketing drives pro-tourism behaviours indirectly through both destination attractiveness and attitude towards the positive impacts of tourism. A survey of 200 Albaha residents was conducted. We have used AMOS to check the constructs' validity and reliability and Hayes's PROCESS macro to test the mediation. The findings show that (1) Social media marketing activities help in explaining why city citizens positively behave towards tourism activities in their city; (2) Sequentially both destination attractiveness and attitude towards the positive impacts of tourism partially mediate the relationships between social media marketing and pro-tourism behaviours. The current study contributes to the existing research through the elucidation of why residents behave to support tourism in their countries by using social media marketing activities. In addition, it adds a number of professional insights. For example, the admins of destination social media platforms should increase their efforts towards providing presence, conversation, interactivity, and sharing on these platforms.

Keywords Social media marketing, Destination attractiveness, Attitude to the positive impacts of tourism, Pro-tourism behaviours

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Introduction

The pandemic has significantly impacted global economies, e.g. [1]. The tourism sector has become highly sensitive to the impact of this pandemic [2–4]. In other words, COVID-19 is widely recognised as a challenge or even a game-changer for travel and tourism [5]. The negative effects of the pandemic are obvious, but keywords

with high relevance such as "sustainable tourism" represent the new development direction of tourism [2]. Residents are considered a proactive stakeholder group to co-create tourism products and services [6]. Pro-tourism behaviour is one of the key constructs related to the residents. It represents a behavioural dimension of resident attitudes towards tourism development [7]. Residents' pro-tourism behavioural intention plays an important role in determining the sustainability or even success of a tourist destination [8]. Although understanding resident pro-tourism behaviour is critical, it is still a new research area [7].

The Internet, as a dynamic technology, is constantly evolving as users adopt and reject new features, devices, and applications and use them in ways that are often unexpected [9]. It promises broad-based changes to individuals and organisations that are profound to warrant the title of revolution [10]. The Internet is an easy and convenient way to communicate socially [11]. In other words, through the internet, information sharing and communication have become easier [10]. Electronic mail, commonly known as e-mail, is one of the most popular features of the Internet [12]. Besides, the dropping cost of communication has led to increased traffic and greater information access [10]. The Internet is central to the new media [9]. It has become recognised as a global channel where consumers can be targeted, and entities can both advertise and present commercial offerings [13].

Social media has recently been a highly impactful channel of communication in the modern times of digitised living [14]. Social media channels are vital in the contemporary period of time and have a substantial influence on the attitudes, behavioural intentions, and actual behaviour of tourists [15–17]. For most firms, social media alters the ways of communicating with partners significantly [18]. Social media marketing is an essential part of twenty-first century business [19]. The media has changed the market dynamics and endangered the brands' competitive positions. Brands have increasingly adopted social media for various marketing activities such as branding, customer relationship management, service provision, and sales promotion [20].

Digital marketing is very helpful in promoting tourism destinations, for example, digital marketing using social media [21]. The previous work highlighted the importance of social media and digital data in understanding the dynamics of tourism [22–24]. Social media is a widely used technology platform for sharing tourism information and experience, which motivates us to explore social media engagement more [25]. In other words, the pervasive impact of social media provides new opportunities to study residents' attitudes to tourism since residents express their opinions and read about tourism

development on social media [26]. The exchange of social media-based information for citizens and tourists is part of the practice-based solution for better sustainable tourism planning [27]. Although there has been a phenomenal growth in social media studies, that is not a new research topic [28, 29], the previous research on social media marketing has little attention particularly related to pro-tourism [19, 29–31]. In other words, despite the massive popularity of social media, research with a set of driving constructs along with indicators of social media regarding the changing attitudes and behaviours are lacking in the literature [15, 16]. Few studies have been conducted to examine the use of social media by marketers, particularly in eastern countries such as Saudi Arabia [29]. In other words, although the use of social media has gained increasing importance as a component of brands' portfolio strategies, scant research has systematically consolidated and extended knowledge on social media marketing strategies [43]. Specifically, whereas there has been an increasing academic interest related to social media in tourism, the existing literature is still in its infancy [32–34]. Little attention has been paid to the perceptions of social media from tourism providers' perspectives, as most studies have addressed social media from a traveler's point of view [32, 35].

Preceding research proposed that destination attractiveness is one of the important determinant factors that could enhance tourism, particularly destination loyalty [36]. Besides, research on resident attitudes of tourism has become one of the most important areas of tourism [37]. In other words, since tourists significantly vary from residents in a demographic sense, the contact between them can subsequently shape residents' behaviours and attitudes [38]. Despite the importance of residents' attitude towards tourism impacts and development [39], little attention has been gained to examining residents' attitudes in developing countries, especially at the inception stages when the support and involvement of the local community is vital to the success of tourism development efforts [40]. Attitudes towards tourism and support for tourism development have been prioritised "outcomes" in the tourism impacts literature [41]. Although satisfactory attention has been paid to residents' attitudes to tourism in previous studies, few research has used residents' attitudes to tourists and tourism simultaneously to explain their support for tourism [42].

