

Visitors' perception towards heritage museum management: An empirical study on Varendra research museum

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ABSTRACT

Assessing visitors' knowledge in heritage museums in Bangladesh is vital for enhancing cultural preservation, boosting tourism engagement, and improving educational outreach. The primary goal of this study is to assess the effectiveness of museum management based on visitors' knowledge. This paper presents a conceptual framework for visitors' knowledge of museum in the eyes of management. It then examines a heritage museum in Bangladesh. In this quantitative research, we have collected data from 235 students who have visited Varendra Research Museum (VRM) at least once using random convenient sampling technique and the questionnaire is designed in structured way using 5-point Likert scale. The data was analyzed by conducting regression analysis and ANNOVA test using SPSS 22.0 version. It is concluded that management support, management communication, guide efficiency and display of objects play most important role to increase knowledge of the visitors. But the presence of a security system does not exert a noteworthy impact on visitors' knowledge when integrated into the model. The current study will aid key stakeholders like museum administrators and policymakers in developing a clear understanding and practical application of the concept. Lastly, this study provides some valuable future research directions relating with museum management and knowledge perspective context.

I. Introduction

Tourism appeals on a number of authors' consideration to look at its numerous apparatuses from local as well as intercontinental standpoints (Alim et al., 2022). It is a diverse area encompassing the artistic and scenic allure of a location, along with paleontological and historical sites, socio-political aspects, and infrastructure development. Museums, integral to artistic heritage, play a crucial role as heritage destinations and significant attractions for both domestic and international tourists in various destinations (Williams & Kelly, 2001; Jee, Ting, and Alim, 2019; Alim et al., 2021). The widely recognized definition of a museum, as provided by the International Council of Museums (ICOM), characterizes it as a non-profit, permanent institution serving society's development, accessible to the public. It acquires, preserves, researches, communicates, and exhibits the tangible and intangible heritage of humanity and its environment for educational, study, and enjoyment purposes (ICOM, 2007). Museums contribute substantially to the socio-economic development of a country by enhancing foreign exchange earnings and creating employment opportunities. In this line of discussion, Bangladesh has its unique paleontological and artistic heritage. Many historical places are the instances of its artistic and archaeological heritages. Such as Mahastangar, Paharpur Buddhist Vihar and so many historical places and paleontological museums witnessed the pride and achievements of the nation. Similar to museums in numerous other nations, those in Bangladesh can have a crucial impact on the economic development of the country, in addition to their artistic and historical importance. An extraordinary growth is observed in the revenue from tourism & travel sector in Bangladesh between 2001 and 2010 which is intended as 110%. More evidently, revenue earning in 2010 and 2001 was intended as 5562.70 million (BDT) taka and 2653.80 million (BDT) respectively (WTTC, 2010). Among others Varendra Research Museum, Bangabandhu Memorial Museum, National Museum, Ahsanmanzil Museum, Folk Art Museum, Zia Memorial Museum, Science Museum, Ethnological Museum, and Shilaidaha Kuthi Bari Museum are the imperative as well as prevalent museums in Bangladesh.

