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# Desert Tourism in Wadi Rum, Jordan: Destination Image, Challenges, and Planning Strategies

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#### **Abstract**

This article offers a distinctive viewpoint on desert tourism in Wadi Rum, Jordan, through an examination of TripAdvisor reviews, which serve as a valuable repository of actual tourist impressions and experiences. The study examines the destination image of Wadi Rum as viewed by visitors by collecting and analyzing data from TripAdvisor reviews. Thematic analysis approach was used for analyzing a total of 1840 reviews about Wadi Rum (Only comments in English were included) that were collected using the Instant Data Scraper from TripAdvisor. The study findings provide a valuable insight into the destination image of Wadi Rum Protected Area as perceived by visitors. The analysis of tourists' reviews on TripAdvisor using the thematic analysis approach resulted in an indepth understanding of Wadi Rum destination image's cognitive, affective, and conative components, which showed significant favorable attributes. The results of this study are consistent with previous research about the perception of tourism destination image. This study also illustrates the interconnections between the three dimensions of destination image in influencing tourists' opinions of Wadi Rum. This analysis of destination image of Wadi Rum is very useful for destination managers, planners and decision-makers, and academics who want to match tourism development with visitors' expectations and support the long-term and sustainable growth of desert tourism in Wadi Rum, Jordan.

**Keywords:** Destination image; TripAdvisor; Planning; Wadi Rum; Jordan.

### Introduction

Travelers now read reviews and comments made by other travelers on travel blogs, forums, and social media platforms (Alzboun et al., 2023; Lam, et al., 2020; Zhang et al., 2018), and they consider these peer-to-peer reviews to be more reliable than conventional advertising or promotional materials (Taecharungroj & Mathayomchan, 2021; Költringer & Dickinger, 2015). User-Generated-Content (UGC) websites enable travelers to communicate with one another and exchange ideas, tips, and advice (Al Kurdi & Alshurideh, 2023; Alshurideh et al., 2023). Tourist views of a place can be favorably impacted by this sense of community and trust among travelers (Al-Sulaiti et al., 2021; Lam et al., 2020). Furthermore, UGC websites give tourism establishments and destinations useful input that enables them to enhance their services and handle any problems or worries that visitors may have (Abaalzamat et al., 2021; Marine-Roig, 2021). Therefore, UGC websites might affect visitors' choices since they frequently check them before making a reservation or travel arrangements. The purpose of the study is to analyze the destination image of Wadi Rum Protected Area as a top tourist attraction in Jordan based on TripAdvisor user ratings. The study also aims to comprehend how the

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elements of Wadi Rum's destination image contribute to the creation of a planning strategy for a more sustainable and competitive destination.

## **Destination Image:**

In the field of tourism marketing and management, the notion of the tourism destination image is essential. It refers to the general opinion and mental image that people have of a specific tourist site (Lai & Li, 2016; Baloglu & McCleary, 1999). Various factors, such as advertising, word-of-mouth, online evaluations, and personal experiences, contribute to the formation of these perceptions (Alshurideh et al., 2019; Al Khasawneh et al., 2021; Alshurideh et al., 2022). The perception of a place has a big impact on how tourists behave since it determines their expectations and feelings about the place. For destination marketing businesses to successfully manage and advertise their destinations, an understanding of the elements of destination image is crucial (Beerli & Martin, 2004; Jenkins, 1999; Chaulagain et al., 2019). The subject of tourist destination image (TDI) has garnered considerable scholarly interest (Chen & Phou, 2013; Lai & Li., 2016; Lojo et al., 2020; Marine-Roig, 2021; Marine-Roig, 2019; Xiao et al., 2022; Wang et al., 2021; Alzboun et al., 2023; Abaalzamat et al., 2021; Hunitie et al., 2022; Qurah et al, 2023).

According to the Gartner model of destination image (Gartner, 1993), the components of the destination image comprise cognitive, affective, and conative components. The factual and knowledge-based information that tourists have about a place is represented by the cognitive component, which frequently comes through brochures, websites, and guidebooks. It consists of components including geographical features, historical sites, climate, and attractions. The emotional and subjective elements of destination picture are covered by the affective component. It involves how people feel about a place, their attitudes about it, and their emotional reactions. Positive emotional elements are essential for drawing tourists because they foster a sense of expectation and excitement. The third component, known as the conative component, is concerned with how tourists behave and what they do when they are at a certain location. This aspect shows how ready the visitors are to act on their observations and feelings (Marine-Roig, 2021; Marine-Roig, 2019; Xiao et al., 2022; Wang et al., 2021; Alzboun et al., 2023; Abaalzamat et al., 2021). The likelihood of visiting a location, the likelihood of promoting it to others, and the desire to carry out particular activities while there are some examples (Baloglu & McCleary, 1999; Gartner, 1994).

Perceived risk, which depicts possible uncertainties or negative impacts linked with a location, is also an important component of destination image. Before visiting an area, tourists assess the risk factors associated to the location's safety, health, and money. To be effective in destination marketing, perceived risks must be reduced. Furthermore, much as people have personalities, places might be regarded to have certain personality traits. A location may be seen as romantic, calming, adventurous, or culturally varied, for example. This aspect influences tourist expectations and the kind of experiences they want. Another component of social image is the impact of social networks, peers, and the media on how a location is seen. The reputation of a destination may be greatly influenced by social media, word-of-mouth recommendations, and celebrity endorsements. Furthermore, previous trips to a site or the experiences of others may have altered visitors' view of that location. As a result, positive experiences can reinforce a positive view, whilst negative ones might leave a long-lasting unfavorable impression. The image of a place is heavily influenced by its marketing endeavors, which include advertising campaigns, promotional materials, and an internet presence. Thus, destination marketing organizations must understand and control these parts of destination image in order to attract and retain tourists, increase their competitive edge, and assure long-term tourism development. (Pike, 2002; Baloglu & McCleary, 1999; Gartner, 1994).

