What Hinders to Promote Tourism in Pakistan? Using Binary Matrices for Structuring the Issue

1 Abdul Aziz Khan Niazi, 2 Tehmina Fiaz Qazi, 3 Abdul Basit

1 University of Engineering and Technology, Lahore, Pakistan: azizniazi@uet.edu.pk
2 University of Engineering and Technology, Lahore, Pakistan: tehmina.qazi@gmail.com
3 Lahore Institute of Science and Technology, Lahore, Pakistan: abasit_shahbaz@yahoo.com

ARTICLE DETAILS

ABSTRACT

Aim of the study is to identify what are the barriers in promoting tourism in Pakistan and imposing structure on complex interrelationships among these barriers. It is an exploratory study which uses literature discourse for identification of barriers, binary matrices for structuring issue and cross impact matrix multiplication applied to classification for analyzing driving-dependence power. Discourse of literature revealed that there are sixteen barriers important to address the issue in hand. Communication barrier and unfavorable government policies occupy bottom in the interpretive structural model that are highly important and need utmost attention. Eight barriers fall in dependent, four in independent, three in linkage and none in autonomous quadrant of driving-dependence diagram. The study is useful for policy makers and tourists’ agencies to handle current issues prevailing in tourism industry and promote it accordingly. It is a foremost attempt in Pakistan to structure the issue on the basis of opinion of experts from within stakeholders.

© 2019 The authors, under a Creative Commons Attribution-Non Commercial 4.0

Corresponding author’s email address: azizniazi@uet.edu.pk

Recommended citation: Niazi, A. A. K., Qazi, T. F. and Basit, A., (2019). What Hinders to Promote Tourism in Pakistan? Using Binary Matrices for Structuring the Issue. Review of Economics and Development Studies, 5 (4), 881-890

DOI: 10.26710/readsv5i4.664

1. Introduction

Meo et al. (2018) bolstered that tourism is a sunshine sector across the world. It is considered as great economic support to economies. Numerous countries are minting money from tourism. United Nations World Tourism Organization (UNWTO) offers technical assistance and provides the platform to its affiliate members for dialogue, collaboration, information sharing and generating market knowledge & tourism development (Perdomo, 2016). Lyons et al. (2016) asserted that tourism is vital in knowledge economy, therefore, tourism scholars and tourism agencies are considered instrumental to modern economic development. This sector is important for employment creation and increase in national revenue as well as foreign exchange earnings and economic prosperity (Meo et al., 2018) but it is relatively neglected in Pakistan (Ahmed et al., 2011). God has endowed Pakistan with lot of natural resources that include four different seasons, variety of landscapes, mountains, minerals, etc. It is a rich country as for as recreational places is concerned. These places include natural beauty, historical heritage and psudu-naturally developed resorts that fascinate the tourists continually (Naqvi et al., 2018). Baloch and Rehman
(2015) stated that Pakistan is a fertile land in all type of tourisms for tourists which needs to be tapped with: i) tourists-friendly visa policies, ii) better infrastructure, and iii) reposition strategy of cultural and religious sites for South Asian market. Therefore, there is a lot of scope of tourism in Pakistan. The recreational places aforementioned are attractive for local as well as international tourists. But, unfortunately, Pakistan has not been able to exploit the tourism to an optimum level (Ahmed et al., 2011). Lot of research has surpassed on this topic world-wide (Meo et al., 2018) but relatively less studies have been conducted in Pakistan and that too are nascent and scanty. Few of them are being placed on record in literature to set out the outset of this study. Particularly, there is dearth of studies investigating tourism from view point of hindrances/obstacles and/or barriers in context of Pakistan. Therefore, it has become imperative to investigate the barriers in promoting tourism. Keeping in view the utmost importance of the phenomenon and barriers pertaining the phenomenon, it has become call of the day to structure this issue. Following are the objective of this study:

- To elicit and rank the barriers to promote tourism in Pakistan,
- To ascertain interactions among them,
- To impose hierarchy on them and to develop a structural model,
- To deliberate on its managerial implications and
- To analyze driving-dependence power of barriers for further insight.

