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The Role of Competitive Advantage Between Search Engine Optimization and Shaping the Mental Image of Private Jordanian University Students Using Google

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ABSTRACT

This study aims to determine the factors that influence the improvement of the mental image of Jordanian private university students who primarily use Google. Building upon the concept of Search Engine Optimization (SEO), we developed and assessed a conceptual framework that includes the influences of On-Page Optimization, Off-Page Optimization, and the functioning of search engines. The theoretical framework of the study draws upon Bedny's perspective of activity, which emphasizes purposeful actions undertaken by individuals in specific contexts. Activity encompasses not only physical actions but also the psychological processes and social interactions associated with them. A sample of 400 respondents was surveyed, revealing a strong relationship between search engine optimization (as an independent variable) and the creation of a positive mental image (as a dependent variable). Competitive advantage served as a mediating variable, with dimensions including scope, site, synergy, and system, particularly among potential students. The results demonstrate that search engine optimization significantly impacts the creation and formation of a positive mental image among students at private Jordanian universities, and it correlates strongly with their self-perceptions. Further research is needed to better understand the role of search engine optimization, artificial intelligence, and big data techniques in attracting students to private universities. This study contributes to the literature on both Search Engine Optimization and Knowledge Graphs by offering a fresh perspective on how these subjects can be effectively utilized in modern marketing. Additionally, it provides insights into the benefits of SEO utilization in the context of Knowledge Graphs.

1. INTRODUCTION

Information is the driving force behind all economic value chains in the world today. Online "search engines" have developed over the past few years as a result of people's desire for information, and they are currently the most widely used tools. Gradually, product marketers began utilizing this platform to promote their services or goods. how search engine optimization affects various marketing metrics like market share, brand equity, and others as a marketing tool [1]. Numerous marketing factors are shown in the literature review to be impacted by search engine optimization. Consumer online behavior, product price, brand awareness, brand recognition, product information, brand image, brand loyalty, market share, and user reviews are just a few of the variables that can affect a business [2]. The world is currently dominated by internet connectivity, making it almost impossible to find anything online without using a search engine. But what exactly is this search engine? A search engine is a sophisticated piece of software that can be compared to a finder visiting various websites and their pages to locate important information [3].

Search engine optimization (SEO) and search engine marketing (SEM) are the two main forms of online advertising connected to Internet search engines. Search engines use paid placement in the form of sponsored or paid results, where an ad appears alongside web search results in a pre-defined area of a search result page. Search engines levy placement fees based on the number of clicks through the advertisement and the cost of the relevant keywords, which are primarily decided by auction and measured by CPC (cost per click). SEO, also known as natural or organic results because they are meant to reflect relevancy by searchers' standards, is the practice of optimizing web pages in a way that increases their ranking in the web search results. In this type of advertising, advertisers pay SEO companies that are experts in this field [4].

SEO is the process of designing, writing, and coding a website in such a way as to increase the quantity, quality, and visibility of the company website by people using search engines via unpaid (organic or algorithmic) search results. This is known as search engine optimization (SEO). Other types of search engine marketing (SEM) concentrate on paid listings. The marketing tactic of search engine optimization (SEO) aids in boosting a company's online presence. The likelihood that users will visit a website increases when it appears at the top of the page or at the beginning of the search results list. This is why businesses work hard to increase their rankings for their websites [5].