For planners and decision-makers, researching tourism destination image is essential because it supports sustainable tourism practices, fosters a competitive advantage,

supports risk management, optimizes resource allocation, shapes policy formulation, and shapes crisis management (Baloglu & McCleary, 1999). This knowledge enables places to prosper in the dynamism and competition of the tourism sector. First, knowing how tourists see a destination enables planners to create strategic strategies that reflect that perception. Destinations may effectively draw in and keep visitors by coordinating their marketing initiatives with the development of their infrastructure and their tourism offers. A competitive advantage may also be offered by the favorable destination reputation. When decision-makers and planners concentrate on creating and maintaining a positive image, the destination stands out in a crowded market, bringing in more tourists and generating more income. Planners can proactively address concerns about negative aspects of the destination's image, such as safety or environmental challenges, by being aware of them. Destinations can safeguard their reputation and preserve tourist trust by controlling and mitigating hazards. Additionally, knowing the elements of destination image aids in the efficient allocation of resources by decision-makers. In order to maximize the return on investment, they might prioritize marketing initiatives and spend in areas that improve the brand's image. Additionally, the ideal destination image should serve as a guide for decisions on tourism policy, including rules, incentives, and sustainability initiatives. These regulations may assist in shaping the area into the kind of tourism destination that is desired. In the event of a crisis or unfavorable event, crisis management requires a solid awareness of destination image. Decision-makers are capable of acting quickly and decisively to minimize image harm and regain passenger confidence. Finally, the image of a destination is intimately related to sustainable tourism development. The desired image can be used by decision-makers to encourage ethical and sustainable behavior that protects the destination's natural and cultural resources (Gartner, 1994; Pike, 2002; Beerli & Martin, 2004).

## User-Generated-Content Websites and Destination Image:

There are several user-generated content websites in the field of tourism where travelers share their experiences, reviews, and recommendations, such as: TripAdvisor, which is one of the most well-known user-generated travel websites, offering reviews, ratings, and recommendations for hotels, restaurants, attractions, and more. TripAdvisor and other UGC websites offer valuable insights and recommendations from fellow travelers, making them useful resources for anyone planning a trip (Abaalzamat et al., 2021; Alzboun et al., 2023; Kladou & Mavragani, 2015; Marine-Roig, 2021; Taecharungroj & Mathayomchan, 2021). Therefore, user-generated content has replaced surveys and interviews in research (Marine-Roig 2019). UGC websites play a vital role in the realm of tourism planning and decision-making. They serve as dynamic platforms where travelers share their authentic experiences, insights, and recommendations about destinations, accommodations, and attractions. These websites empower prospective travelers with firsthand knowledge, enabling them to make informed choices when planning their trips. For planners and decision makers in the tourism industry, such as destination management organizations and businesses, UGC serves as a valuable source of customer feedback and market insights. By analyzing reviews and ratings on platforms like TripAdvisor, Yelp, and Google Maps, these stakeholders can assess visitor satisfaction, identify areas for improvement, and tailor their offerings to meet traveler preferences. This symbiotic relationship between travelers and the tourism industry, fostered by UGC, enhances the quality of travel experiences and drives growth in the sector (Xiang et al., 2017; Litvin et al., 2008; Schegg & Stangle, 2019; Ye et al., 2011; Alzboun et al., 2023).

## Case Study: Wadi Rum, Jordan

Wadi Rum Protected Area, also known as the "Valley of the Moon," is a spectacular natural and cultural treasure located in southern Jordan (Jamaliah et al., 2019). This protected area, which is about 720 square kilometers in size, is renowned for its breathtaking desert vistas, extensive history, and distinctive geology (Jordan Tourism Board, 2023). It is the second most visited tourist site in Jordan (MOTA, 2023). Wadi