This study uses literature review method i.e. empirical evidence from single-single studies coupled with expert opinion/focus group for eliciting the barriers. Whereas, ISM for hierarchicalization and MICMAC for driving-dependence power analysis of barriers. ISM/MICMAC is workable with as less as 5 elements (Sushil, 2017) and with as many as more than 80 elements (Li et al., 2019). Since, this study is based on 16 barriers which is an ideal range for ISM (Sushil, 2017) hence, it is the most suitable methodology. Therefore, remaining part of the study is divided into literature review, solution methodology, results & discussion and conclusion.

2. Survey of Literature of Tourism Barriers

Leung et al. (1996) carried out a study on tourism development in Cambodia on analysis of opportunities and barriers and provided insights about the barriers of obtaining information regarding tourists’ places. Andercek et al. (2005) conducted a study in USA, whereas, Aref et al. (2009) in Iran and both of them reported that lack of community knowledge and resources are major barriers in improvement of tourism sector. Sofield (2006) asserted that weedy political relations of sovereign countries have negative impact on tourists’ mobility in cross-border tourism development. Khadaroo and Seetanah (2008) claimed that poor transport infrastructure has significant impact on tourism development. Ahmed et al. (2011) affirmed that terrorism adversely affects tourism activities in Pakistan. Heung et al. (2011) reported five key barriers important to be rectified for development of tourism in Hong Kong. Salazar (2012) asserted that weak cultural integrity and harmony for local community to interact with tourists hampers the growth of tourism. Chen et al. (2014) bolstered that China is facing predicaments in tourism at two different levels i.e. socio-cultural & environmental and economic. Matasci et al. (2014) found social and economic feasibility barriers are significant in climate change adjustment process. Mehami and Karami (2014) argued that lack of investment in tourism sectors hinders promoting tourism. Najda-Janoszka and Kopera (2014) highlighted environmental and organizational factors that hinder innovation capability of tourism in Poland. Taleghani et al. (2014) documented organizational coordination problem as a main obstacle in tourism development of Iran. Ismagilova et al. (2015) argued that poor preservation of historical places adversely affects country’s economic and social development. Hatipoglu et al. (2016) findings revealed that lack of financial focus, narrow vision and lack of organizational structure for effective cooperation hinder in successful planning of sustainable tourism in Turkey. Andrades & Dimanche (2017) asserted that there are numerous barriers in promoting tourism in Russia like lack of infrastructure development, sustainable quality management and employees’ education & training issues. Weir (2017) argued that consistent problem of climate change has adverse impact on tourism and travel industry. Alghizzawi et al.
identified that lack of use of social media is also one of the adversative barriers in promoting tourism. Chin et al. (2018) asserted that duration of winter period also becomes barrier in promoting seasonal tourism. Mair et al. (2018) asserted that less support to foreigners particularly in the contexts of conferences is a common barrier to promote tourism. Momeni et al. (2018) identified seven major barriers (i.e. marketing, international issues, culture, transfer, brokerage, management, and policy problems) that hamper in improvement of tourism industry. Okafor et al. (2018) asserted that common unofficial language is the most important factors for mobility of international tourists in Europe. Paraskevas and Brookes (2018) conducted a study on trafficking human being and considered it as one of snags within tourism business and suggested some guidelines to disrupt human trafficking. Tölkes (2018) emphasized on issue of green hoteling, environmental sustainability and communication in context of tourism. Yadav et al. (2018) holds that insufficient government incentives and lack of stakeholders’ coordination responsible of failure of sustainable tourism development in India. Arenas et al. (2019) asserted that traditional handling systems impede promotional activities of tourism. Damm et al. (2019) considered unsynchronized weathering system say higher interest in weather services (i.e. weather variability) than climate services as deterrent in promoting tourism. Jeon (2019) conducted a research study regarding barriers in developing self-efficacy in students, graduating in the discipline of tourism. Qian et al. (2019) pointed out scarcity of literature in certain area of tourism and emphasized on constant improvement on research in domain of tourism. Summers et al. (2019) uncovered five key barriers (i.e. lack of understanding of behavior, lack of financial resources, lack of understanding of structure, lack of collaboration and lack of human resources) and three major enablers that directly influence on economic and social-cultural growth. The list of barriers, based on the literature review, has been formulated as Table 1.