Due to the fact that the majority of students are current or potential customers of private universities, some websites don't cater to students' needs. Websites are their primary source of information. The inability to satisfy user needs, respond to all of their inquiries, build websites from the inside out, and include external links is a weakness. Whereas the favorable mental image consists of websites that satisfy the needs of the students in terms of website construction, aesthetic and technical availability, site speed and navigation, and adequate information that anticipates their questions [6]. According to Najadat et al. [7], the study focuses on analyzing Jordanian university websites using a technique known as data envelope analysis (DEA). DEA is a mathematical modeling method that uses numerous input and output variables to examine the relative efficiency and performance of several entities, such as colleges in this example. The study intends to give insights into the efficiency and effectiveness of Jordanian university websites in terms of information distribution, usability, and functionality in the context of evaluating Jordanian university websites. The researchers use DEA to identify the institutions with the most efficient websites and places for development in others. The research used DEA to assess the efficiency and efficacy of the websites. Efficiency in website design, content organization, and accessibility may all have an influence on how successfully institutions attract and engage potential students via search engine results. Identifying the aspects that lead to efficiency helps influence SEO methods to improve colleges' mental image among students [8].

The study looks at the influence of online accessibility on web traffic and university rankings. Online accessibility refers to the design and execution of websites that are usable by people with impairments. It seeks to comprehend how easily accessible websites attract more visitors, which may lead to improved institution rankings. Thus, considering accessibility, the relevance of online accessibility for colleges is critical. Websites are critical for improving search engine results and influencing students' mental images. It investigates the link between online traffic and university rankings and ensures that websites are accessible and functional for all users, including those with impairments. It implies that increased online traffic may contribute to higher university rankings. Understanding the relationship between web traffic and rankings can give insights into how SEO methods might affect the visibility and perception of institutions when investigating the function of search engine optimization (SEO) in forming the mental image of students.

As a result, Jordanian private universities can effectively shape a positive mental image for students, enhance their reputation, and attract prospective students by incorporating these SEO elements (keyword search, on-page optimization, social media integration, and so on) into their marketing and communication strategies. To develop trust and credibility, institutions must link their narrative and appearance with their real offers and principles.

2. LITERATURE REVIEW

2.1 Overview of search engine optimization

Web pages for prospective students at universities should be easily accessible, of high usability, and dependable in order to effectively communicate information about their academic and social prospects to their stakeholders [9]. In this paper, 330 institutions from three continents-Europe, North America, and Oceania-have their prospective student web pages analyzed for accessibility, usage performance, and security. Based on the Webometrics rating, university websites were chosen for this study, and online automated test tools were employed. The findings demonstrated that websites at North American colleges gave greater consideration to usability and accessibility on web pages for potential students, followed by websites from Oceania and Europe. Websites that were evaluated have a low degree of WCAG 2.0 conformance. There were some areas for improvement, but no significant usability or security issues were found. Additionally, the research gave advice to website administrators and developers on how to address security, usability, and accessibility issues while evenly disseminating information to all stakeholders. In order to improve the accessibility, usability, and security of university websites and their potential student web pages, this analysis report offers suggestions to web developers [10].

The relational data model for the university website with SEO has been successfully designed in accordance with the functional requirements and may be effectively implemented in a free-standing work environment. The conceptual data model satisfies every functional criterion for creating an SEO-friendly university website. One entity and eleven attributes are produced in the conceptual data model as a result of the application of SEO-supporters. Three new tables or relations-article tag, article user, and staff publication-are created in the logical data model as a result of the conceptual data model's M-to-N relationships. By modeling each table or relationship in the schema using relational algebra, the logical data structure may be implemented in separate workplaces using RelaX and operational requirements can be satisfied. The promotion of private institutions' and universities' brands online is very important.
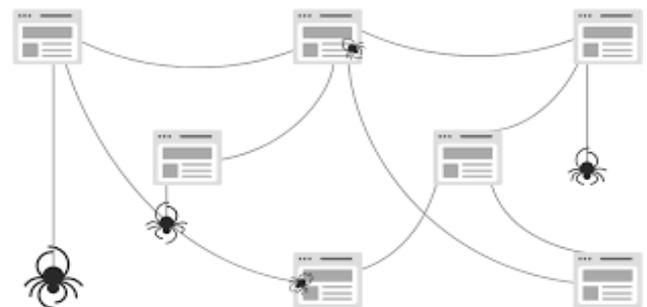

Figure 1. Explanation of the crawl process
Source: Prepared by the authors (2023)