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The museums in Bangladesh have artistic and historical significance although most of them are suffering from diversified constraints. To get rid of the insignificant economic outcomes, the authorities should address the internal managerial issues as well as improve the commercial aspects by mediating, protecting, preserving all the entities of heritage museums with proper financial support to enhance the heritage values in this updated society (Shaw, 1992; Knudson, 2001; Mason, 2008; Russo, 2002; Schwab, 2011; Olinsson and Fouseki, 2019). The ability to attract new visitors is the vital constraint among others. To save the museums and many historical places, Bangladesh government has to develop appropriate policies and strategies to overcome the barriers and attract new visitors. Exploration of the influencing factors can contribute in the formulation of sustainable policy guidelines. In recent years, numerous research studies have been launched to investigate the factors influencing museum visit behavior (Kelly, 2001; Morris, 2007; Chan and Yeoh, 2010; Ranjanthran, and Mohammed, 2010; Brida, Disegna and Scuderi, 2013; Brida, Disegna and Vachkova, 2013; Dragicevic, Letunic and Pisarovic, 2013; Rajesh, 2013). Previous research generally indicates that psychological and attitudinal factors predominantly shape museum visit behavior (Brida, Disegna and Vachkova, 2013; Williams, 2009; Morris, 2007), along with physiological factors (Williams, 2009; Morris, 2007). Interestingly, studies comprehensively exploring this aspect by integrating a range of variables and dimensions of individuals' visit behavior are relatively scarce. Therefore, the heritage museum experience starts before the visit on the actual site and ends with the knowledge and reflections gathered from visiting the site (Kuflik, Wecker, Lanir, and Stock, 2015; Alabau-Montoya and Ruiz-Molina, 2019). This research thus looks at the present status of the individuals' museum visit behavior in Bangladesh with a particular focus on the exploration of the influencing factors which will help develop appropriate policy guidelines. This study analyses a recent data set of Bangladeshi individuals to examine museum visit behavior. The collection at the Varendra Research Museum includes stone and metal sculptures, paintings, epigraphs, terracotta plaques, coins, pottery, periodicals, books, weapons, as well as Bangla and Sanskrit manuscripts.

In Bangladesh, Museums are relatively underrated to consider management as an important part of their services which outlines three different activities such as recruitment system, entry motivation and the 'qualities of the incumbents' (Fopp, 1988). Therefore, museums tend to ignore to strengthen their managerial system to be legitimated because the concept still hides in museum dissertation that management is some outlandish action (Janes and Sandell 2007). The objectivity to the management scientifically should be appeared as the indicators of their performance by using statistics deceptively (Knell, 1999). So, a new management culture should be undertaken to overcome the problem. On the other hand, previous studies show that the effect of managerial activities on visitors' knowledge are examined in different context except Bangladesh (Gilmore and Rentschler, 2002; Moser, 2010; Davies, 2001; Alberti, 2005; Goulding, 2000; Cappa, Rosso, Capaldo, 2020). Therefore, the effect of heritage museum management on visitors' knowledge development in the context of Bangladesh is unexplored.

The primary inquiry addressed in the study is that what perception the museum visitors have in order to develop knowledge on heritage museum. A couple of specific questions also have been set for the study i.e. (1) Does management effort create an impact on visitors' knowledge? and (2) What factors affecting the visitors' knowledge during museum visit in the context of museum management? The primary aim of this study is to assess the effectiveness of museum management based on visitors' knowledge. The study encompasses additional specific objectives aligned with its overarching goal, such as investigating the demographics and interests of museum visitors, exploring the challenges and opportunities experienced by visitors, assessing the satisfaction levels of respondents regarding their museum visits, recommending the implementation of new technology to enrich the public's learning experience (Alim et al., 2023; Ali et al., 2024).

2. Literature Review

Effective management of a heritage museum can influence a visitor's knowledge in a concurrent manner. Heritage museum management involves overseeing museum resources or directorial objectives by engaging in diverse internal and external activities, fostering both short-term and long-term interactions with markets through bidirectional communication (Chan, Shaffer, and Snape, 2004). Consequently, internal performance relies on internal communication, interdepartmental collaboration, staff expertise and proficiency, and feedback mechanisms (Işık et al., 2024a; Işık, Ongan, and Islam, 2024; Işık et al., 2024d; Işık et al., 2024c). On the other hand, external performance is reflected by education, accessibility and communication (Gilmore and Rentschler, 2002). So, a managerial body must perform both internal and external performance effectively so that they can offer the visitors the best possible experience. Therefore, the factors affecting visitor experience from management perspective are management support, management communication, display of museum objects and guide efficiency.