To contribute to filling these research gaps, our research question is to what extent social media marketing activities motivate destination residents to positively (1) perceive high attractive destination, (2) form attitude towards the impacts of tourism, and (3) behave towards the destination tourism (pro-tourism behaviours). Thus, the current study examines the relationships between
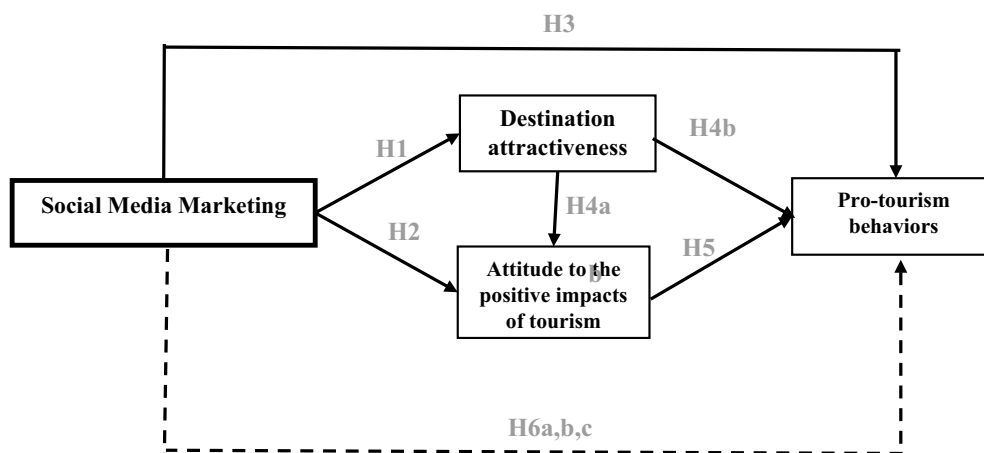
social media marketing activities and pro-tourism behaviours. It also examines the relationships between social media marketing activities and both destination attractiveness and attitude towards the positive impacts of tourism. Finally, it examines the mediation role of destination attractiveness and attitude towards the positive impacts of tourism in the relationships between social media marketing activities and pro-tourism behaviours.

The current study contributes to the existing research in different main ways: First, it elucidates why residents behave to support tourism in their countries by using social media marketing activities. The results fill research gaps, particularly in eastern countries such as Saudi Arabia [15, 29, 32, 43]. In addition, it contributes to the literature by revealing the vital role of social media marketing activities in interpreting residents' pro-tourism behaviours. Residents with high levels of social media participation about their cities/ destinations do more pro-tourism behaviours. Second, although considerable research has demonstrated the relationships between destination attractiveness and attitude, their roles in building pro-tourism behaviours are still limited [42]. This study adds to the emerging literature by demonstrating that attitude towards the positive impacts of tourism directly increases pro-tourism behaviours. A number of professional insights can be drawn based on this study's findings, which will advise marketers of social marketing platforms about the factors that improve residents' pro-tourism behaviours. For example, as social media marketing activities facilitate effective ways of communicating with partners [19], the admins of social media platforms should increase their efforts towards providing presence, conversation, interactivity, and sharing on these platforms. Admins should improve these functions to enhance the perceived destination attractiveness and

attitude towards the positive impacts of tourism and boost the pro-tourism behaviours. This may be possible by designing platforms such as Instagram and Facebook pages that deliver and focus on updated information about the sites and locations to enhance the residents' preferences. The admins of these platforms should also focus on improving conversation functionality by replying to the comments of the fans on their Facebook and/or Instagram page(s). This means that the interactivity level on these platforms is high. Besides, using advanced technology, historical browsing behaviours can be adapted by organising the page's content from a residents' perspective to enable reading, commenting, and following the discussions on particular subjects of interest.

Theoretical background

The conceptual framework (Fig. 1) explicates potential antecedents of pro-tourism behaviours. The framework draws on theory of uses and gratifications theory [44]. Based on the theory, the individuals are actively and selectively involved in media (e.g. social media) usage to satisfy their psychological and social needs (e.g. perceived attractiveness and attitudes). In addition, the current conceptual framework is also based on the stimulus-organism-response (S–O–R) model proposed by Mehrabian and Russell [45]. The S–O–R model has been extensively employed in tourism [46, 47]. It posits that environmental stimulus, such as joining social media platforms (S), elicits an emotional and attitudinal reactions (such as perceived destination attractiveness and attitude towards the positive impacts of tourism) from an organism (O), and these reactions trigger the corresponding behaviour response (R) such as pro-tourism behaviours. Whereby organism refers to the internal processes and outcomes of the stimulus, it normally plays a

Fig. 1 Research framework

mediating role between stimulus and responses, e.g. [48]. Thus, the model hypothesises that social media marketing activities influence pro-tourism behaviours directly and indirectly through destination attractiveness and attitude towards the positive impacts of tourism.