Rum's tourism is distinguished by its natural and cultural features, adventure tourism activities, opportunities for cultural immersion, UNESCO designation, film tourism appeal, sustainability efforts, and a variety of tourists who come here all year long. This confluence of elements distinguishes Wadi Rum as a special and alluring location in Jordan, First of all, the combination of natural and cultural activities is frequently what draws travelers. Wadi Rum is known for its amazing natural beauty, which includes dramatic desert landscapes, sandstone mountains, and prehistoric petroglyphs. Dramatic sandstone mountains, tight valleys, and huge desert plains make up Wadi Rum's unique landscapes. The Precambrian-era rock formations in this area are well-known for their intricate patterns and vivid red hues (Khamis & Nash, 2012). Wadi Rum is a popular destination for thrill-seekers as well. Adventure seekers now frequently travel to the region. Visitors may experience the stunning environment while participating in activities like as rock climbing, hiking, and desert safaris (Ababsa & Ali, 2017). Thousands of years of human settlement are shown to have taken place in Wadi Rum, which also has a rich cultural heritage. It has a strong connection to the native Bedouin people who have long preserved their way of life in the desert (Rasul, 2017). Wadi Rum is a popular tourist destination for thrill-seekers since it offers activities including rock climbing, hiking, camel trekking, and off-road jeep rides. This classification attracts tourists who prioritize protecting natural and cultural assets. Additionally, a lot of visitors want to fully experience the indigenous Bedouin culture. A distinctive cultural experience is provided by traditional desert camps where guests can experience Bedouin hospitality, music, and cuisine. A UNESCO World Heritage Site since 2011, Wadi Rum was chosen for its exceptional ecological and cultural importance. This acknowledgment has aided in the preservation of the region and the promotion of ecotourism (UNESCO, 2011). In addition, the surreal settings of Wadi Rum have been depicted in a number of Hollywood productions, including "Lawrence of Arabia" and "The Martian." Filmmakers from all over the world are still drawn to it because of its cinematic appeal (Ryan, 2018). In Wadi Rum, there is also an increasing emphasis on sustainable tourism, with initiatives to reduce the negative effects of tourism on the environment, protect the desert ecosystem, and help local communities. The cultural history of Wadi Rum and its delicate desert ecosystem continue to be protected as sustainable tourism practices are promoted (Jabbour & Nasr, 2018). Wadi Rum therefore draws a wide variety of visitors, including thrill-seekers, nature lovers, cultural explorers, photographers, history aficionados, and families seeking out uncommon experiences. Last but not least, Wadi Rum's climate permits year-round travel, albeit the cooler seasons of fall and spring are the busiest since they avoid the sweltering summers.

# Methodology:

The vast majority of studies into the destination image have utilized traditional methods such as surveys. However, the emergence of the digital marketing era has heightened the need for implementing innovative strategies that rely on UGC platforms such as TripAdvisor and social media (lei et al., 2023). Thus, the present study utilized a qualitative approach to investigate the formation of destination image among tourists, employing thematic analysis as the primary analytical strategy see figure (1). Previous studies in the field of marketing and tourism research have demonstrated that the application of text analysis holds value in extracting tourists' insights (Alzboun et al., 2023; Gartner & Kim, 2022; Krawczyk & Xiang, 2016). The current study followed the methodological framework proposed by Braun and Clarke for conducting thematic analysis, as seen in Figure 1 and consisted of six steps. A total of 1840 reviews (Only comments in English were included) were collected using the Instant Data Scraper from TripAdvisor, a prominent travel portal that attracts around 150 million visits on a monthly basis (Schröder, 2023). These reviews encompassed 50,863 words and 20,517 sentences. The researcher employed purposive sampling to collect reviews that encompassed the

study area, specifically the "Wadi Rum Protected Area." In contrast, to conduct a theme analysis on the reviews of travelers who have visited Wadi Rum Protected Area, researcher followed a systematic approach consisting of six consecutive steps, as seen in Figure 1. The initial stage involved acquainting oneself with the data by thoroughly reviewing the feedback on many occasions. The second step was the generation of initial codes by utilizing MAXQDA software to identify the most frequently occurring phrases and words in the reviews. The following step was the identification of themes through the process of categorizing interconnected codes. The subsequent stage involved the identification and categorization of the many topics pertaining to the dimensions of the destination image. The fifth step involved doing a thorough examination of the themes to ensure that they were adequately supported by the available data. The final step entailed generating the report through the process of documenting the findings of the study.

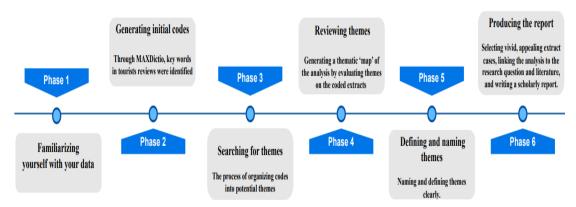


Figure 1. Thematic analysis process (Braun & Clarke, 2006)

Wadi Rum Protected Area was chosen for review due to the fact that it is listed on the World Heritage List as a mixed natural and cultural site; furthermore, it features a diverse desert landscape consisting of narrow gorges, natural arches, towering cliffs, ramps, massive landslides, and caverns; and it has an extensive history of online reviews, thereby serving the study's objectives (UNESCO, 2011). As shown in figure (2), Wadi Rum Protected Area reviews by tourists extend from 2011 to 2023. The quantity of reviews has steadily increased over the years, with a precipitous decline in 2021–2023. The sharp decline in reviews over the past few years may be attributable to a number of factors, including the COVID-19 pandemic, which has contributed to a decline in international travel.

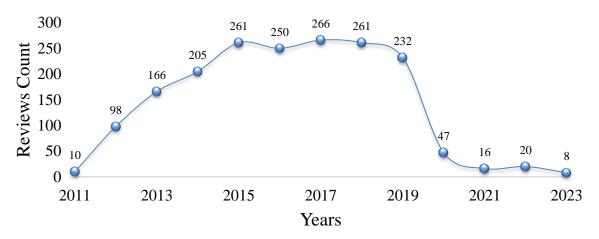


Figure 2. Number of tourists reviews of Wadi Rum Protected Area accordance reviews year

On the other hand, examining the reviews of Wadi Rum Protected Area reveals that a

variety of travelers have visited this one-of-a-kind destination. The majority of the 1840 reviews analyzed were written by couples, who accounted for 34.8% of all visitors. This indicates that Wadi Rum Protected Area is a popular destination for couples as well as romantic getaways. Moreover, the large proportion of friends (28.5%) and families (18.8%) indicates that it appeals to a broader audience by providing group travel-friendly experiences and family-friendly activities. Additionally, the presence of business travelers (2.1%) and solo travelers (15.8%) suggests that the destination may also appeal to those in search of adventure or professional engagements, highlighting its versatility as a tourist destination. The data highlights the unique attractiveness of Wadi Rum Protected Area, which has successfully drawn a broad spectrum of people with diverse interests and preferences in travel.