**Table 1: Final List of Barriers**

| Sr. | Barriers                                         | Authors                                      |
|-----|-------------------------------------------------|----------------------------------------------|
| 1   | Terrorism                                       | Ahmed et al., 2011                          |
| 2   | Less budget allocation                          | Okafor et al., 2018; Summers et al., 2019   |
| 3   | Un-synchronized weathering                      | Damm et al., 2019                           |
| 4   | Government restrictions                         | Arenas et al., 2019                         |
| 5   | Failure to preserve historical places           | Ismagilova et al., 2015                     |
| 6   | Inefficient system of transport                 | Khadaroo & Seetanah, 2008                   |
| 7   | Communication barrier                           | Tölkes, 2018                                 |
| 8   | Traditional (non-digital) system of booking     | Arenas et al., 2019                         |
| 9   | Rigid local behavior                            | Najda-Janoszka & Kopera, 2014               |
| 10  | Limited use of social media                     | Alghizzawi et al., 2018                     |
| 11  | Lack of awareness of local community            | Aref et al., 2009                           |
| 12  | Lack of research                                | Qian et al., 2019                           |
| 13  | Human trafficking                               | Paraskevas & Brookes, 2018                  |
| 14  | International border issues                     | Sofield, 2006                               |
| 15  | Unfavorable Govt. policies                      | Arenas et al., 2019; Heung et al., 2011     |
| 16  | Climate change                                  | Chin et al., 2018; Matasci et al., 2014; Weir, 2017 |
| 17  | Culture harmony                                 | Salazar, 2012                               |
| 18  | Language barrier                                | Okafor et al., 2018                         |
| 19  | Lack of institutional structure                 | Hatipoglu et al., 2016                      |
| 20  | Lack of investments/funds                       | Meihami & Karami, 2014                      |

Total 20 barriers were identified through review of literature. However, the barriers are disorderly and unsystematically identified from literature that might not have relevant literal meaning and they might not necessarily be representative to the context of Pakistan. In order to embark on a study of tourism concerning Pakistan, it was imperative to first indorse relevance of barriers to the context of the study.
Common method of such type of endorsement is formal verification of variables from the experts. Therefore, to identify stakeholders and to determine a panel of experts has become an essence of the study. The researchers deliberated on the stakeholders and consider: government, local community, tourists, revenue department, local business community, transport industry, tourist’s guides, aviation industry, academia and hotel and food industry as major stakeholders. Representatives of these stakeholders have been recruited on the panel in order to strike true representativeness. In this context, a heterogeneous panel of 14 experts have been recruited. The list of barriers was presented to experts four highlighted grey in Table 1 could not attain majority, therefore, eliminated from further analysis.