Social media marketing

Social media refers to web-based applications that are used as a source of social interaction, collaboration, and creative expression [28, 49, 50]. The rise of social media has essentially altered the tourism industry, permitting both tourists and tourism providers to become the "media" themselves for communicating, collaborating, and sharing tourism-related information in the form of photos, videos, and stories [32]. The media gives brands a better platform to promote and build strong relationships with their consumers [29, 51].

Social media marketing scope represents a range from defenders to explorers [19]. It refers to "the utilisation of social media technologies, channels, and software to create, communicate, deliver, and exchange offerings that have value for an organisation's stakeholders" [52], p 19. Social media marketing also helps brands in improving their business activities and inducing them to invest more in digital marketing [53]. Previous studies developed models that are considered as important frameworks to help in understanding social media platforms [54]. Social media can be examined as a type of persuasion tool [18]. According to Khan and Jan's [54] study, social media plays critical roles or functions such as identity, conversations, sharing, presence, relationships, reputation, and groups functions that help in developing social media user experience. Presence functionality represents the extent to which the user knows the others are present. Sharing functionality represents the extent to which the user exchanges, distributes, and receives content. Identity functionality shows the extent to which the user reveals themselves.

Destination attractiveness

Destination attractiveness reflects the excellences, feelings, beliefs, and sentiments of individuals (such as tourists) on the destination [55]. It refers to travelers' perceptions about a destination and its aptitude to satisfy their needs and wants [56]. Destination attractiveness perceptions might be differed from one visitor to another and the purpose of the visit [57]. For instance, a destination might appeal to a visitor considering a honeymoon, nonetheless not appeal to their family summer holiday. However, the current research examines destination attractiveness from the residents' perspective. Social media platforms have a significant impact on destination attractiveness [58, 59]. Social media enhances the

perceived attractiveness of decision markers [60]. Previous research confirmed that social media content is an influential factor in determining destination attractiveness [18]. The large information available on platforms can contribute to destination attractiveness [61]. Thus,

H1   Social media marketing positively influences destination attractiveness.

Attitude to the positive impacts of tourism

Attitudes of residents towards tourism development and its influences aid as critically significant inputs in identifying the strategic and managerial priorities of tourism [62]. In other words, understanding resident attitudes towards tourism development allows government and practitioners to design favourable strategies for community development [63]. For example, when residents have strong positive attitudes towards tourism, it is likely that they are willing to co-create value with the visitors [64]. Attitudes towards tourism held by residents are influenced by a variety of individual and community or societal level factors [62]. Social media has increasing influences over public opinions [65]. Social media content can generate positive or negative attitudes of the destination [15, 18]. The intangible benefits gained through interactions on social networking sites influence consumers' attitudes towards those sites [66]. Thus,

H2   Social media marketing positively influences attitude to the positive impacts of tourism.

Pro-tourism behaviours

Residents provide pro-tourism behaviours when they perceive that benefits are more than the costs [66]. Pro-tourism behaviours include participation in tourism development or recommendation and revisit intentions [67]. Social influences such as the destruction of living standards and conflict between residents had a significant influence on the support of tourism development of residents [66]. Social media enables interactive connections and collaborations with other stakeholders in the community such as destination residents [61]. The contribution of users to objects (e.g. tourism destinations) on social media platforms is described by the dimension of interaction [68]. In the context of tourism, they influence the behaviour of tourists and lead to choosing certain brand(s) and destinations and making travel-related decisions. A tourist information search has a strong impact on behavioural intention rather than the actual behaviour [16]. Thus,

H3 Social media marketing positively influences pro-tourism behaviours.

Destination attractiveness plays a key factor in destination competitiveness and success [69]. Destination attractiveness has an impact on tourists' attitude [56]. The preceding studies show that residents' perception of destination attractiveness is a key factor in understanding their behaviour towards tourism development [70]. Destination attractiveness has an impact on tourism development support of local people [66]. In other words, residents who have a positive perceived destination attractiveness possess pro-tourism behaviour [70]. Hence,

H4 Destination attractiveness positively influences a) attitude to the positive impacts of tourism and b) pro-tourism behaviours.

The attitude of community stakeholders such as local people or residents is very important for sustainable tourism development [66]. Residents' attitudes impact their support for tourism development. In other words, the positive attitudes lead to pro-tourism development behaviours [71, 72]. Previous research showed the significant and strong direct effect of attitude towards tourism on support for tourism development [39]. Positive resident attitudes encourage a more welcoming and friendly destination [73]. Moreover, resident attitudes have the power to impact resident behaviour towards tourists, which affects tourism planning and development as well as a destination's success or failure [42, 74]. Thus,

H5 Attitude to the positive impacts of tourism positively influences pro-tourism behaviours.