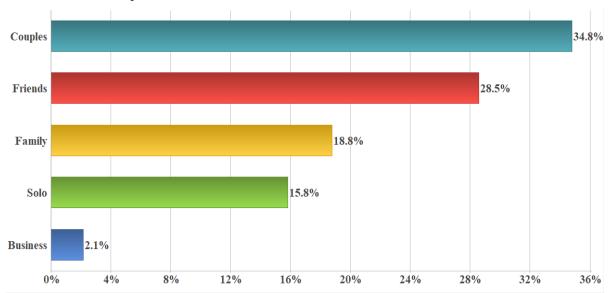


Figure 3. Tourism types in Wadi Rum Protected Area

While the dataset pertaining to the nations from which visitors to Wadi Rum Protected Area originate offers significant insights into the global attraction of the site (see figure 4). Out of the 1840 reviews that were examined, the United States emerged as the predominant origin of tourists, constituting 25.8% of the overall number of visitors. This observation indicates a significant level of enthusiasm among American tourists for discovering the distinctive geographical features and cultural encounters provided by this designated region. The United Kingdom, Australia, and Canada make up a substantial proportion of the tourist base, with percentages of 16.7%, 5.9%, and 5.0%, respectively. This suggests that Wadi Rum Protected Area has garnered considerable interest from English-speaking nations.

Furthermore, it is important to acknowledge that the appeal of the destination transcends geographical boundaries, as seen by the participation of nations such as India (4.8%), Jordan (3.5%), and the United Arab Emirates (3.4%) in contributing to its global attractiveness. The presence of diverse sources of tourists in the area is indicative of its international acclaim and ability to effectively appeal to visitors from other nations. Additionally, the category labeled as "Rest of the World" comprising 20.6% of visitors highlights the diverse range of nationalities that are attracted to Wadi Rum Protected Area, thereby reinforcing its position as a really global tourist destination.

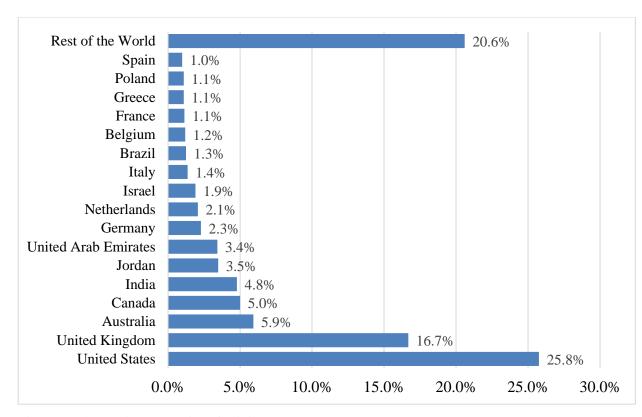


Figure 4. The tourists' countries of origin

By examining the countries of origin of tourists and the types of tourism in Wadi Rum Protected Area together, a more thorough understanding can be gained of the international attraction of the destination and its capacity to accommodate a broad spectrum of tourist tastes. The data presented in Figure 5 demonstrates a fascinating interaction between the geographic origin of tourists and their preference for a certain form of tourism. For instance, it is noteworthy to observe that the United States, United Kingdom, Australia, and Canada make substantial contributions to the overall number of visitors. However, it is interesting to highlight that a considerable proportion of tourists from these countries primarily consist of couples. The substantial presence of couples from these nations implies that the region's romantic and picturesque allure particularly connects with this particular group of travelers. In the context of European tourists, it is observed that they possess a diverse range of travel tastes, encompassing various forms of tourism such as family-oriented trips and individual solo journeys. This pattern is similarly observed among Asian and African tourists.

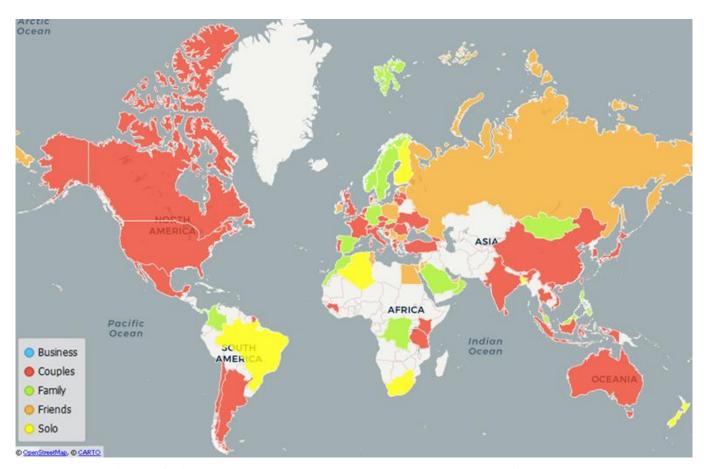


Figure 5. Thematic map for interaction between travelers' geographic origin and preferred tourism type

## Reliability and validity

The issue of ensuring reliabipreviousy in qualitative studies is a challenge due to the absence of statistical testing as a means of verification. Additionally, it is difficult to achieve a high level of dependability in human-coded text analysis, especially when dealing with large amounts of data. This is mostly due to the heightened likelihood of researchers committing errors during the coding procedure (Su et al., 2017). One way to overcome previous limitations is intercoder reliability (ICR), a frequently recommended best practice in qualitative analysis (O'Connor & Joffe, 2020). The present study employed intercoder dependability by utilizing two coders and leveraging the functionality of MAXQDA software, specifically making use of the auto-code feature. The ICR result indicate that there is high reliability with 92% according to following equation: The ICR = number of agreements / (the total number of agreements + disagreements) (O'Connor & Joffe, 2020).