3. Solution Methodology
The authors are recognize of the fact that true benefits of research can only be reaped by using appropriate methodology. The methodological choices were considered and ISM was opted to embark on this study. ISM is applied in a wide variety of areas on this type of problems (Sushil, 2017; Warfield, 1973). It is a visible, well defined, graphical model representation using reachability and transitive inferences through matrix transformation. ISM is preferred over other statistical technique because most of them are unable to analyze multitude of interrelationships among variable of phenomenon which loses the opportunity of gaining thorough understanding of conundrum situations like tourism (Chidambaranathan et al., 2009). Therefore, this study uses literature discourse, ISM and MICMAC as research methodology. The data was collected from a heterogeneous panel of medium size experts on a matrix type questionnaire using i leads to j as type of relationship (Trigunarsyah & ParamiDewi, 2015). The research preferred exploratory paradigm of research and collection of data from panel of experts instead of statistical groups (Ranjbar et al., 2012). The process of selecting the experts is admittedly critical because quality prevails over the quantity (Shen et al., 2016). There are plenty of evidences regarding size of panel of experts e.g. 15-30 people for a homogeneous and 5-14 people for a heterogeneous (Khan & Khan, 2013). Since, the study uses heterogeneous panel therefore a panel size of 14 experts was opted. The panel was approached three times i.e. firstly, for approval of barriers, secondly, for opinion on paired relations among the barriers, and thirdly, for checking model’s logical, theoretical, conceptual and directional inconsistencies, if any. For eliciting data the researchers opted for one-on-one face-to-face in-depth interview on work places of experts (Li & Yang, 2014). There took three rounds on place to finalize the model i.e. discussion & piloting round, data elicitation round and model verification round. The decision of the experts regarding approval of factors, paired relations and that of model based on majority rule (Cai & Xia, 2018). The experts were recruited on panel on the basis of their relevant practical experience of not less than 10 years, theoretical knowledge, expert knowledge and their positions in authoritative organizations concerning tourism. The study applied classical procedure of ISM on the data and constructed a structural model. ISM proceeded step wise as asserted by Attri et al., 2013; Warfield, 1973.

3.1 Building ISM Model
Since, it has been revealed by the iterations that there are four underlined levels in which the barriers of tourism can be subdivided and hierarchicalized. Barriers namely 1, 2, 3, 4, 5, 6, 9 and 11 occupy top level of the model, barriers 8, 10, 13 and 14 occupy second level, barriers 12 and 16 occupy third level, whereas, 7 and 15 occupy fourth level. Using a software Edraw Max 9.4 a level wise model has been constructed as Figure 1. Level to level relations have been indicated according to norms of ISM whereas, the relations of the factors at levels have been mentioned by two-way arrows inferring from reachability matrix.
Figure 1: ISM Model

Model was presented to panel of experts for checking conceptual inconsistencies and modifications thereof. The experts reported some minor modifications that have been incorporated and the model was finalized. The model, in this way, has imposed hierarchy and direction on complex relations among barriers.

### 3.2 MICMAC Analysis

The study also used MICMAC as supplemental analysis to ISM. It is a structural analysis which classifies the factors into four different clusters namely, independent, dependent, linkage and autonomous (Godet, 1986). The MICMAC is a driving-dependence diagram (Figure 2) which has been constructed from final reachability matrix.

Figure 2: MICMAC Analysis
MICMAC analysis classifies the barriers into four clusters on continua of low-high (Figure 2). It has four quadrants (i.e. dependence power - x-axis and driving power - y-axis) from low to high. Out of sixteen barriers, there is no autonomous factor, five fall in independent, three in linkage and eight in dependent quadrant.

4. Results and Discussion
Tourism is one of the emerging sectors in developing economies. It has potential to cast material impact on revenue generation. Developing countries are now concerned about development of tourism and Pakistan is also in this queue. There is scanty and scarce literature on tourism as whole and extinct in case of Pakistan. Due to utmost importance of tourism, the barriers pertaining this phenomenon have been investigated by using two unique structural methodologies i.e. ISM and MICMAC analysis. That provides understanding of complex interrelationships among barriers of developing tourism. Summarized results are presented as Table 2.

