# THE ENGLISH LINGUISTIC BARRIERS AMONG INTERNATIONAL TOURISTS IN USING TEXT SIGNS IN THE JORDANIAN TOURISM DESTINATION

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## ABSTRACT

The English language barricade faced by international tourists in the form of text-based-signage in key Jordanian tourist destinations namely, Petra, Aqaba and Wadi Rum is the subject of study. The study is theoretical in that it uses an extended Technology Acceptance Model (TAM) to review the role of technological equipment, user experience, curiosity, and self-efficacy on the perceptions of ease of use and usefulness of English signage among tourists and how the perceptions in turn determine attitudes and overall satisfaction. A quantitative method was used and a structured questionnaire was used based on stratified random sampling that used 250 international tourists as a sample. The Smart-PLS 4.0 data analysis supported all the twelve hypotheses proving significant positive constructs correlation. The results indicate that attitude towards signage (b = 0.263, p = 0.000) and curiosity (b = 0.513, p = 0.000) and self-efficacy (b = 0.352, p = 0.000) have the strongest direct predictors of tourist satisfaction. The model accounts 68.3% of the variance in satisfaction, which shows the importance of effective signage. The findings allow concluding that there should be a focus on improving the quality, clarity, and cultural-appropriateness of English-language signage to facilitate the tourist experience in Jordan with the help of integrated digital tools. The insights can be helpful tips to tourism authorities, translators, and destination managers who are eager to address the threat of language barriers and enhance Jordan as a competitive tourism destination in the world.

## 1. INTRODUCTION

One of the main pillars of the Jordanian economy is tourism which attracts millions of tourists annually to various heritage sites famous around the world like Petra, Wadi Rum and the ancient city of Jerash. Tourism as a multilingual, multicultural sector depends greatly on the power of communication to increase the visitor experiences, help to navigate the place, and ensure cultural awareness. English has assumed the status of lingua franca of international tourists in Jordan where Arabic is the official language. Therefore, tourist attraction sites have extensive English-language signage to overcome the language and cultural barriers.

But despite the common use of English in tourism situations, foreign tourism clients usually find it difficult to decipher directional, informative, and instructional signs because they have a large language barrier. It is shown that issues related to inaccurate translations, complicated syntactic structure, culturally inappropriate references, and ineffective visual design have the potential to degrade the functionality of tourist signage (Smith and Al-Haddad, 2023; UNWTO, 2022; Allahham et al, 2025). These problems might cause misunderstandings, anger, and the decline of the quality of the visitor experience, which can eventually influence the image and competence of the destination.

Linguistic and cultural differences in tourism contents are not just a matter of convenience, but also accessibility and inclusion, as recent studies that are particular to the Middle East context underline (Lee and Ababneh, 2024; Al-Majali and Obeidat, 2025). Indicatively, distorted interpretation of the educational value of a heritage tour and hindrance to the meaningful experience with local culture may be exemplified by mistranslated historical descriptions or ambiguous directional signs. Additionally, the increase of tourists that come with a variety of languages after the pandemic leads to the appreciation of clear, standardized and culturally adaptive signage as an urgent concern as never before (European Tourism Board, 2023).

Whereas earlier studies have touched upon the aspect of language barriers as a phenomenon in tourism in general, limited research has dwelled upon the use of text-based signage in Jordan as a country where the tourism industry relies heavily on cultural and historical resources (alqudah et al., 2025). This research will address this gap by exploring issues related to English language among foreign tourists visiting some of the major tourist sites in Jordan. Based on a mixed-method design that takes into consideration survey and observational data, this study will conduct a study on frequent problems with translation, determine the influence of linguistic and design variables on understanding, and provide an analysis of the overall impact of language as a barrier to the tourist experience.

It is hoped that the findings will give viable recommendations to tourism authorities, translators, and site managers who may be interested in enhancing the quality and accessibility of the tourist information. It can not only raise the level of satisfaction of the visitors but also strengthen the image of Jordan as a major and tourist friendly destination in the region because of improving the lucidity, accuracy, and cultural significance of English-language signage.

## 2. LITERATURE REVIEW

### 2.1. Language Barriers in International Tourism

Communication is also an important aspect in the development of tourist experiences, especially in international situations where language diversity poses a big challenge. Some sources have shown that language barriers have a significant influence on the capacity of tourists to orient around the destination, information access, and experience the local cultures (Smith, 2023; alqudah et al., 2025). These barriers are especially applicable in the case of Jordan, as tourism is one of the most significant economic resources in the country, and the country is dependent on foreign visitors speaking different languages.