The mediating effect of destination attractiveness and attitude to the positive impacts of tourism

According to the S–O–R paradigm, social media marketing activities can thus be treated as a social stimulus. Destination attractiveness and attitude to the positive impacts of tourism are deemed to be the emotional and attitudinal reactions of the organism and pro-tourism behaviours. They are regarded as the behavioural response of the organism. In addition, whereby organism refers to the internal processes and outcomes of the stimulus, it normally plays a mediating role between stimulus and responses, e.g. [48]. In other words, since the S–O–R model suggests that the effects of stimuli on an individual's response would be mediated by individual's internal state, e.g. [76], we include destination attractiveness and attitude to the positive impacts of tourism as the

mediators in the current study. Preceding research has shown that social media marketing activities positively affected perceived attractiveness [18] and attitude to the positive impacts of tourism [65], destination attractiveness positively impacted pro-tourism behaviours [70], and attitude to the positive impacts of tourism positively impacted pro-tourism behaviours [39]. Furthermore, destination attitude mediated the relationship between destination attractiveness and destination attachment [56]. Destination attractiveness and attitude to the positive impacts of tourism may therefore play a mediating role between social media marketing activities and pro-tourism behaviours. Thus,

H6a Destination attractiveness mediates the relationship between social media activities and pro-tourism behaviours.

H6b Attitude to the positive impacts of tourism mediates the relationship between social media activities and pro-tourism behaviours.

H6c Destination attractiveness and attitude to the positive impacts of tourism mediate the relationship between social media activities and pro-tourism behaviours.

Methodology

We chose the quantitative approach to test the effects between the constructs under investigation. We used the questionnaire to collect the data. Before collecting the actual data, we conducted a pre-test study to make sure that all items are understandable and reflect the constructs under investigation.

Pre-test study

We recruited a professional translator to take part in this process and guarantee the reliability of the translated version [76]. We also chose two marketing professors and ten students to review the questionnaire and evaluate its face and content validity, resulting in minimal design and wording changes. Some examples were added to some scale items to improve these items' clarity.

Sampling and actual data collection

The research population includes all the residents who live in Albaha City in Saudi Arabia. Since it was difficult to get a frame, a convenience non-probability sample was chosen for this study [77]. Two hundred fourteen completed questionnaires were collected between July–September 2021. The questionnaires have been collected online via a link, which was sent to people who live there. Fourteen questionnaires were dropped as the trapped

questions were wrongly answered. The sample size is still acceptable since previous research used similar size in their studies and some of them stated that a sample size between 200 and 300 is recommended to produce sophisticated results and improve credibility and generalisability, e.g. [78–80]. The questionnaire starts with socio-demographic information. Table 1 shows the sample characteristics. Among the sample participants: 84% were male and 16% were female, 71% were younger than 30 years old, 19% were 30 to 39, 6% were 40 to 49, and 4% were older than 50 years. Afterwards, the survey adopted existing scales for the variables selected from the current literature.

Research context

The tourism context was chosen as the current research is part of a funded project to investigate how to enhance the tourism activities in Saudi Arabia, particularly Albaha destination. Tourism has become a strategic sector that contributes to the country developments. However, the country must exert great effort as tourism destinations have increasingly become competitive all over the world due to the diverse options the tourists have for travel. King Salman has developed a 2030 vision to make Saudi Arabia Kingdom a successful and pioneering model in the world at all levels/ sectors. One of these sectors is tourism. The current research is conducted to support achieving the vision's goals. The current research will be applied on Albaha destination as an area of the Saudi Arabia Kingdom.

Construct measures

Social media marketing scale comprises seven dimensions, namely, identity functionality (3 items), conversation functionality (3 items), sharing functionality (4 items), presence functionality (3items), reputation functionality (3items), relationships functionality (3 items), and groups functionality (3 items) [54]. The destination attractiveness scale includes 9 items proposed by Hu and Ritchie [55], and Thach and Axinn (1994), cited in [81]. Attitude to the positive impacts of tourism and pro-tourism behaviours includes 8 and 5 items, respectively [82].

Data analysis and results
Instrument validation

Table 2 shows the standard deviations and means of each construct. It also shows Cronbach's alphas for all research constructs, which were greater than the recommended value (0.7) [83]. The variables were also evaluated for convergent and discriminant validity through the Confirmatory Factor Analysis (CFA) using AMOS [84, 85].