Table 2: Summary Results of Literature, MICMAC and ISM

| Result of Literature Review Ratified by Experts | Results of MICMAC Analysis | ISM Results | Comments |
|-----------------------------------------------|-----------------------------|-------------|----------|
| No. Barrier                                    | Driving | Dependence | Effectiveness | Cluster | Level |
| 1 Terrorant                                    | 8       | 16         | −8           | Independent | IV     | Key Factor |
| 2 Less budget allocation                       | 8       | 16         | −8           | Independent | IV     |
| 3 Un-synchronized weathering system            | 8       | 15         | −7           | Independent | IV     |
| 4 Govt. restrictions                           | 8       | 15         | −7           | Independent | IV     |
| 5 Failure to preserve historical places        | 8       | 16         | −8           | Independent | IV     |
| 6 Inefficient system of transport              | 8       | 14         | −6           | Independent | IV     |
| 7 Communication barrier                        | 13      | 1          | 12           | Independent | IV     |
| 8 Traditional (non-digital) system of booking  | 11      | 8          | 3            | Linkage | II     |
| 9 Rigid local behavior                         | 8       | 15         | −7           | Independent | IV     |
| 10 Limited use of social media                 | 11      | 8          | 3            | Linkage | II     |
| 11 Lack of awareness of local community        | 8       | 14         | −6           | Independent | IV     |
| 12 Lack of research                            | 12      | 2          | 10           | Independent | III    |
| 13 Human trafficking                           | 11      | 8          | 3            | Linkage | II     |
| 14 International border issues                 | 11      | 7          | 4            | Independent | II     |
| 15 Unfavorable Govt. policies                  | 13      | 1          | 12           | Independent | IV     | Key Factor |
| 16 Climate change                              | 12      | 2          | 10           | Independent | III    |

Results of ISM revealed that communication barrier (7) and unfavorable government policies (15) occupy bottom of the model and they are key barriers. Lack of research (12) and climate change (16) occupy third level (second important level) of model therefore, they are also vital. Traditional (non-digital) system of booking (8), limited use of social media (10), human trafficking (13) and international border issues (14) occupy second level relatively less important to third level having moderate lesser importance. Whereas, terrorism (1), less budget allocation (2), un-synchronized weathering system (3), government restrictions (4), failure to preserve historical places (5), inefficient system of transport (6), rigid local behavior (9) and lack of awareness of local community (11) occupy top of the model hence attain least priority. Objective of MICMAC is to identify key factors and to augment ISM by way further analysis of the results of ISM. The results are, therefore, presented cluster wise.

4.1 Autonomous
Those factors that have weak driving and weak dependence power, relatively separated from model but have some powerful links fall in this cluster. They don’t have much impact on system. In this study autonomous factors don’t and non-existence of autonomous factors means that all factors play important role in model.

4.2 Dependent
Those factors that have weak driving but strong dependence power fall in this cluster. The barriers listed at 1, 2, 3, 4, 5, 6, 9 and 11 have low driving and high dependence power therefore fall in dependent
cluster. They depend on others therefore need extra care. There are certain factors which have high dependence power but at the same time high driving power and may fall in linkage cluster.

4.3 Linkage
Those factors that have strong driving and strong dependence power fall in this cluster. They are unbalanced, agile and ambivalent and action on them may affect others and as a feedback effect on themselves. Existence of these factors in the model means that regulators might be struggling to make sense. The barriers listed at 8, 10 and 13 fall in linkage cluster.

Independent: Those factors that have high driving and low dependence power fall in this cluster. Some of them might have high dependence power as well and may fall in linkage as well. These are key factors high care is needed to handle them. Practitioners should therefore give priority to understand these factors. The barriers listed at 2, 7, 14, 15 and 16 have high driving but low dependence power therefore fall in independent. In nutshell: communication barrier (7) and unfavorable government policies (15) are key barriers because they occupy bottom of ISM model, have high driving, lowest dependence, high effectiveness and fall in independent cluster in terms of MICMAC. The results of both the structural methodologies coincide and experts also ratified the same as consistent, therefore, these two factors can be considered as vital key factors.

This study is different from contemporary studies in many dimensions. It uses unique and different methodology, whereas, contemporary studies mostly use factor analysis and other statistical analyses that give comparatively minimal insight to the issue. It is empirical field study based on very different set of variables and expert respondents of phenomena under study. It provides more deeper understanding and insight of the issue. This study has been conducted in Pakistan which itself has unique position within Asian countries and researchers could not find any such study on this topic. It is a seminal study on tourism sector. However, there are some studies conducted in different countries findings of this study are consistent with them in general Table 3.