In this study [11], link index and traffic index data from private university webs ites in China are gathered, relevant analysis is done, the relationship between link indicators and traffic indicators is sorted out, and the strategies for using these indicators to promote the brands of private colleges and universities are interpreted along with case studies. Search engines work through three primary functions:

- Crawling: search the Internet for information, examining the code and content of each URL they come across. Search engines use the discovery process known as crawling to send out a group of robots, also referred to as crawlers or spiders, to look for new and updated content. It doesn't matter what format the content is in-a webpage, an image, a video, a PDF, etc.-links are what allow users to find it.

- Indexing: Keep and arrange the information gathered during the crawling process (Figure 1). Once a page is indexed, it has a chance of being displayed as the result of pertinent searches.

- Ranking: Results are sorted from most relevant to least relevant in order to provide the content that will best satisfy a searcher's request [12].

2.2 Process of search engine optimization

The construction of websites in accordance with SEO criteria is crucial for web developers. When creating a website, SEO principles must be meticulously followed in order to attract Internet users' attention. This is because there are many aspects at play when trying to move a website up the search results ranking. Backlinks and keywords that are beneficial from the perspective of a website are used in the SEO process. The entire process of on-site and off-site optimization is involved in the search engine process. The relevance of SEO A culture that expects rapid access to the necessary information has arisen as a result of the extensive use of the Internet as a marketing medium. Internet consumers anticipate seeing pertinent information on the first search results page. SEO makes websites visible in search results, and websites with higher rankings get more visitors. Online merchants have a huge opportunity to increase their customer base thanks to higher website rankings. Therefore, businesses need a rapid and creative way to sell their products effectively, and this calls for website optimization. A higher ranking in the search engine results directly and favorably affects how frequently users visit a website, resulting in a profitable return on investment for the website owner.

On-Page Optimization: On the basis of the site audit, we present our strategy for internal website optimization in this phase. Keyword research is the primary task at hand in this stage. The analyst must create a list of suggested keywords based on the customer's suggestions and feedback. After that, the internal content of the website should be filled with keywords by including them everywhere on-site, in the page's titles, tags, and content. After implementing the keywords, the website should be checked frequently to see if the desired results have been obtained. Site traffic, page rank, and SERP are the three main artifacts that should be closely monitored throughout this analysis. Usually, traffic analysis is done using Google Analytics. This analysis can be used to develop new tactics [13].

Website Construction: The quality and number of backlinks, social media support, the keyword in the title tag, the length of the URL, and the website structure are all factors in the aforementioned publications. Website loading speed and page size: The loading speed is a crucial on-page aspect for the optimization of a website. This element is also taken into account by search engines in their algorithms. A website's ranking in the search results will decline the longer it takes to load. Although graphic components and special effects improve a website's appearance, using them excessively may lengthen the time it takes for the website to load. HTML files and all elements, regardless of their file format, contribute to the size of the page, which affects loading speed. The majority of a website's elements must be in HTML format to guarantee proper indexing. However, for content like photographs and videos to be indexed by search engines, more information is required. If a webmaster wants to provide enough information about a particular sort of material, they must utilize an alt tag for photos and a transcript for videos. The domain name must therefore be appropriate for the facility's work, such as for universities (.edu), organizations (.org), and electronics stores (.store) ..., Prior to purchasing the hostess, consideration should also be given to researching the anticipated visitor's volume. The theme used must be appropriate for the activity of the institution and include all services and goods offered by the establishment in the header, body, and footer of the page [14].