2.1 Management support

Visitor learning varies individual to individual as people perceive their experience at their own. Their learning depends on varied previous experience and the state of mind during their visits (Falk, Moussouri and Coulson, 1998). So, the managerial decision must be made on the basis of the museum's strength as well as weakness along with the opportunity and threat it has in the market to develop the entire environment of its own. It is the duty of the museum director to address all the dimensions and take the necessary decision within the time frame (Overman, 2020; Alvarado et al., 2022; Ongan et al., 2022; Asif et al., 2023; Cetin et al., 2023; Han et al., 2024; Long et al., 2024). However, custodial management decisions help to manage and develop the museum collection, standardize opening and closing time, maintain proximity of the precious collections and engage visitors in a better way (Ghosh et al., 2023). And marketing management emphasizes on creating environment that is visitor friendly, making proactive relationship between staff and visitors and approaching personally and emotionally with the visitors (Gilmore and Rentschler, 2002). The entire program is designed to satisfy the needs of the visitors (Aker et al., 2020). The whole program is developed systematically with the aim of using visual cues like symbols for representing departments and collections to give navigation and orientation to the visitors in a museum (Işık et al., 2015, 2017, 2018, 2020, 2021, 2022, 2024f, 2024g, 2024i; Micoli et al., 2020; Das et al., 2023;

Dogru et al., 2019, 2023, 2024; Karagöz et al., 2021, 2023; Koscak et al., 2023; Yan et al., 2024a, 2024b). Separating the departments like ancient collections, crafts, world culture and paintings with individual symbol and collections increases the efficiency of the management team and results in enhancing visitors' experience (Davies, 2001).

Thus, (H1) management support at heritage museums is positively associated with the visitors' knowledge.

2.2 Management communication

Traditionally the management is more conscious about fund management, exhibition arrangement, creative object focused. But recently, the trend of museum management has been shifted towards fulfillment of visitors needs and more emphasis on visitors' experience (Luo, & Ye, 2020). For that reason, communication plays a vital role from managerial perspective. It is assumed by some researchers that visitors come to the museums to gather either education or entertainment. Often visitors want to know vast information regarding numerous objects. (Thyne, 2001) Being a service organization, a museum has to maintain its physical aspects to orient, interest and involve its visitor. Therefore, the service delivery process needs to be a phenomenal as it affiliates the visitors to promote or motive others to visit. As a consequence, the service delivery process depends on education, accessibility and communication. (Gilmore & Rentschler, 2002) According to Gilmore & Rentschler (2002), education mostly depends on the core service of a museum along with the collections and different exhibition. And accessibility is related with the opportunity to use the non-abstract values with best possible service and alternatives of antic objects as a memory of the visit. So, management must emphasis on the components to ensure desired outcomes from overall offerings. Therefore, the museum management must have an effective internal communication system along with knowledgeable and cooperative staff contacting with each other through two-way communication by which the workforces can create a network with each level management for any emergencies or for any queries (Gilmore & Rentschler, 2002). In addition, the museums record feedback from the visitors and improve their service quality to fulfill visitors' desire (Vesci, Conti, Rossato, & Castellani, 2020). However, the feedback from managerial bodies helps to maintain a good internal communication system. Overall, the management maintains both internal and external communication effectively to enhance the visiting experience (Gilmore & Rentschler, 2002).

Thus, (H2) management communication at heritage museums is positively associated with the visitors' knowledge.