# **Results:**

The research utilized MAXQDA software to conduct an analysis of the study questions and to uncover the underlying concepts and themes present in the comments posted by tourists on TripAdvisor during their visits to Wadi Rum Protected Area. Table 1 presents an analysis of the most frequently used words in tourist reviews of Wadi Rum Protected Area. These words are representative of the fundamental ideas and patterns that reviewers articulate when describing their varied encounters at this renowned location. Significantly, the terms "Desert" and "Wadi" hold the foremost positions, underscoring the importance of the desert landscape and Wadi Rum region itself in the reviews provided by tourists. These terms hold significant importance in defining the essence of

the region and are likely to have a pivotal impact on the experiences of tourists. Terms such as "Experience," "Amaze," and "Beautiful" serve to emphasize the emotional and aesthetic aspects of tourists' interactions, implying that Wadi Rum Protected Area frequently elicits a deep and visually captivating impression on its visitors. Furthermore, the utilization of terms such as "Camp," "Bedouin," "Jeep," and "Camel" serves to highlight the significance of adventure sports and cultural immersions, as tourists engage in activities like as camping, encounters with Bedouin communities, and desert safaris. Furthermore, the term "Sunset" emphasizes the inherent aesthetic appeal and distinctive experiences that tourists hold dear throughout their journeys.

Table 1. Most frequencies words in tourist reviews

| Rank | Words      | Frequency | % from all words | Documents | Documents % |
|------|------------|-----------|------------------|-----------|-------------|
| 1    | Desert     | 1340      | 2.63             | 888       | 48.55       |
| 2    | Wadi       | 1311      | 2.58             | 916       | 50.08       |
| 3    | Place      | 868       | 1.71             | 623       | 34.06       |
| 4    | Tour       | 821       | 1.61             | 577       | 31.55       |
| 5    | Experience | 679       | 1.33             | 522       | 28.54       |
| 6    | Amaze      | 625       | 1.23             | 507       | 27.72       |
| 7    | Camp       | 600       | 1.18             | 455       | 24.88       |
| 8    | Visit      | 579       | 1.14             | 457       | 24.99       |
| 9    | Beautiful  | 570       | 1.12             | 457       | 24.99       |
| 10   | Night      | 525       | 1.03             | 399       | 21.82       |
| 11   | Bedouin    | 511       | 1.00             | 419       | 22.91       |
| 12   | Jeep       | 509       | 1.00             | 435       | 23.78       |
| 12   | Sand       | 509       | 1.00             | 420       | 22.96       |
| 14   | Rock       | 448       | 0.88             | 384       | 21.00       |
| 15   | Stay       | 424       | 0.83             | 356       | 19.46       |
| 16   | Great      | 413       | 0.81             | 329       | 17.99       |
| 17   | Time       | 390       | 0.77             | 327       | 17.88       |
| 18   | Ride       | 373       | 0.73             | 293       | 16.02       |
| 19   | Camel      | 367       | 0.72             | 316       | 17.28       |
| 20   | Guide      | 366       | 0.72             | 283       | 15.47       |
| 21   | Trip       | 322       | 0.63             | 269       | 14.71       |
| 22   | Area       | 319       | 0.63             | 264       | 14.43       |
| 22   | Good       | 319       | 0.63             | 264       | 14.43       |
| 24   | Landscape  | 309       | 0.61             | 270       | 14.76       |
| 25   | Sunset     | 305       | 0.60             | 273       | 14.93       |
| 26   | Make       | 274       | 0.54             | 243       | 13.29       |
| 27   | Lawrence   | 268       | 0.53             | 229       | 12.52       |
| 27   | Spend      | 268       | 0.53             | 241       | 13.18       |
|      |            |           |                  |           |             |

| 27 | Well  | 268 | 0.53 | 231 | 12.63 |
|----|-------|-----|------|-----|-------|
| 30 | Drive | 264 | 0.52 | 224 | 12.25 |