Table 1 Sample characteristics

Variable	Details	Frequency	Percentage (%)
Gender	Male	168	84
	Female	32	16
Age	Less than 30	154	77
	31–40	17	8.5
	41–50	23	11.5
	50+	6	3
Education	High School	142	71
	Undergraduate	38	19
	Postgraduate	20	10
Tourism activities participation	No participation	190	95
	Participation	10	5
Monthly income	Less than 2000	126	63
	2000–5000	18	9
	5001–10,000	14	7
	10,001–17,000	16	8
	17,000+	26	13
Residency	Less than 5	36	18
	5–10	18	9
	11–20	91	45.5
	21–30	23	11.5
	31–40	11	5.5
	40+	21	10.5

As shown in Table 2 for the remaining items, the unidimensionality of each construct and the measurement model was checked, based on Janssens et al.'s study [23]. It had a good fit (X^2 (217) = 297.81 p = 0.000; GFI = 0.89; NFI = 0.895; CFI = 0.968; TLI = 0.96; RMSEA = 0.043; SRMR = 0.0423). Based on Fornell and Larcker's [77] and Janssens et al.'s [87] studies, four criteria were used to evaluate the convergent validity of constructs' items. All factor loadings' estimates of the remaining items were above 0.5 (loadings ranged from 0.631 to 0.909). All of t-values > 1.96 (loadings ranged from 6.545 to 16.741 (p < 0. 001)), as shown in Table 2. As Table 2 also indicates, all composite reliability (CRs) were above the recommended level of 0.7 except for the relationships functionality construct. However, it was very close (0.68) to the accepted level. All amount of variance (AVE) estimates were above the recommended level of 0.5, except for attitude to the positive impacts of tourism and pro-tourism behaviours constructs. However, they were very close (0.498 and 0.468, respectively) to the accepted level. All four criteria provided support of the constructs' convergent validity. Discriminant validity was also evaluated. All square roots of AVE estimates on the diagonal were greater than the construct correlations with another factor, as shown in Table 3. It provides evidence of discriminant validity for all research constructs.

Table 2 Mean, Std. deviation, standardized factor loadings, *t*-values and Cronbach's alpha

Constructs and items	Mean	Std. deviation	Standzd loadings	*t*-value	Cronbach's alpha	AVE	CR
Social Media marketing							
Identity functionality							
{Albaha}reveals its information through its profile on Facebook	3.723	.760	.707		.876	0.604	0.819
{Albaha}'s Facebook page(s) keeps updating the information about sites/locations			.882	10.861			
Tourists can easily recognize{Albaha}by its profile picture on its Facebook page(s)			.731	9.449			
Conversation functionality							
{Albaha} admins reply to the comments of the fans on its Facebook page(s)	3.445	.855	.789		.867	0.691	0.817
The Facebook Page(s) of {Albaha}is interactive			.871	13.546			
Sharing functionality							
{Albaha}shares interesting pictures of its sites/locations on Facebook	3.752	.822	.727	12.343	.867	0.694	0.871
{Albaha}shares informative caption on its Facebook page(s)			.894				
{Albaha}shares important links on its Facebook page(s)			.868	16.741			
Presence functionality							
Whenever I login to my Facebook, I see{Albaha}'s content	3.185	.880	.767	10.812	.873	0.602	0.820
I receive notification from{Albaha}most often			.765				
The frequency of updates from{Albaha}is very high			.796	11.258			
Reputation functionality							
{Albaha}receives positive comments on its shared content on Facebook	3.638	.803	.847		.870	0.772	0.871
{Albaha}receives lots of likes on its posting			.909	15.623			
Relationships functionality							
Those who comment on{Albaha}'s status on Facebook are often loyal tourists	3.685	.759	.658	8.914	.877	0.515	0.679
Tourists often defend{Albaha}against the negative comments posted			.773				
Destination attractiveness							
Well-appointed accommodation and restaurants	3.530	.933	.768		.874	0.552	0.787
Unique local specialties and souvenirs			.719				
Well-developed environment management			.741	11.233			
Attitude to the positive impacts of tourism							
Tourism creates positive impact on the cultural identity of{Albaha}	4.238	0.672	.688		.896	0.498	0.747
Tourism is an incentive for the preservation of local culture			.764	7.833			
Tourism increases opportunities for leisure and tourism			.660	7.360			
Pro-tourism behaviours							
I am willing to receive tourists as affable host and being more hospitable	4.203	0.66	.776	6.802	.901	0.468	0.723
I am willing to protect the natural and environmental resources on which tourism depends			.631	6.545			
I am willing to provide information to tourists and contribute to enhance their experience			.636				

Direct effect

Direct effect of social media marketing construct

Empirical results in Table 4 show that while social media marketing construct influences destination attractiveness ($\beta = 0.979$, $p < 0.001$) and pro-tourism behaviours ($\beta = 0.287$, $p < 0.01$), it does not influence the attitude to the positive impacts of tourism ($\beta = 0.139$, $p > 0.05$). Thus, hypotheses 1 and 3 are supported and hypothesis 2 is not supported.