2.3 Display of museum objects

The museum objects are the visible products of the organization. Although objects are soundless in generic term, they provide sustainable in-depth learning in details (Alberti, 2005). The objects are displayed in an organized manner by which visitors understand the objects easily. The objects should have the capacity to create visitor knowledge. They are often considered as document of artistic discipline and the revolution of ideas. So, the museum collections are the combination of objects, texts and pictures representing by space, light and color (Daher et al., 2020). The accessibility of the objects grows visitors' interest to learn more about the history, cultures, science and also the concept of civilization (Moser, 2010). Moser (2010) also focused on the architectural structure of the building where the objects are kept, and the physical setting and the location of the museum are crucial in term of evaluation museum displays. The visitors perceived the objects depending on the space within the exhibition. The color, design and light of the museum objects play significant role in visitors' experience. Also, the label of the object is the fundamental document by which the visitors come to know about the objects and it increase more interest to the visitors to experience other objects to learn more (Zhao, Gao, Lu, Sun, & Cheng, 2021). In developed cities, the display of objects is integrated with animation presentation where the main collections are highlighted and the visitors select the objects that they want to disclose and easily discover all the information regarding the object within a second (Davies, 2001). The museum authority also raises the awareness of the main collections of the museum through website (Sironi, Calosci, & Ceccarelli, 2020). The authority maintains long term interaction with the visitors that facilitates museum by increasing number of visitors and also helps the visitors to explore knowledge. So, the objects create networks among the manufacturers, collectors, curators, scientists and visitors by their existence (Alberti, 2005).

Thus, (H3) display of museum objects at heritage museums is positively associated with the visitors' knowledge.

2.4 Guide's efficiency

The museum guides interact with visitors through direct, in-person communication (Ghosh, Parven, & Sakib, 2024). They furnish details about the museum's collections as well as information about the museum as a whole. The guides are often considered as "Embodied Conversational Agents" (Kopp, Gesellensetter, Krämer, Wachsmuth, 2005). The proactive nature is found in guides' characteristic with cognitive approach (Chiscano, & Jiménez-Zarco, 2021). The engagement, involvement, inner reflection, imagination, variation of stimulus and authenticity of the guide enrich the visitors learning and experience (Işık et al., 2024e). The engagement and involvement with the visitors help the guide to understand the visitors need (Ghosh, Alim, & Hossain, 2021). Sometimes, inner reflection and imagination provide visitors required information and as a result the visitors' knowledge is developed (Yousaf, & Fan, 2020). Variation of stimulus creates a meaningful subject as a whole and authenticity is perceived (Goulding, 2000). So, knowledge and information about museum as well as museum collection is the pre-determined success factor for a guide particularly for the visitors who visit museum for the first time. Otherwise lack of knowledge and information discourages visitors to visit the museum (Davies, 2001). The capability to understand the visitors' information requirements to fulfill their learning is the inner strength of the guides. Online communication with the museum's expertise helps all visitors to make plan visit by knowing relationship between museum and its collections (Davies, 2001; Lee et al., 2020). Davies (2001) further discussed that use of metaphor while

describing the museum objects eases the visitors to understand the background information about the collections. The managerial bodies make use of metaphor while communicating with visitors about the collections to enhance visitors' experience (Mason, & Vavoula, 2021). Thus, (H4) *guide's efficiency at heritage museums is positively associated with the visitors' knowledge.*

2.5 Security system

Museum security stands as a crucial responsibility for museums. While the country boasts around one thousand museums safeguarding millions of invaluable antique artifacts, their unparalleled importance to our artistic and natural heritage is disproportionately overlooked in the government's agendas and priorities. This undervaluation extends not only to their security but also encompasses various other aspects (Feldman, 2020). Typically, relevant authorities become attentive and express concern only in the aftermath of museum thefts. Once the media attention subsides, these authorities tend to neglect follow-up actions and overlook essential precautionary measures related to museum security (Feldman, 2020). Several instances of thefts in museums nationwide have brought to light the deficiencies in museum security. The prevailing conditions in museum management acknowledge the necessity for a shift towards a more entrepreneurial approach (Rentschler, 2001). Nevertheless, the responsibilities of directors should be broadened to harmonize the advancement and conservation of creative artworks with the innovative administration of the museum as an organization oriented toward the market (Md Abdul, Rafijul, & Tusher, 2020; Islam et al., 2023). Additionally, museum staff must be ready to overcome the impacts of professional bureaucracy to facilitate the development of meaningful management and a fresh culture centered on visitor service. Certain professional staff members may adhere to conventional roles, prioritizing the preservation of collections over addressing the needs of visitors (Gilmore & Rentschler, 2002; Islam et al., 2024a). Despite the availability of numerous tools and techniques for museum security, the majority of museums do not implement all security systems simultaneously to ensure comprehensive museum security. Consequently, adopting an integrated museum security system that incorporates all available methods, including modern gadgets, allows for the establishment of a multi-faceted security system to ensure the full security of museums (Ekinil, Gorgadze, Provotorina, & Petrenko, 2020).