The process of qualitative coding begins once the documents have been uploaded. Braun & Clarke (2012) argue that codes serve as fundamental components of analysis, aiding researchers in understanding their data within the context of their preliminary research questions. As stated by Kuckartz & Rädiker (2019), scholars engage in the process of data selection and coding, employing two primary methods: the concept-driven, deductive approach and the data-driven, inductive approach. Thematic analysis allows for coding to be undertaken in multiple ways, resulting in the co-occurrence and interconnection of coded segments. The present study employed a data-driven, inductive approach to reveal the core themes that encapsulate the destination image of Wadi Rum Protected Area. The initial step was the identification of keywords, as illustrated in Table 1. Subsequently, patterns of codes were revealed through the utilization of Code Maps and the MAXMaps functionality inside the MAXQDA software. The results of utilizing the Code Maps function are visually represented in Figure 6. This figure displays a theme map that effectively portrays three main themes that comprehensively incorporate all codes obtained from tourist reviews. These themes have been classified as "cognitive" (indicated by the blue color), "affective" (represented by the yellow color), and "conative" (denoted by the red vellow) which consist with Gartner's (1993) theoretical model. As shown in below figure, the cognitive aspect of tourism pertains to the image framework that tourists possess towards a certain destination, including their understanding and perceptions of many elements within it. This encompasses various components such as the historical backdrop, the distinctive desert landscape, and the culturally significant Bedouin heritage. Fundamentally, it covers the comprehension and beliefs held by tourists towards Wadi Rum Protected Area. While the concept of "affectivity." visually depicted by the red color, explores the emotional and subjective aspects of visitors' experiences. This analysis explores the emotions, sentiments, and personal responses elicited by individuals' experiences with this desert setting, thereby capturing the affective dimension of their encounters. Finally, the "conative" concept, represented by the yellow color, comprises the behavioral and action-oriented components of tourists' reactions to the destination. The acts encompassed in this context involve making recommendations for others to visit Wadi Rum, proposing a suggested spending at least a day, and campaigning for spending a night in the area. These actions are motivated by the personal experiences of individuals within Wadi Rum Protected Area.

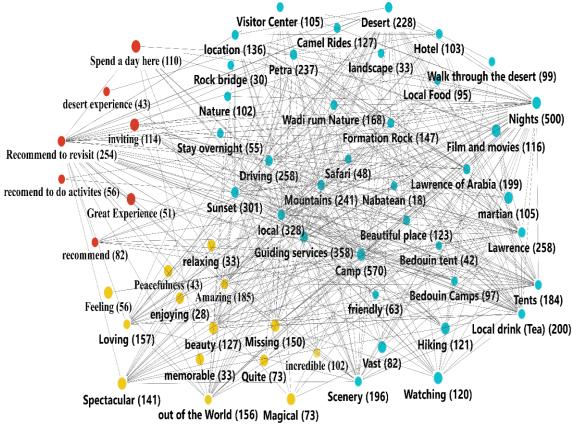


Figure 6. Thematic map for main themes and concepts used by tourists

To get deeper into the cognitive theme, the author divided the cognitive image into six sub-themes. These sub-themes offer valuable insights into what tourists associate with Wadi Rum Protected Area. They highlight various aspects such as the natural beauty of the desert, the available activities, the influence of films, gastronomic experiences, historical and heritage significance, and the services offered, all contributing to the overall cognitive perception of the destination. For instance, the Desert Nature theme related to the natural aspects of the desert area. It offers sub-themes including "Mountains," "Scenery," "Sand Dunes," "Formation Rock," and "Vast Landscape," emphasizing the area's breathtaking natural beauty and geological elements. Wadi Rum Protected Area is often associated with its dramatic desert setting and unusual rock formations. while the primary emphasis of the Activities Theme is the cognitive associations that tourists establish with the available activities in Wadi Rum. The inclusion of sub-themes such as "Jeep Tour," "Camel Rides," "Hiking," "Safari," and "Desert Experience" symbolizes the wide array of adventure and exploration opportunities that are available to travelers. These behaviors play a significant role in shaping the cognitive perception of the destination. The theme of films, encompassing sub-themes such as "Lawrence of Arabia" and "Martian," highlights the impact of renowned movies and media portrayals on the way tourists see Wadi Rum. The inclusion of the destination's unique landscapes as cinematic settings in these films has played a significant role in shaping its cognitive picture. The gastronomic Theme involves various aspects related to food and beverages. The presence of sub-themes such as "Local drink (tea)" and "Local Food" suggests that tourists tend to connect Wadi Rum with the distinct tastes and culinary customs of the surrounding area. The field of gastronomy serves to augment the cognitive representation by serving as a manifestation of the indigenous culture. The topic of heritage, specifically encompassing sub-themes such as "Petra," "Lawrence," and "Nabatean," serves to emphasize the historical and cultural significance that visitors associate with Wadi Rum. The inclusion of references to heritage buildings and historical personalities enhances the cognitive perception of the region as a locale of considerable cultural importance. lastly, The "Services" theme relates to the practical aspects of the destination. The presence of sub-themes such as "Guiding Services," "Tents," "Visitor Center," and "Hotel" indicates the range of facilities and services that serve the needs of tourists (see Table 2). These factors have an impact on cognitive representation by shaping the way visitors perceive the level of accessibility and convenience during their visit.