2.3 Search engine optimization on competitive advantage

Competitive advantage is a fundamental concept in management strategies because it explains how differences in performance between companies are explained [15]. Competitive advantage is defined as a company's best effort to compete in the market when compared to its competitors. Competitive advantage is the average industry's ability to capitalize on market opportunities while mitigating the threat of competition. At its most basic level, competitive advantage is a measure of the value that a firm is capable of creating and transferring to customers. It is offering a product that customers will value more than similar competitors' products [16]. To gain a competitive advantage, the firm must design itself to do something unique and valuable, something that is difficult to replicate perfectly. Baqleh and Alateeq [17] argue alongside [18] and [19] competitive advantage (CA) refers to the level where a company can build a safe status on its competitors. A competitive advantage can be gained by synchronizing a wide range of activities, from marketing to logistics, manufacturing to finance. The core of gaining a competitive advantage is allocating an integrated set of choices that distinguishes the company from its competitors. This characteristic gives the facility a strong attitude towards others and various parties [20]. It is important to noted that challenge facing the establishments is not in their ability to produce or provide services, but rather in their possession of the capabilities to satisfy the needs of their customers and fulfill their changing desires. In addition to the fact that customer roles and perceptions have also increased in such fierce competition [21].

2.4 Impact of search engine optimization on mental image

Lien and Chen [22] discover that concrete text in a narrative advertisement improves readers' imagery information processing by mentally expressing the images. Likewise, in services research, concrete text like "a palm-fringed fringed seaside" boosts both the elaboration and quality of mental imagery. Daoud and Otair [23] pictures and text are the basic forms of communication used by both websites and print advertising [24]. As a result, it is plausible to speculate that concrete images and text on a retail website, like print advertising, elicit mental imagery. When a consumer sees an apparel item with a concrete consumption background, he or she is more likely to engage in consumption imagery than if the item is presented with a solid background. Similarly, an apparel item presented with the concrete text of consumption and context could be more efficient than an item presented without the text in generating mental imagery Hirschman (1984).

2.5 Competitive advantage on mental image

Universities must develop the ability to research, strategy, and construct additional business items to ensure long-term competitiveness [25]. To that end, a business model is an overview of an organization and how it operates in order to achieve its objectives, such as profitability, growth, and social impact. It has proven to be a necessary tool for bringing new technologies and ideas to market, as well as a driver of innovation for unlocking technological potential defined reliability as a business model's ability to remain viable and workable in a changing business environment. A strategic business model is consistent with this notion.

Competitive advantage refers to the unique attributes or strategies that enable a business to outperform its competitors and achieve superior performance in the marketplace. It is the distinctive edge that sets a company apart from its rivals and allows it to generate higher sales, profits, and market share [26].

3. THEORETICAL FRAMEWORK

3.1 Bedny's theoretical perspective of activity theory

In this section, we will present the theoretical framework of the present study, based on Bedny's theoretical perspective of activity theory, introducing the fundamental definitions and assumptions (Figure 2).
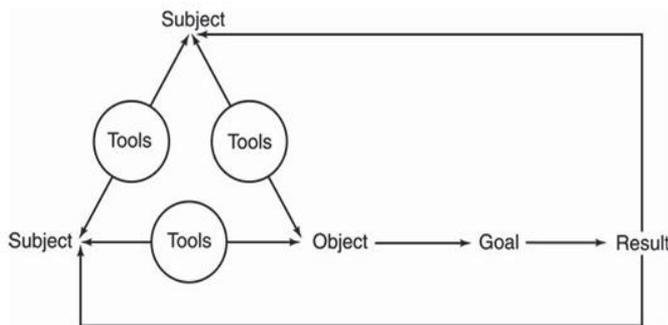

Figure 2. Conceptual framework- Bedny's representation of activity theory [27]

1. Activity: is a form of "doing" directed to an object. The theory uses the notion of an activity as the basis and unit of analysis. It is necessarily bound up with the concept of motive.

2. Subject: that is, a person or group of persons engaged in the activity, acting upon an object in ways directed by a predetermined goal, using tools in the course of the activity, which has some result (not always directly satisfying the intended goal).

3. Object of an activity: is that, which is modified and explored by a subject, according to the goal of the activity. Objects can be material things or intangibles, such as "consciousness of central issues".