Thus, (H5) *security system at heritage museums is positively associated with the visitors' knowledge.*

2.6 Visitors' knowledge

The focus has been shifting towards visitors' behavior and museum innovation in recent time (Lanir et al., 2017; Yoshimura et al., 2014; Cappa, Rosso, & Capaldo, 2020). So, visitor sensing is important for the management to ensure better visitors' knowledge. Visitors' sensing is developed by engaging visitors during their visit at their will and by providing insight depth knowledge about the collections through appropriate museum atmosphere inside as well as ensuring financial and artistic sustainability (Cappa, et al., 2020). The knowledge of the visitors varies individual to individual. The knowledge is the combination of both previous and new experiences. The visitor's knowledge can be measured by a new approach called 'Personal Meaning Mapping (PMM)' by which it is determined that one visits museum to increase his/her knowledge in four ways – they are extent, breadth, depth and mastery of knowledge (Falk, et al., 1998; Grácio, Coutinho, Falé, & Sobreira, 2020). It is highlighted that more satisfying experience encompasses to capture more knowledge. And the satisfying visit starts with a successful promotional effort on museum and its collections (Islam et al., 2024b). However, the other factors for a good experience are proper program content, display of object in a more visible way and the capabilities of the managerial bodies (Davies, 2001). Within our visitor-sensing framework, visitors are incentivized to share data with museum managers not only to enhance their future personal experiences but also to enable museums to enhance their offerings and thereby expand their audience, ultimately benefiting the entire society (Cappa, et al., 2020).

2.7 Conceptual framework

Visitors' knowledge can be affected by many issues. From the management perspective, the possible managerial factors to develop the knowledge are management support, management communication, display of objects and guide efficiency. All the factors are interrelated and have direct effect on visitors' knowledge (See Figure 1 for the conceptual framework).

3. Methodology

A quantitative survey suggested by authors (Muniz et al., 2021; Trunfio et al., 2022) was conducted to gather data and assess the significance of the proposed relationships outlined in the conceptual framework. The measurement items on the used constructs were adopted from previous related studies (Gilmore & Rentschler, 2002; Moser, 2010; Davies, 2001; Alberti, 2005; Goulding, 2000; Cappa, et al., 2020). Each measurement item is analyzed using a five-point Likert scale, where respondents can express their agreement on a scale from strongly disagree (1) to strongly agree (5). The data were collected from the students who visit Varendra Research Museum at least once and Varendra Research Museum is one of the oldest museums of Asian sub-continent area using convenience sampling technique suggested by previous studies (Akter et al., 2020; Trunfio et al., 2022). Most of the respondents were business students as they can understand the managerial perspective more than other discipline students. On the other hand, the respondents visiting VRM gives more authenticity of the data representing the visitors of heritage museum. We received 235 usable responses, and performed multiple regression analysis, success factors regression model, ANNOVA test and coefficient statics using SPSS software 22.0 version. This was done by performing factor leading, reliability test, composite reliability, and average variance extracted, using different suggested threshold values.