Direct effect of destination attractiveness construct

Empirical results (as shown in Table 4) show that destination attractiveness influences the attitude to the positive impacts of tourism ($\beta = 0.211$, $p < 0.01$). However, it does not influence pro-tourism behaviours ($\beta = 0.061$, $p > 0.05$). These results provide support for hypothesis 4a that destination attractiveness enhances the attitude to the positive impacts of tourism but does not directly enhance the pro-tourism behaviours (hypothesis 4b is not supported).

Direct effect of the attitude to the positive impacts of tourism

Empirical results (as shown in Table 4) show that attitude to the positive impacts of tourism influences the pro-tourism behaviours, ($\beta = 0.199$, $p < 0.01$). These results provide support for hypothesis 5 that the attitude to the positive impacts of tourism enhances the pro-tourism behaviours.

Indirect effect

The current research includes three mediating hypotheses (H6a, H6b, and H6c). To test the mediation, we followed Hayes's PROCESS macro (Model 6) instructions

[88]. Table 5 shows the statistical significance of the direct and indirect effects. The results were produced with the bootstrap procedure (5000 bootstraps) and the confidence interval (95%). For hypotheses 6a, and b, (as shown in Table 5), the bootstrap procedure generated (− 0.215 and 0.073), and (− 0.006 and 0.095), respectively, included (zero) for the indirect effect of (H6a) social media marketing activities on pro-tourism behaviours through destination attractiveness, and (H6b) social media marketing activities on pro-tourism behaviours through attitude to the positive impacts of tourism. Thus, both hypotheses are not supported. However, for hypothesis 6c, (as shown in Table 5), the bootstrap procedure

Table 3 correlations and the square root of the average variance extracted

Constructs	IF	CF	SF	PF	REPF	RELF	DA	ATTIT	PTB
IF	**0.777**								
CF	0.771	**0.831**							
SF	0.727	0.774	**0.833**						
PF	0.660	0.803	0.831	**0.776**					
REPF	0.725	0.678	0.730	0.641	**0.879**				
RELF	0.632	0.701	0.749	0.691	0.800	**0.718**			
DA	0.670	0.813	0.733	0.693	0.676	0.643	**0.743**		
ATTIT	0.370	0.322	0.353	0.265	0.501	0.397	0.521	**0.705**	
PTB	0.301	0.270	0.218	0.325	0.411	0.355	0.255	0.381	**0.684**

Bold: Square roots of AVE estimates

Identity functionality *IF*, conversation functionality *CF*, sharing functionality *SF*, presence functionality *PF*, reputation functionality *REPF*, and relationships functionality *RELF*. The destination attractiveness *DA*, Attitude to the positive impacts of tourism *ATTIT* and pro-tourism behaviours PTB

Table 4 Summary of hypotheses testing results (Direct effect)

Hypotheses	Path coefficient	*t*-value	Hypothesis result
(H1) SSM → Destination attractiveness	0.979	(13.84)***	Supported
(H2) SMM → Attitude to the positive impacts of tourism	0.139	(1.512)†	Not supported
(H3) SMM → Pro-tourism behaviours	0.287	(3.09)**	Supported
(H4a) Destination attractiveness → Attitude to the positive impacts of tourism	0.211	(3.208)**	Supported
(H4b) Destination attractiveness → Pro-tourism behaviours	0.061	(0.898)†	Not supported
(H5) Attitude to the positive impacts of tourism → Pro-tourism behaviours	0.199	(2.788)**	Supported

$***$ $p < 0.01$. $**$ p < 0.05. † Not significant

Table 5 Summary of hypotheses testing results (mediating effect)

Hypotheses	Direct effect	Bootstrap		Indirect effect	Bootstrap		Hypothesis result
		LLCI	LLCI		LLCI	ULCI	
H6(a) SMM activities → Destination attractiveness → Pro-tourism behaviours	0.296**	0.164	0.427	− 0.061†	− 0.215	0.073	No mediation
H6(b) SMM activities → Attitude to the positive impacts of tourism → Pro-tourism behaviours	0.296**	0.164	0.427	0.028†	− 0.006	0.095	No mediation
H6(c) SMM activities → Destination attractiveness → Attitude to the positive impacts of tourism → Pro-tourism behaviours	0.296**	0.164	0.427	0.42**	0.006	0.085	Partial mediation

$**$ $p < 0.05$. † Not significant

generated did not include zero for the indirect effect of social media marketing activities on pro-tourism behaviours through destination attractiveness and attitude to the positive impacts of tourism (0.006 and 0.085). After taking both destination attractiveness and attitude to the positive impacts of tourism into account, the direct relationship between social media marketing activities and pro-tourism behaviours still became significant; the bootstrap procedure generated (0.164 and 0.427) did not include zero, showing partial mediation existence. Thus, hypothesis 6c is supported.