4. Tool: may be physical or mental.

5. Goal: is closely associated with the concept of 'motive'.

6. Result: not always directly satisfying the intended goal. Establishes feedback to the subject or subjects engaged in the activity.

The knowledge of the Bedny's theoretical perspective of activity theory, as a behavioristic framework for the elaboration of SEO promotion technique, will guide the collection and the analysis of the data.

3.2 Empirical studies

Poturak et al. [28] investigate the impact of SEO on the business performance of a private university in Sarajevo. Thus, the main research question provides the finding on how the implementation of SEO influence the performance of business does. Moreover, the tested hypothesis presents weather SEO positively influence business performance of International Burch University (IBU). The research strategy is to analyze primary data derived from a case study, which is generated following a conversation with the Head of IBU Marketing and PR team. Data sample is derived from Google Analytics (focusing on number of visits and sessions, average engagement time, keywords and SERP positioning). Seobility tools are employed in data analysis. Business performance is calculated through IBU CRM system, focusing on student enrolment. Findings indicate that increasing a site's rankings on search engine results pages (SERPs) led to a variety of positive outcomes for companies including an increase in the number of visitors to the site, an increase in the average amount of time users spent on the site, increased user engagement, and an increase in student enrollment, which resulted in IBU increased annual sales revenue. It will benefit many different groups, including the government, which will benefit in both microeconomic and macroeconomic senses, digital marketing enthusiasts and SEO experts, and the academic world, which will benefit as a framework for future studies and research in the field of SEO recognition and implementation in business queries.

Haaker et al. [29] evaluated Jordanian Universities' websites based on data envelopment analysis. In this paper, a new approach is proposed in order to evaluate the Jordanian universities based on data envelopment analysis. The dataset is collected from 23 Jordanian universities' websites by using four tools to extract a set of vital features from each website. We applied data envelopment analysis to provide decision makers of universities a plan to improve the websites. In this paper, the websites' efficiencies are evaluated in three viewpoints including usability, design, and performance. The results of the usability show that 18 websites are usable while 5 websites are not usable, while the results of the design show that only 7 websites have good design. Finally, the websites' performances are classified into efficient or inefficient. The result shows that among 23 universities, there are 4 websites are rated as efficient and 19 sites are rated as inefficient.

3.3 Research methodology

This research adopts expost-facto survey method, combining qualitative and quantitative data collection methods [30]. The review of literature was done using the variables of the research objectives. This was accomplished by employing past research works, academic journals and textbooks, and inspection of twenty-one Jordanian private universities websites by current university students. Using a method similar to that proposed by Panchal et al. [31], a sample of 383 students was selected from a pool of more than 14321. A snowball sampling method was also used to find the respondents. The questionnaire were distributed using Google Forms and administered to sampled students via WhatsApp group and email to university students in Jordan, and their

responses were included in the study [32]. The snowball sampling method prevented researchers from visiting universities in person to collect information. As participants were already linked to one another, the snowball method was effective in locating them. Only 379 questionnaires were properly filed and submitted. The collected data were analyzed using appropriate statistical technique such as regression analysis to test the null hypothesis.

3.4 Research model

H1: There is a significant impact of Search Engine Optimization on Competitive Advantage.

H2: There is a significant impact of Search Engine Optimization on Mental Image.

H3: There is a mediating impact of Competitive Advantage on the relationship between Search Engine Optimization and Mental Image (Figure 3).
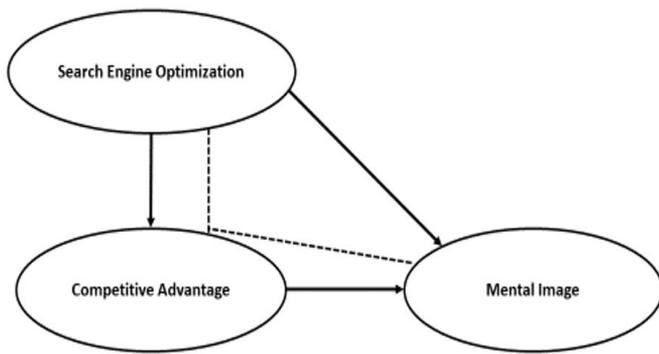