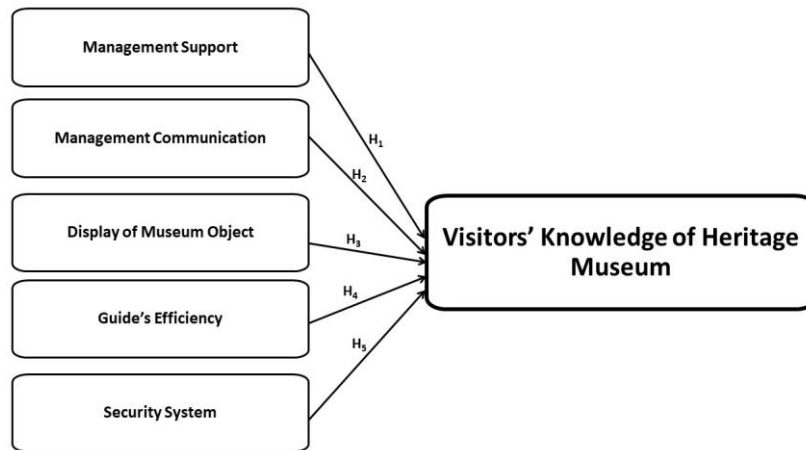


Figure 1: Conceptual Framework

4. Results and Discussions

4.1 Demographic profile

The survey inquired about respondents' demographic details, encompassing factors such as gender, age, education, profession, transaction history, and income. This data served to characterize and elucidate the sample under investigation, establishing a basis for the study's findings and conclusions. Subsequent sections delve into a comprehensive analysis of each demographic category.

Table 1: Demographic profile of the respondents

	Sex	Education	Age	Division	Last Visit	Number of Visit	Other Museum Visit	Study Group
Valid	235	235	235	235	235	235	235	235
Missing	0	0	0	0	0	0	0	0
Mean	1.34	1.33	2.09	2.79	3.67	1.91	1.24	2.03
Std. Dev.	.476	.479	.286	2.154	1.553	1.212	.427	.813
Variance	.227	.230	.082	4.638	2.411	1.470	.182	.662

4.2 Reliability test

The comprehensive reliability statistics reveals an overall instrument Cronbach's alpha of .850, surpassing the benchmark of .60, which is considered indicative of a reliable instrument (Gerber & Malhotra, 2008). Communalities, denoting the shared variance of variables, provide an overall estimate. It is anticipated that each variable's communality value should be .50 or higher, reflecting the explained variance in a variable through the extracted factors. The statistical and practical omissions of certain items are not unexpected. Given the dynamic nature of museum services, it is reasonable for not all tools to be statistically significant. As suggested by Gerber and Malhotra (2008), items with minimal loading or cross-loading may be omitted to enhance results in further analysis.

4.3 Multiple Regression Analysis

As previous scholars used regression analysis (Işık et al., 2024a; Işık et al., 2024b), we use multiple regression analysis so that we can demonstrate that when considering the success factors of management support, management communication, guide efficiency, display of objects, and security system as independent variables collectively, they seem to contribute to the development of visitors' knowledge. The correlation coefficient (r) is .557, indicating a moderate positive relationship. The coefficient of determination (r^2) is .310, suggesting that 31% of the variance in visitors' knowledge can be explained by these factors. The adjusted r^2 , which accounts for the number of predictors, is .295. The regression model fits the data well, as evidenced by a significant F test = 60.121 at the $p < .001$ level.

Table 2: Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557 ^a	.310	.295	.60121

a. Predictors: (Constant), Display of Object, Management Support, Security System, Guide Efficiency, Management Communication

Table 3: ANNOVA test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.254	5	7.451	20.613	.000 ^b
	Residual	82.774	229	.361		
	Total	120.028	234			

a. Dependent Variable: Visitors' Knowledge

b. Predictors: (Constant), Display of Object, Management Support, Security System, Guide Efficiency

The coefficient statistics encompass the beta weights (slopes) of each variable and a constant reflecting enterprise success. The table presents both non-standardized and standardized coefficients, along with t values and significance levels. The collective impact of the independent variables can contribute to the development of visitors' knowledge in heritage museums in Bangladesh.