Discussion

This research shows that social media marketing activities enhance destination attractiveness, ultimately leading to attitude to the positive impacts of tourism and pro-tourism behaviours, as shown in Fig. 2.

The results indicate that social media marketing plays a positively significant role in influencing destination attractiveness. However, social media marketing does not play a direct significant role in shaping the residents' attitudes to the positive impacts of tourism. These results are in line with preceding research that confirmed that social media platforms have a significant impact on perceived destination attractiveness [58]. In other words, social media content is an influential factor in determining destination attractiveness [18]. The large information available on platforms can contribute to destination attractiveness [61]. The results also show that social media marketing activities play an important role in improving pro-tourism behaviours. These results are consistent with previous studies [e.g. 30], which indicated that residents' social media use is positively related to their support for tourism. In a similar vein, this is consistent with previous research [e.g., 60] that confirmed that social media enhances decision makers' behaviours. Social influences such as destruction of living standards and conflict between residents had a significant influence on the support of tourism development of residents [66].

The direct influence of destination attractiveness on attitude to the positive impacts of tourism is confirmed. When residents perceive their communities or cities as attractive, they are more likely to create a positive attitude to the positive impacts of tourism. This result is in line with previous research [56]. Besides, the direct influence of attitude to the positive impacts of tourism on pro-tourism behaviours is also confirmed. This result is in line with previous research [30, 39, 72]. However, the direct influence of destination attractiveness on pro-tourism behaviours is not confirmed.

We also intended to extend the understanding of the mediating role of destination attractiveness and attitude to the positive impacts of tourism in satisfying the relationships between social media marketing activities and pro-tourism behaviours. The results show partial mediation existence of both destination attractiveness and attitude to the positive impacts of tourism in the influence of social media marketing activities on pro-tourism behaviours. This means that pro-tourism behaviours might happen due to social media marketing activities, not necessarily destination attractiveness or attitude to the positive impacts of tourism. However, the indirect impact of social media marketing on pro-tourism behaviours should be through both destination attractiveness and attitude to the positive impacts of tourism, respectively.
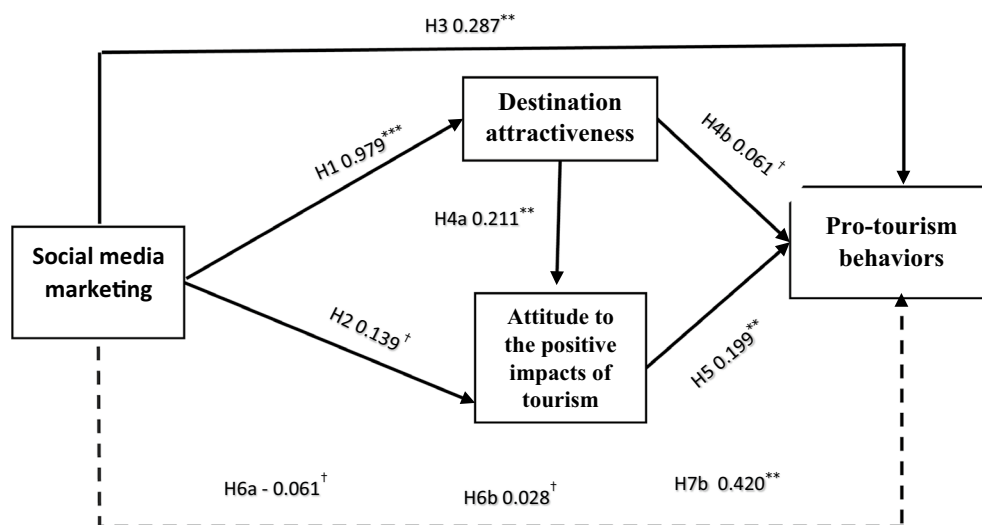
Fig. 2 The direct and indirect effect results

Conclusions

The current study examines the relationships between social media marketing activities and pro-tourism behaviours. It also examines the relationships between social media marketing activities and both destination attractiveness and attitude towards the positive impacts of tourism. Finally, it examines the mediation role of destination attractiveness and attitude towards the positive impacts of tourism in the relationships between social media marketing activities and pro-tourism behaviours. This study contributes to the marketing literature and provides practical implications. The following sections highlight these contributions and implications.

Theoretical contributions

The current research advances the insights of tourism developments in different ways. First, on contrary to previous research that focused on tourists' perspective, the current study contributes to residents' behaviour to support tourism in their countries by using social media marketing activities from the resident's perspective. The results fill the research gap that previous research showed that social media marketing has little attention media in tourism [32, 33], particularly in eastern countries such as Saudi Arabia [15, 19, 29, 43]. It also contributes to the literature by revealing the vital role of social media marketing activities in interpreting residents' pro-tourism behaviours. Residents with high levels of social media participation about their cities/ destinations do more pro-tourism behaviours.