Figure 3. Research model (prepared by author)

4. ANALYSIS AND RESULTS

4.1 Profile of Respondents (Table 1)

Table 1. Profile of respondents (N=400)

Variable	Category	Frequency	Percent (100%)
Gender	Male	209	52
	Female	191	48
Age	18-27	201	50
	28-37	135	34
	38-47	35	8
	48-57	24	6
	58-67	5	1
	68-over	1	0.25
Educational Level	High school	10	3
	Diploma	8	2
	Bachelor	244	61
	Master	138	34

4.2 Multicollinearity test

Table 2 shows that the researcher conducted two types of tests to assess multicollinearity between the variables: tolerance value and variance inflation factor (VIF), utilizing SPSS version 25. Based on the data presented in Tables 4-8 from the multiple regression analysis, the study's findings revealed a tolerance value of 0.890 for the independent variable, and a variance inflation factor (VIF) value of 1.134.

Since the tolerance value significantly exceeds 0.10 and the VIF value is below 10, it can be inferred that multicollinearity among the variables is not an issue.

Table 2. Analysis of variance of the difference in the influence exerted by each independent variable

| Variable | Collinearity Statistics | |
	Tolerance	VIF
Search Engine Optimization	.890	1.134
Mental Image	.890	1.134

4.3 Measurement model assessment

Table 3. Internal consistency reliability analysis

Dimension	Cronbach's Alpha	C R	AVE
Search Engine Optimization	0.860	0.882	0.280
System Availability	0.910	0.930	0.779
Efficiency	0.919	0.929	0.696
Fulfillment	0.889	0.911	0.635
Privacy	0.854	0.896	0.773
Competitive Advantage	0.847	0.868	0.467
Scope	0.890	0.930	0.811
Site	0.913	0.927	0.827
Synergy	0.881	0.921	0.787
System	0.862	0.897	0.776
Mental Image	0.857	0.889	0.475
Customer Expectation	0.888	0.929	0.801
Perceived Quality	0.905	0.934	0.836
Perceived Value	0.875	0.915	0.795

Table 3 reveals that the reason for construct validity is to determine the degree to which the results that are obtained from the use of a measure match the theories upon which the test is primarily designed. In a specific term, construct validity is concerned with answering the question: does the adapted instrument measure what it is supposed to measure as theorized? In order to achieve the validity analysis, the researcher subjected the measurement scales to three rigorous validity tests and including validity, convergent validity, and discriminant validity. Content validity measures the extent to which the indicators or scale items represent the domain of the concepts under study.

4.4 Measurement model assessment

4.4.1 Convergent validity

In order to establish convergent validity, the convention requires that the factor loading, average variance extracted (AVE), and composite reliability (CR). factor loadings, composite reliability, and average variance extracted (AVE) are the three key assessors of convergence validity. Based on the establishment of convergence validity which determines item loadings that meet satisfactory criteria, satisfactory AVE, and composite reliability, it can then be concluded that the items represent their respective constructs, hence establishing their convergence validity. AVE refers to the average variance that a construct and its measures share. The general rule is that the value of AVE should be 0.5 and above. Table 7 and Table 4 displays the results of AVE with coefficients that range from

0.695 to 0.836. This designates the establishment of convergence validity for all the constructs. Additionally, the table also shows composite reliability with values that range between 0.906 and 0.936, equally.

4.4.2 Discriminant validity

In order to evaluate the discriminant validity of this study, the comparison of the indicator loading with other variable cross loading was conducted. the indicator loading with other reflective indicators. All accessible indicators are greater than cross loading, which deduces that the condition of discriminating validity has been satisfied correlation between latent construct is lower than the square roots of the corresponding AVE placed in the diagonal cells and correlations appear below it. Likewise, as shown in Table 4, the HTMT criterion is below 0.85 thresholds, signifying that the discriminant validity was proven.