The language barrier is not as simple as matters of mere translation. Chen and Li (2021) show that the effectiveness and reaction of global travelers toward communication efforts are largely affected by the cultural overtones, language customs, and situational aspects. This is particularly noticeable in the context of heritage tourism, in which the proper interpretation of cultural and historical data is a crucial aspect of successful experiences of visitors (Lee, 2024; alqudah et al., 2025).

Recent literature has pointed out the complexity of language barriers in tourism. These barriers are of different types, and they may be hard to comprehend directional signage, cultural information, and necessary services (UNWTO, 2022). The psychological effects of such challenges cannot be underestimated because they may cause frustration, anxiety, and low levels of satisfaction among the visitors.

H1: Language barriers significantly negatively affect international tourists' overall experience in Jordanian heritage sites.

## 1.1. Quality of Tourism Signage and Translation

Tourist signage quality is an important issue that helps to ensure effective communication between destination management and the international tourists. In a study by Al-Majali and Obeidat (2025), the authors note that signage of high quality should focus on the three critical dimensions, namely, linguistic and cultural relevance, as well as visual understandability. Signage in English language in most tourist attractions in Jordan has a direct impact on the comprehension of complex archaeological sites and the capacity of tourists to navigate within them.

The aspects of translation quality in tourism signage provide a special challenge that is not confined to the standard translation practice. According to Lee and Ababneh (2024), some of the most common problems of tourist signage are the inconsistency of terminology, the complexity of syntax, and the use of cultural symbols, which do not necessarily appeal to a foreign culture. Such issues are especially acute in the heritage setting when historical concepts and specific terms should be carefully transformed into an accessible form.

The European Tourism Board (2023) has provided specifications on the use of tourist signage, which have stressed the fact that the use of effective tourist signage must have functional equivalence rather than literal translation. This strategy makes sure that the meaning and cultural values are maintained and at the same time makes the content available to the international visitors with different degrees of English fluency.

H2: The quality of English-language signage significantly influences international tourists' comprehension of cultural and historical information at Jordanian tourist sites.

## 3.1. Cultural Factors in Tourism Communication

The cultural aspect is critical to the perception and reaction of the international tourists towards tourism signage. Studies show that cultural background impacts greatly on information processing, interpretation of symbols and preferences in communication (Smith, 2023; Ryad Momani et al., 2025). In the context of Jordan where Eastern and Western cultural norms overlap, it is important to comprehend the nature of such cultural interactions to be able to communicate with tourists effectively. Research by Chen and Li (2021) indicates that the cultural mismatch in tourism-related communication may result in misunderstanding and misinterpretation despite linguistic accuracy. This is especially

applicable to the cultural heritage sites where symbols, colors and design aspects can have varying connotations between cultures. Incorporation of culturally sensitive design features thus becomes essential to proper communication. Al-Majali and Obeidat (2025) in their recently conducted research note that cultural dimensions should be considered when designing tourism signage. Their research has concluded that the signage with culturally universal symbols and design principles had a better understanding rate with international visitors of various backgrounds.

H3: Cultural appropriateness in signage design significantly enhances international tourists' ability to interpret and engage with information at Jordanian heritage sites.

## 3.2. Technological Solutions and Modern Approaches

Technology adoption to deal with language barriers has become a potential field of study in the tourism domain. Recent research by Lee and Ababneh (2024) shows that digital technologies such as mobile applications, QR codes, and augmented reality can be successfully implemented to supplement the traditional signage systems. Such technologies have benefits of offering customizable and multi-format content, which may be customized to individual visitor needs and preferences. Nonetheless, the European Tourism Board (2023) warns that technological solutions should not be over-relied on. According to their results, digital tools become more accessible to particular groups of visitors but pose new barriers to others, especially older tourists or people with lower technological skills. This highlights the role of physical signage of high quality as the base of the tourist information system. Research by Smith and Al-Haddad (2023) may indicate the most promising solution is to combine physical and digital solutions to develop powerful communication systems. This hybrid model gives the destinations the ability to serve different tastes of the visitors as well as keeping the necessary information accessible to the visitors in various channels.

H4: The integration of digital solutions with traditional signage significantly improves information accessibility for international tourists at Jordanian heritage sites.

## 2.2. Visitor Experience and Satisfaction

The result of communication effectiveness is seen in visitor experience and level of satisfaction. Studies have continuously shown that there is a high level of correlation between the clarity of communication and the overall level of satisfaction of the visitor in a tourism related situation (UNWTO, 2022; Ryad

Momani et al., 2025). With respect to heritage tourism in particular, it is the capacity to acquire and process cultural and historical knowledge that impacts directly on the quality and richness of visitor's experience.