Table 2. Cognitive sub-themes of Wadi Rum Protected Area

| Desert Nati | ure   | Activities |       | Films     |       | Gastron | omic  | Heritage |       | Services |       |
|-------------|-------|------------|-------|-----------|-------|---------|-------|----------|-------|----------|-------|
| Themes      | Count | Themes     | Count | Themes    | Count | Themes  | Count | Themes   | Count | Themes   | Count |
| Camp        | 570   | Jeep Tour  | 278   | Lawrence  | 199   | Local   | 200   | Petra    | 237   | Guiding  | 358   |
|             |       |            |       | of Arabia |       | drink   |       |          |       | services |       |
|             |       |            |       |           |       | (Tea)   |       |          |       |          |       |
| Nights      | 500   | Driving    | 258   | Film and  | 116   | Local   | 95    | Lawrence | 258   | local    | 328   |
|             |       |            |       | movies    |       | Food    |       |          |       |          |       |
| Sunset      | 301   | Camel      | 127   | Martian   | 105   |         |       | Bedouin  | 97    | Tents    | 184   |
|             |       | Rides      |       |           |       |         |       | Camps    |       |          |       |
| Mountains   | 241   | Hiking     | 121   |           |       |         |       | Bedouin  | 42    | Visitor  | 105   |
|             |       |            |       |           |       |         |       | tent     |       | Center   |       |
| Desert      | 228   | Watching   | 120   |           |       |         |       | Nabatean | 18    | Hotel    | 103   |
| Scenery     | 196   | Safari     | 48    |           |       |         |       |          |       | friendly | 63    |
| Wadi rum    | 168   | Desert     | 43    |           |       |         |       |          |       |          |       |
| Nature      |       | experience |       |           |       |         |       |          |       |          |       |
| Sand        | 149   |            |       |           |       |         |       |          |       |          |       |
| Dunes       |       |            |       |           |       |         |       |          |       |          |       |
| Formation   | 147   |            |       |           |       |         |       |          |       |          |       |
| Rock        |       |            |       |           |       |         |       |          |       |          |       |
| location    | 136   |            |       |           |       |         |       |          |       |          |       |
| Beautiful   | 123   |            |       |           |       |         |       |          |       |          |       |
| place       |       |            |       |           |       |         |       |          |       |          |       |
| Nature      | 102   |            |       |           |       |         |       |          |       |          |       |
| Vast        | 82    |            |       |           |       |         |       |          |       |          |       |
| landscape   | 33    |            |       |           |       |         |       |          |       |          |       |
| Rock        | 30    |            |       |           |       |         |       |          |       |          |       |
| bridge      |       |            |       |           |       |         |       |          |       |          |       |
| Walk        | 99    |            |       |           |       |         |       |          |       |          |       |
| through     |       |            |       |           |       |         |       |          |       |          |       |
| the desert  |       |            |       |           |       |         |       |          |       | _        |       |
| Total       | 3105  | 995        |       | 420       |       | 295     |       | 652      |       | 1141     |       |

As in the cognitive theme, the affective subthemes associated with Wadi Rum Protected Area disclose the emotional and subjective responses of tourists who have visited this location (see Table 3). Collectively, these subthemes convey the profound and diverse spectrum of emotions evoked by Wadi Rum experience, such as loving, missing, peacefulness, etc. Specifically, the most prevalent affective sub-theme, "Amazing," accounts for 13.6% of tourists' comments, indicating that a substantial number of visitors are profoundly impressed and overwhelmed by the destination and describe their experiences as nothing short of extraordinary.

Table 3. Affective sub-themes of Wadi Rum Protected Area

| Affective sub-themes | Frequency | Percentage |
|----------------------|-----------|------------|
| Amazing              | 185       | 13.6%      |
| Loving               | 157       | 11.6%      |
| out of the World     | 156       | 11.5%      |
| Missing              | 150       | 11.1%      |

| Spectacular  | 141  | 10.4%  |
|--------------|------|--------|
| beauty       | 127  | 9.4%   |
| incredible   | 102  | 7.5%   |
| Quite        | 73   | 5.4%   |
| Magical      | 73   | 5.4%   |
| Feeling      | 56   | 4.1%   |
| Peacefulness | 43   | 3.2%   |
| memorable    | 33   | 2.4%   |
| relaxing     | 33   | 2.4%   |
| enjoying     | 28   | 2.1%   |
| Total        | 1357 | 100.0% |

Finally, table (4) presents the conative sub-themes associated with Wadi Rum Protected Area, shedding light on the behavior and intentions of tourists who have visited the destination. These sub-themes are crucial in understanding how visitors are inclined to act or recommend certain actions following their experiences in this protected area. The most prominent conative sub-theme is "Recommend to revisit," representing 37.9% of the responses. This suggests that a significant proportion of tourists are not only satisfied with their initial visit but are enthusiastic about returning to Wadi Rum Protected Area, highlighting a strong desire to re-experience its offerings. The sub-theme "Inviting" at 17.0% indicates that a substantial portion of visitors perceives the destination as welcoming and alluring, which may encourage others to explore it. This conveys the destination's ability to create a hospitable environment that attracts further exploration. "Spend a day here," theme with a representation of 16.4%, suggests that a notable number of tourists view a day trip to Wadi Rum as a worthwhile experience, emphasizing the destination's potential for day-long exploration and activities. "Recommend," accounting for 12.2%, implies that many tourists are inclined to endorse Wadi Rum Protected Area as a destination worth visiting, showcasing the power of positive word-of-mouth recommendations in driving further tourism. "Recommend to do activities" (8.3%) underlines the importance of specific activities and experiences offered in Wadi Rum that travelers feel compelled to endorse. This highlights the significance of adventure and cultural experiences that tourists find appealing. Finally, "Stay overnight" at 8.2% signifies that a portion of visitors are inclined to extend their stay in Wadi Rum, indicating the destination's capacity to captivate and engage tourists for an extended duration.