Table 3: Comparison of results of the present study with prior studies in the literature

| Study            | Focus                              | Country | Factors | Key Factors                                                                 | Method |
|------------------|------------------------------------|---------|---------|----------------------------------------------------------------------------|--------|
| In hand          | Barriers in promoting tourism      | Pakistan| 16      | Communication barrier and unfavorable government policies.                 | ISM    |
| Ranjan Debata et al. (2013) | Enablers of medical tourism     | India   | 12      | National policy and top management commitment.                             | ISM    |
| Firuzajeany et al. (2013)  | Barriers in tourism development    | Iran    | 12      | Economic and political sanctions, lack of coordination, cultural & religious restrictions for foreign tourists, lack of government support and encouragement of private sector investment. | ISM    |
| Lee et al. (2015) | Marketing strategies for tourism   | Taiwan  | 12      | Consistency of environment, atmosphere & brand, learning & leisure activity, training & management of staff and traffic accessibility. | ISM    |
| Tseng et al. (2018) | Tourism development sustainability | Vietnam | 24      | Culture, diversity and decision synchronization.                           | ISM    |

5. Conclusion
This study has great value for stakeholders of business of tourism that wish to prioritize their efforts and resources to remove the most important barriers and challenges for successful policy implementation. There are lots of barriers in promoting tourism in developing countries like Pakistan. There is a severe need to unearth these barriers and understand the complex interrelations among barriers. This research study has addressed the issue in an innovative manner. It identified 20 barriers from literature presented it to the recruited panel of experts from within the stakeholders of tourism in Pakistan who declared 16 barriers as highly relevant and representative to the phenomenon under study. The research study used ISM and MICMAC as methodology for structuring and analyzing the issue. The results of the study show
that there are 16 representative barriers, barrier 7 and 15 occupy bottom of the model, therefore, they are key barriers. 12 and 16 occupy third level i.e. second important level, therefore, they are also vital; 8, 10, 13 and 14 occupy second level relatively less important to third level having moderate lesser importance; and 1, 2, 3, 4, 5, 6, 9 and 11 occupy top of model hence attain least priority. Results of MICMAC analysis show that: there is no autonomous barriers meaning thereby all factors are relevant and play vital role in the system; 1, 2, 3, 4, 5, 6, 9 and 11 are dependent on others therefore need extra care; 8, 10 and 13 are linking hence are unbalanced, agile & ambivalent and action on them may affect others and as a feedback effect on themselves; and 7, 12, 14, 15 and 16 are independent therefore high care is needed to handle them. Barrier 7 and 15 are key barriers according to both structural methodologies. This study contributes to existing theories of tourism. It contributed an ISM model (Figure 1) of representative barriers in promoting tourism towards literature that also states hierarchy and direction of relationships among barriers. It also has another significant contribution by way of driving-dependence diagram (Figure 2). It contributes lot of supplemental information to augment further qualitative and quantitative studies too. It divulges deeper understanding to researchers by way of hierarchical structure of barriers and paved the way for further researches. The study enables stakeholders to devise a detailed structure in order of importance in which barriers have to be dealt. The model is helpful to improve and understand the issue clearly. It has significant relevance to tour operators, tourists, governments as policy makers, researchers and practitioners. The study provides essential information to decision-makers for identifying the focal areas and taking due actions. There are certain limitations of study also. Firstly, since it is relatively less explored area and this study is first of its kind that uses qualitative approach therefore its findings have generalizability limited to the scope of study. Future studies may follow quantitative approaches with wider scope and may collect evidence from different geographical areas in order to enhance the frontiers of findings of this study. Secondly, key barriers have been identified through single method of literature discourse and there is possibility that some important barriers might have missed, therefore, it is recommended that future researches should use other methods to validate and augment the findings of this research. Thirdly, judgmental data has been collected from fewer stakeholders in Pakistan therefore future studies may take data from statistical groups.