Table 4. Discriminant validity based on HTMT ratio of correlations

Heterotrait-Monotrait Ratio (HTMT)			
	Search Engine Optimization	Competitive Advantage	Mental Image
Search Engine Optimization			
Competitive Advantage	0.394		
Mental Image	0.413	0.350	

4.5 Structural model assessment

Table 5. R-Square (R2)

Endogenous Variable	R2	Predictive Relevance
Competitive Advantage	0.685	
Mental Image	0.652	

The R2 value specifies the amount of variance in dependent variables that is explained by the independent variables. In this research, the SmartPLS algorithm function is used to obtain the values, while the SmartPLS bootstrapping function is used to generate the t- statistics.

This can be assessed by a cross-validated redundancy measure that is obtained through PLS blindfolding technique for all the endogenous constructs. As a rule, the value of cross-validated redundancy should be greater than zero as obtained in this study and as shown in Table 6. Having conducted a blindfolding exercise in SmartPLS, Tables 7-8 expose the predictive quality power of the model of this study.

Table 6. The Q² values for the endogenous latent variables

Endogenous Variable	SSO	SSE	Q² (1-SSE/SSO)
Competitive Advantage	7780.000	7552.173	0.134
Mental Image	7680.000	7452.173	0.201

Table 7. Effect sizes (f²) of the latent variables

Variable	Endogenous Variable	f²	Effect Size Rating
Search Engine Optimization	Competitive Advantage	0.367	Large
	Mental Image	0.354	Large
Competitive Advantage	Mental Image	0.201	Medium

To calculate the f2, the researcher must estimate two PLS path models (with and without the latent variable inclusion). The rule of thumb is the value of effect sizes, the omitted construct for particular endogenous constructs can be determined such as 0.02, 0.15, and 0.35 to illustrate small, medium, and large effects respectively predictive quality power of the model of this research.

4.6 Hypothesis test

H1: There is a significant impact of Search Engine Optimization on Competitive Advantage, the hypothesis was supported.

H2: There is a significant impact of Search Engine Optimization on Mental Image, the hypothesis was supported.

H3: There is a significant impact of Competitive Advantage on Mental Image, the hypothesis was supported.

H4: There is a mediating impact of Competitive Advantage on the relationship between Search Engine Optimization and Mental Image, the hypothesis was supported.

The indirect effects of Search Engine Optimization on Mental Image through Competitive Advantage are significant ($\beta = 0.124$, t= 5.179, LL= 0.080, UL = 0.175, p<0.001). Thus, hypothesis H4 was confirmed. Competitive Advantage was found to mediate the relationship between Search Engine Optimization on Mental Image. Table 9 presents the result the of hypotheses.

Table 8. Hypothesis test

No.	Hypotheses	Beta	SE	T-Value	P-Value	Decision
H1	SEO →CA	0.325	0.048	6.946	0.000	Supported***
H2	SEO → MI	0.258	0.051	5.300	0.000	Supported***
H3	CA→MI	0.379	0.050	7.556	0.000	Supported***

***: p<0.001; Two-tailed hypothesis; 5,000 bootstrap samples

Table 9. Results of mediating effects

No.	Hypothesis	B	Standard Error	T-value	P-value	Confidence Interval	
						95% LL	95% UL
H4	MM→ESQ→CS	0.131	0.024	5.169	0.000***	0.098	0.185

5. FINDINGS

The research examines the impact of search engine optimization on cultivating a favorable perception among students attending private Jordanian universities who utilize Google search engines. Given that Google is the predominant search engine in Arab countries and often prioritizes top-ranked websites for information access, user attention tends to focus on these rankings.