Table 4: Coefficients statics

		Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	All variables	.775	.285		2.723	.007
	Management Support	.167	.052	.188	3.226	.001
	Management Communication	.149	.059	.154	2.545	.012
	Display of Objects	.289	.062	.286	4.665	.000
	Guide Efficiency	.222	.057	.243	3.889	.000
	Security System	-.064	.055	-.073	-1.153	.250

a. Dependent Variable: Visitors' Knowledge

In a combined model that considered the impact of all other factors, the data indicated that the presence of a security system was not a significant predictor of visitors' knowledge in a regression analysis which is not similar with the previous studies (Govindarajo and Khen, 2020; Chai-Aryalert, 2020; Zou and Yu, 2022). The probable reason behind this finding may be the history of the museum as the record of significant insecurity incidents are happened there. Management support, management communication, guide efficiency and display of objects are the best predicted for Visitors' knowledge in the museum which is similar with previous studies (Muniz et al., 2021; Trunfio et al., 2022).

Table 5: Result of the hypothesis

	Hypothesized paths	Coefficients Beta (β)	t	Sig.	Remarks
H1	Management Support & Visitors' Knowledge	.188	3.226	.001	Supported
H2	Management Communication & Visitors' Knowledge	.154	2.545	.012	Supported
H3	Display of Objects & Visitors' Knowledge	.286	4.665	.000	Supported
H4	Guide Efficiency & Visitors' Knowledge	.243	3.889	.000	Supported
H5	Security System & Visitors' Knowledge	.073	1.153	.250	Not Supported

Table 6: Rank of the Supported Factors

	Factors	Standardized Coefficients Beta (β)	t	Rank
H3	Display of Objects	.286	4.665	1
H4	Guide Efficiency	.243	3.889	2
H1	Management Support	.188	3.226	3
H2	Management Communication	.154	2.545	4

Previous studies have ranked the influencing factor on the dependent variable (Zoha et al., 2021). So, the data analysis reports that display of objects creates the most impact on visitors' mind to gain knowledge from the museums followed by guide efficiency, management support and management communication. So, the managerial bodies should emphasis on their efforts according to these priorities.

5. Conclusions and Recommendations

Upon evaluating the study's specific objectives and testing hypotheses through multiple regressions, several conclusions emerge, It is noteworthy that the study's findings align with the concept that visitors' knowledge in museums is influenced positively by all exogenous variables, both individually and collectively. However, in terms of significance, the standard regression weight indicates that management support, management communication, guide efficiency, and object display are the most crucial factors in enhancing visitor knowledge.

Beyond this, the current study will aid key stakeholders in developing a clear understanding and practical application of the concept. Furthermore, it has the potential to facilitate smoother museum operations, foster knowledge expansion, and enable the implementation of diverse marketing strategies to enhance visitors' knowledge. This understanding allows museums to better tailor their exhibits and programs to meet the specific interests and educational needs of their visitors, leading to more engaging and relevant experiences. Moreover, the study's findings can contribute to the expansion of public knowledge about heritage, fostering a more informed and appreciative audience. This is particularly important in the context of Bangladesh, where cultural heritage plays a critical role in national identity. Additionally, the study can inform the development of diverse marketing strategies that not only attract more visitors but also enhance their understanding and appreciation of the exhibits. These strategies can include targeted promotional campaigns, educational workshops, and interactive digital content, all aimed at enriching the visitor experience. Ultimately, this study has the potential to transform the way heritage museums operate, promote cultural heritage, and engage with the public, ensuring that they remain vibrant, educational, and culturally significant institutions.

5.1 Limitations and prospective avenue of future research

This study has some limitations. First of all, gathering information from individuals of all age groups is unfeasible. Therefore, the researchers have restricted the survey to include only students. The researcher has not conducted any interview with the managerial body of VRM. And the survey was conducted on only one museum while there are many more museums in Bangladesh. The study has delved into various issues that merit additional exploration. Subsequent research endeavors should aim to examine additional factors influencing visitors' knowledge within the realm of museum management. Future investigations could benefit from a blend of survey and case study methodologies.

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