Table 4. Conative sub-themes of Wadi Rum Protected Area

| Conative sub-themes        | Frequency | Percentages |  |
|----------------------------|-----------|-------------|--|
| Recommend to revisit       | 254       | 37.9%       |  |
| Inviting                   | 114       | 17.0%       |  |
| Spend a day here           | 110       | 16.4%       |  |
| recommend                  | 82        | 12.2%       |  |
| Recommend to do activities | 56        | 8.3%        |  |
| Stay overnight             | 55        | 8.2%        |  |
| Total                      | 671       | 100.0%      |  |

# **Discussion & implications:**

The current study offers valuable insights into the destination image of Wadi Rum Protected Area as perceived by tourists. The utilization of thematic analysis approach for the analysis of tourist reviews on TripAdvisor resulted in an in-depth understanding of the cognitive, affective, and conative aspects of the destination image. The study's findings indicate that the cognitive, emotional, and conative dimensions of the destination image exhibit significant favorable attributes. Wadi Rum is commonly linked by tourists to its awe-inspiring natural landscapes, a wide range of recreational pursuits, historical and cultural importance, as well as its warm and hospitable atmosphere. Additionally, individuals convey a profound emotional connection to the site, characterizing their encounters as "amazing," "peaceful," and "inviting." Furthermore, a considerable number of tourists exhibit an overwhelming desire to recommend Wadi Rum to other tourists and extend their stay in the area. The results of this study align with prior research conducted on the perception of tourism destination image. A study conducted by Gartner (1993) revealed that the cognitive, affective, and conative elements collectively constitute important components of the destination image. This study provides more evidence to substantiate the aforementioned finding, as it illustrates the interconnections between these three dimensions in influencing tourists' opinions of Wadi Rum. The findings of this study have a number of implications for tourism stakeholders in Wadi Rum Protected Area. By understanding the destination image that tourists hold, stakeholders can develop strategies to enhance the visitors experience and promote the area as a desirable tourist destination. For example, they can focus on promoting the unique natural and cultural attractions of the region, as well as the wide range of activities and experiences that are available to visitors. Additionally, they can invest in improving the quality of services and infrastructure in the destination, making it more accessible and convenient for tourists. By taking these steps, tourism stakeholders and policymakers can help to ensure that Wadi Rum Protected Area continues to attract visitors from all over the world and contributes to the sustainable development of the local community. The study's findings also have important implications for tourism marketing and management. By understanding the key elements of the destination image, tourism stakeholders can develop targeted marketing campaigns and improve the overall visitor experience. For instance, the findings suggest that tourists are drawn to Wadi Rum Protected Area's natural beauty, adventure activities, and cultural heritage. Tourism stakeholders could capitalize on these strengths by promoting the destination as a unique and unforgettable experience. In addition, the study's findings highlight the importance of positive word-of-mouth recommendations from tourists. The findings show that a significant proportion of tourists are motivated to revisit Wadi Rum Protected Area and recommend it to others. This suggests that tourism stakeholders should focus on providing excellent customer service and creating memorable experiences for visitors.

Therefore, enhancing and utilizing Wadi Rum's destination image should be the foundation of any planning initiatives for tourism promotion. Wadi Rum's tourism strategy should consider both the preservation of its cultural and natural resources and the creation of a delightful and unforgettable experience for tourists. It should consider a variety of factors including emphasizing the importance of conservation and responsible tourism; implementing eco-friendly practices; educate visitors on the unique desert ecosystem; developing guided tours which focus on flora, fauna, and sustainable practices; planning festivals, events, and workshops that highlight Bedouin culture's traditions, music, and cuisine promoting interaction between visitors and the neighborhood's residents; and marketing adventure tourist pursuits like hot air balloon flights, camel treks, and rock climbing.

#### Conclusion

This study offers a comprehensive and useful review of travelers' perceptions of Wadi

Rum Protected Area as a tourism destination. The results indicate that the place possesses a significantly positive perception, as tourists express praising for its natural aesthetics, adventurous opportunities, cultural value, and welcoming and pleasant atmosphere. Tourists also experience a wide range of positive emotions during their visits to Wadi Rum, and they are highly likely to recommend the destination to others and to return for future visits. The implications of the study's findings hold significance for various stakeholders in the tourism industry and policymakers involved in the management of Wadi Rum Protected Area. By comprehending the perception of the destination image held by tourists, stakeholders can formulate strategies aimed at augmenting the overall visitor experience and effectively marketing the region as an appealing tourism destination. The findings of this study can be utilized by professionals in the field of tourism marketing and management to enhance the visitor experience and create more effective targeted marketing campaigns. In general, the results of this study emphasize the considerable capacity of Wadi Rum Protected Area to appeal to and retain tourists from various global regions. By using the inherent advantages of the locale and effectively addressing areas of potential enhancement, actors in the tourism industry may contribute to the long-term viability and economic success of Wadi Rum as a sustainable and flourishing tourist destination.

## Limitation and further research:

The present study possesses several limitations. The study is grounded in an analysis of tourist reviews sourced from TripAdvisor, which may not always reflect the perspectives of all tourists who visit Wadi Rum Protected Area. Furthermore, this study solely focuses on analyzing the cognitive, affective, and conative dimensions of the destination image. Future research could potentially delve into additional dimensions, such as the behavioral and social components, which are of significant importance. Furthermore, this study does not investigate the various elements that may impact tourists' opinions of Wadi Rum Protected Area. Subsequent studies may explore the influence of other elements, including tourists' characteristics, travel motivations, and previous experiences, on the formation of tourists' perceptions of destinations.

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