On-Page Optimization was investigated through the lenses of Website Construction, Generating High-Quality Content, and Keyword Analysis. The findings underscored a significant influence on shaping the mental image of students and potential future students, particularly those from local and regional contexts.

In addition, Off-Page Optimization was scrutinized through practices such as Publishing Blogs, Engaging in Positive Local Community Involvement, Enhancing Premier Content, and Prioritizing Trustworthiness. The results robustly indicated a noteworthy role in shaping a favorable mental image among students from local, regional, and international backgrounds. Notably, this influence extends to Arab universities, which attract Arabic language learners and students interested in Sharia from across the globe.

Furthermore, the study unveiled the mediating and impactful role of competitive advantage in the relationship between search engine optimization and the cultivation of a mental image. This underlines the significance of enhancing search engine practices within universities to foster a more positive perception.

6. CONCLUSION

6.1 Recommendations

The role of search engine optimization (SEO) in shaping the perceptions of students from private Jordanian universities who use Google is significant. Here are some recommendations on how to effectively utilize SEO in this context:

Conduct thorough keyword research to identify the terms and phrases that your target audience, specifically private Jordanian university students, are likely to search for on Google. Consider using specific keywords related to the university, its courses, programs, and other relevant topics.

Optimize your website's on-page elements to enhance its visibility in search results. This includes optimizing meta tags (title tags, meta descriptions), header tags, URLs, and incorporating relevant keywords naturally throughout your content.

Develop high-quality, informative, and engaging content that caters to the interests and needs of students from private Jordanian universities. Create content that showcases the university's strengths, programs, campus life, faculty, and any unique features that might appeal to prospective students.

Focus on local SEO techniques to target Jordanian students specifically. Register your university on Google My Business, optimize your local listings, and ensure accurate and consistent information about the university across various online directories.

Establishing a strong backlink profile is crucial for SEO. Seek opportunities to obtain backlinks from authoritative and relevant websites. Engage in guest blogging, collaborations, and partnerships with other educational institutions or reputable websites in Jordan to build your backlink portfolio.

Ensure your website is mobile-friendly, as a significant portion of searches are conducted on mobile devices. Optimize the site's design, loading speed, and user experience for mobile users to improve visibility and engagement.

Leverage social media platforms to amplify your university's online presence. Share engaging content, promote events, interact with students, and encourage social sharing. Social media activity can positively impact search engine rankings and brand reputation.

6.2 Limitation of the study

While the study on the role of search engine optimization (SEO) in shaping the mental image of private Jordanian university students using Google can provide valuable insights, there are some limitations that should be considered:

Generalizability: The study focuses specifically on private Jordanian university students using Google. As a result, the findings may not be applicable to students in public universities or students in other countries. The sample size of the study may also impact the generalizability of the results.

Sample Bias: The study may suffer from selection bias if the sample of students included is not representative of the entire population of private Jordanian university students. This could limit the generalizability of the findings.

Measurement Bias: The study relies on self-report data from the participants, which can be subject to biases such as social desirability bias or recall bias. Participants may not accurately remember or report their experiences with search engine results or SEO. Additionally, the study might not capture the full extent of the participants' mental image formation processes accurately.

6.3 Suggestions for further studies

Conduct a comparative analysis of multiple private Jordanian universities and evaluate the impact of SEO on the mental image of their students. Compare universities with strong SEO strategies to those with weaker or non-existent strategies.

Investigate how the visibility of private Jordanian universities on Google search results influences the perceived credibility and reputation of these institutions among students. Analyze the correlation between search engine rankings and students' opinions.

Explore the SEO techniques employed by private Jordanian universities to enhance their online visibility. Evaluate the effectiveness of various strategies such as keyword optimization, content quality, backlink building, and user experience in shaping the mental image of university students.

Examine the role of SEO in managing and improving the online reputation of private Jordanian universities. Investigate how search engine rankings, review platforms, and social media presence affect the overall perception of students towards these institutions.

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