Second, preceding studies revealed the lack of knowledge in showing the relationships between destination attractiveness and attitude and their roles in building pro-tourism behaviours, [42]. This study adds to the emerging literature by demonstrating that attitude towards the positive impacts of tourism directly increases pro-tourism behaviours. Investigating these relationships shed light on how to shape the residents' pro-tourism behaviours through destination attractiveness and attitude to the positive impacts of tourism. The results underline the importance of social media marketing activities as effective antecedents that enhance residents' perceived destination attractiveness and improve their attitudes to the positive impacts of tourism. Thus, this research supplements preceding studies on enhancing residents' perceived destination attractiveness and improving their attitudes to the positive impacts of tourism by introducing social media marketing activities as drivers of them. Third, this study is the first to investigate the mediating role of destination attractiveness and attitude towards the positive impacts of tourism in the linkage between social media marketing activities and pro-tourism behaviours.

These mediators enhance the understanding of tourism development [41, 67].

Practical implications

A number of practical implications are raised based on the current research findings, which guide marketers about social marketing platform-related factors that improve residents' pro-tourism behaviours. First, as social media marketing activities facilitate effective ways of communicating with partners [19], the admins of social media platforms should increase their efforts towards providing presence, conversation, interactivity, and sharing on these platforms. Admins should improve these functions to enhance the perceived destination attractiveness and attitude towards the positive impacts of tourism and boost pro-tourism behaviours. This may be possible by designing platforms such as Instagram and Facebook pages that deliver and focus on updated information about sites and locations to enhance the residents' preferences. The admins of these platforms should also focus on improving conversation functionality by replying to the comments of the fans on their Facebook and/or Instagram page(s). This means that the interactivity level on these platforms is high. Besides, using advanced technology, historical browsing behaviours can be adapted by organising the page's content from a residents' perspective to enable reading, commenting, and following the discussions on particular subjects of interest. Admins of social media platforms can also invite social media influencers on these pages or channels to interact with the residents and enhance their perceived attractiveness about the destinations they belong to. In addition, as social media use was found to influence residents' support for tourism, it sheds new light on the significance of using social media to improve residents' levels of support for tourism. For instance, relevant institutions and management of the destinations should create official accounts on popular social media platforms (such as Facebook, Twitter, Instagram and WhatsApp). They should provide updated information every day on new news regarding that destination(s).

Second, according to our findings, the admins of social media platforms are advised to advance strategic and tactical initiatives that inspire and reinforce the attitude towards the positive impacts of tourism. This may demand that the admins employ relationship activities to improve residents' interaction on social media platforms such as online communities [20]. Our findings show that social media marketing activities that residents receive play a critical role in enhancing residents' perceived attractiveness about the destination and creating the attitude towards the positive impacts of tourism. Thus, admins are advised to post valuable content that

emphasises destination values to enhance residents' attitudes towards the positive impacts of tourism.

Third, the results provide a base on which admins can improve residents' perceived attractiveness and attitudes and thus, develop the likelihood of experiencing pro-tourism behaviours from destination's residents. Admins should explore how to build the greatest possible residents' perceived attractiveness and attitude towards the positive impacts of tourism with the destination. To enhance the resident's attitudes, for example, the government and institutions should adopt a benefit-sharing system and provide more job opportunities to the destination residents in order to ensure their appropriate rights and interests. In addition, Marketing should emphasise on activities linked with high conversation, interactivity, sharing, and relations that could build a highly perceived attractiveness and attitude towards the positive impacts of tourism on residents. For example, developing precise and pertinent content on social media platforms of the destination (e.g. sharing information about the new touristic activities of the destination; providing information of any enhancements of current services, activities, or promotion activities). Finally, the government and tourism institutions should allow residents to participate in decision-making processes connected to tourism planning and even serve as the main management personnel of the destination tourism corporate [30].

Limitations and future research

The current study reports essential antecedents of having residents who support tourism in their countries, though numerous limits exist. First, while the selected research approach to examine the hypotheses supports achieving the research objectives, different approaches and/or methods such as the experimental approach would improve the results' validity. Furthermore, although the use of point-in-time snapshot data is crucial in considering directional relations between the study constructs, they do not allow for causal explanations that could be recognised through using the longitudinal design (whether over short or long periods of time). Second, we selected tourism to represent the research context in general. However, the findings might deliver a confounded explanation since the tourism sector reflects diverse tourism categories such as domestic tourism, international tourism, business tourism, adventure tourism, wildlife tourism, medical tourism, and wellness tourism. Thus, the research could employ specific types or conduct comparative research to show the differences. Assessing residents' attitudes and behaviours towards tourism types could be insightful. Finally, further study would examine

the impact of advanced technological tools such as artificial intelligence (AI) and generative tools in enhancing the interactions between residents and tourists on the destination's social media platforms.

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