References
Ahmed, I., Nawaz, M.M., & Qazi, T.F. (2011). Impact of terrorism on tourism industry: A point to ponder. International Journal of Academic Research, 3(4), 249-256.
Alghizzawi, M., Salloum, S.A., & Habies, M. (2018). The role of social media in tourism marketing in Jordan. International Journal of Information Technology and Language Studies, 2(3), 59-70.
Andereck, K.L., Valentine, K.M., Knopf, R.C., & Vogt, C.A. (2005). Residents’ perceptions of community tourism impacts. Annals of tourism research, 32(4), 1056-1076.
Andrades, L., & Dimanche, F. (2017). Destination competitiveness and tourism development in Russia: Issues and challenges. Tourism management, 62, 360-376.
Aref, F., Redzuan, M.R., Emby, Z., & Gill, S.S. (2009). Barriers of tourism industry through community capacity building. International Review of Business Research Papers, 5(4), 399-408.
Arenas, A.E., Goh, J.M., & Urueña, A. (2019). How does IT affect design centricity approaches: Evidence from Spain’s smart tourism ecosystem. International Journal of Information Management, 45, 149-162.
Attri, R., Dev, N., & Sharma, V. (2013). Interpretive Structural Modelling (ISM) approach: An overview. Research Journal of Management Sciences, 2319, 1171.
Baloch, Q.B., & Rehman, A. (2015). Regional integration of Pakistan tourism: Exploring prospects. Abasyn University Journal of Social Sciences, 8(2), 405-415.
Cai, Y., & Xia, C. (2018). Interpretive structural analysis of interrelationships among the elements of characteristic agriculture development in Chinese rural poverty alleviation. Sustainability, 10(3), 786.
Chen, Y., Huang, Z., & Cai, L. (2014). Image of China tourism and sustainability issues in Western media: An investigation of National Geographic. International journal of contemporary hospitality management, 26(6), 855-878.

Chidambaranathan, S., Muralidharan, C., & Deshmukh, S.G. (2009). Analyzing the interaction of critical factors of supplier development using interpretive structural modeling-An empirical study. The International Journal of Advanced Manufacturing Technology, 43(11-12), 1081-1093.

Chin, N., Byun, K., Hamlet, A.F., & Cherkauer, K. A. (2018). Assessing potential winter weather response to climate change and implications for tourism in the US Great Lakes and Midwest. Journal of Hydrology: Regional Studies, 19, 42-56.

Damm, A., Köberl, J., Stegmaier, P., Alonso, E.J., & Harjanne, A. (2019). The market for climate services in the tourism sector-An analysis of Austrian stakeholders’ perceptions. Climate Services.

Firuzjaeyan, A.S., Firuzjaeyan, M., Petroodi, S.H.P., & Gholamrezazadeh, F. (2013). Applying techniques of Interpretive Structural Modeling (ISM) in tourism Studies (A pathological approach). 2(6), 129-159.

Godet, M. (1986). Introduction to la prospective: Seven key ideas and one scenario method. futures, 18(2), 134-157.

Hatipoglu, B., Alvarez, M.D., & Ertuna, B. (2016). Barriers to stakeholder involvement in the planning of sustainable tourism: The case of the Thrace region in Turkey. Journal of Cleaner Production, 111, 306-317.

Heung, V. C., Kucukusta, D., & Song, H. (2011). Medical tourism development in Hong Kong: An assessment of the barriers. Tourism Management, 32(5), 995-1005.

Ismagilova, G., Safiullin, L., & Gafurov, I. (2015). Using historical heritage as a factor in tourism development. Procedia-social and Behavioral sciences, 188, 157-162.

Jeon, A. (2019). Effects of career barriers on career self-efficacy and career preparation behavior among undergraduates majoring in aviation tourism. Service Business, 1-21.

Khadaroo, J., & Seetanah, B. (2008). The role of transport infrastructure in international tourism development: A gravity model approach. Tourism Management, 29(5), 831-840.

Khan, S., & Khan, M.S.A. (2013). Conceptualized model of green it purchasing enablers-An application of Delphi technique and interpretive structural modeling. Business Sciences International Research Journal, 1(1), 24-37.

Leung, P., Lam, T., & Wong, S. (1996). Tourism development in Cambodia: An analysis of opportunities and barriers. Asia Pacific Journal of Tourism Research, 1(2), 27-33.

Lee, T. R., Kuo, Y. H., & Muhos, M. (2015). Applying interpretive structural modeling to the planning of a sequence of marketing strategies: A case study of the architectural tourism in Taiwan. Asia Pacific Journal of Tourism Research, 20(10), 1132-1150.

Li, G., Huang, D., Sun, C., & Li, Y. (2019). Developing interpretive structural modeling based on factor analysis for the water-energy-food nexus conundrum. Science of The Total Environment, 651, 309-322.

Li, M., & Yang, J. (2014). Analysis of interrelationships between critical waste factors in office building retrofit projects using interpretive structural modelling. International Journal of Construction Management, 14(1), 15-27.

Lyons, K.D., Young, T., Hanley, J., & Stolk, P. (2016). Professional development barriers and benefits in a tourism knowledge economy. International Journal of Tourism Research, 18(4), 319-326.

Mair, J., Lockstone-Binney, L., & Whitelaw, P.A. (2018). The motives and barriers of association conference attendance: Evidence from an Australasian tourism and hospitality academic
conference. Journal of Hospitality and Tourism Management, 34, 58-65.

Matasci, C., Kruse, S., Barawid, N., & Thalmann, P. (2014). Exploring barriers to climate change adaptation in the Swiss tourism sector. Mitigation and Adaptation strategies for global change, 19(8), 1239-1254.

Meihami, B., & Karami, J. (2014). Review some effects of the investment in the tourism sector (evidence of the Qhorveh City). International Letters of Natural Sciences, 25, 39-46.

Meo, M.S., Chowdhury, M.A.F., Shaikh, G.M., Ali, M., & Masood Sheikh, S. (2018). Asymmetric impact of oil prices, exchange rate, and inflation on tourism demand in Pakistan: New evidence from nonlinear ARDL. Asia Pacific Journal of Tourism Research, 23(4), 408-422.

Momeni, K., Janati, A., Imani, A., & Khodayari-Zarnaq, R. (2018). Barriers to the development of medical tourism in East Azerbaijan province, Iran: A qualitative study. Tourism Management, 69, 307-316.

Najda-Janoszka, M., & Kopera, S. (2014). Exploring barriers to innovation in tourism industry-The case of southern region of Poland. Procedia-Social and Behavioral Sciences, 110, 190-201.

Naqvi, M., Jiang, Y., Naqvi, M., Miao, M., Liang, C., & Mehmood, S. (2018). The effect of cultural heritage tourism on tourist word of mouth: The case of lok versa festival, Pakistan. Sustainability, 10(7), 2391.

Okafor, L.E., Khalid, U., & Then, T. (2018). Common unofficial language, development and international tourism. Tourism Management, 67, 127-138.

Paraskevas, A., & Brookes, M. (2018). Nodes, guardians and signs: Raising barriers to human trafficking in the tourism industry. Tourism Management, 67, 147-156.

Perdomo, Y. (2016). Key issues for tourism development-The AM-UNWTO contribution. Worldwide hospitality and tourism themes, 8(6), 625-632.

Qian, J., Law, R., & Li, X. (2019). Education research in tourism: A longitudinal study of 77 articles between 2008 and 2017. Journal of Hospitality, Leisure, Sport & Tourism Education, 24, 120-129.

Ranjan Debata, B., Sree, K., Patnaik, B., & Sankar Mahapatra, S. (2013). Evaluating medical tourism enablers with interpretive structural modeling. Benchmarking: An International Journal, 20(6), 716-743.

Ranjbar, M.S., Azami, A., & Afraze, A. (2012). Analysis of interaction among effective factors on corporate entrepreneurship. Asia Pacific Journal of Innovation and Entrepreneurship, 6, 9-31.