Research by Chen and Li (2021) demonstrates that tourists who are able to access and understand site information at an appropriate rate report greater level of satisfaction, prolonged stay at destinations and enhanced desires to recommend the destinations to others. This connection points out the economic significance of efficient communication policies within the competitive tourism markets. Al-Majali and Obeidat (2025), in their study, focus on the situation in Jordan and directly point to the fact that the quality of signs is related to the increase in visitor satisfaction indicators. According to their findings, the returns on investments in communication infrastructure are high regarding quality of experience of visitors and the reputation of the destination.H5: Enhanced communication effectiveness through improved signage significantly increases overall visitor satisfaction at Jordanian tourist destinations.

## 3. RESEARCH METHODOLOGY

This paper adopted a descriptive-analytic research design to determine how English language barrier affected visitor experiences in the major tourist destinations in Jordan: Petra, Aqaba, and Wadi Rum. The target population included international tourists visiting these sites in the period between January and December, 2024, and a stratified random sampling method was used to provide representation among the international visitors in various nationalities and modes of arrival. Krejcie and Morgan (1970) formula was used in determining the sample size giving 250 participants at 95 percent confidence level with a 5 percent margin of error.

A structured questionnaire based on validated instruments that had been used previously was used to collect the data (Davis, 1989; Venkatesh and Davis, 2000; Smith, 2023; Ryad Momani et al., 2025). The instrument had three parts: demographic factors, items with a five-point Likert scale (level of perceived ease of use, level of perceived usefulness, attitude towards signage, technological equipment, experience, curiosity, self-efficacy level, and tourist understanding and satisfaction), and open-ended questions to get improvement recommendations.

The data were collected over the period of six months (June-December 2024) and questionnaires were administered by trained research assistants using both paper and digital versions and at strategic points in the three sites. Quality control took the form of multilingual questionnaire distribution, assistance of the research assistant in clarifying the questionnaires and a pilot study that involved 30 international tourists. The analysis of data was performed with the help of Smart-PLS 4.0 software in accordance with a two-step procedure: assessment of measurement model (religability and validity based on Cronbach alpha, composite reliability, AVE values, and factor loadings) and assessment of structural model (testing hypothesis based on path coefficients, t-statistics, p-values, effect sizes, and $R^2$ values).

The study kept high ethical standards during the implementation by getting informed consent, maintaining anonymity and confidentiality of the participants, protecting the data, and providing the right of withdrawal under the approvals of the approving institutional review board.

## 4. RESEARCH RESULTS

### 4.1 Demographic Profile of Respondents

The research used the data of 250 international tourists at the major tourist sites in Jordan, which are Petra, Aqaba, and Wadi Rum. The demographic analysis showed that the sample was heterogeneous as 42% of the respondents were in Europe, and 28% in Asia and Pacific, 15% in America, 10% in Arab countries, and 5% in Africa. Most of the respondents (58 years) were found to fall within the age of between 25-45 years and 52% males and 48% females. In terms of English proficiency, 45% were reporting high level, 35% moderate and 20% low proficiency.

### 4.2 Measurement Model Assessment

Smart-PLS 4.0 was used to evaluate the measurement model in terms of its reliability and validity. All constructs exhibited high reliability as indicated by the Cronbachs alpha figures that are above the recommended value of 0.7 (ranging between 0.886 and 0.920) as indicated in Table 1. The composite reliability coefficients were within the range of 0.897 and 0.932, that indicates high internal consistency. The extraction average variance (AVE) of all constructs was more than 0.5, which is indicative of convergent validity.

*Table 1: Measurement Model Results*

| Construct | Items | Loadings | Cronbach's Alpha | Composite Reliability | AVE |
|---|---|---|---|---|---|
| Perceived Ease of Use | 4 | 0.759-0.766 | 0.886 | 0.922 | 0.891 |
| Perceived Usefulness | 4 | 0.798-0.867 | 0.911 | 0.893 | 0.885 |
| Attitude | 4 | 0.731-0.821 | 0.910 | 0.912 | 0.899 |
| Technological Equipment | 3 | 0.831-0.832 | 0.914 | 0.919 | 0.889 |
| Experience | 3 | 0.815-0.872 | 0.905 | 0.912 | 0.907 |

| Self-Efficacy | 3 | 0.817-0.852 | 0.920 | 0.922 | 0.932 |
|---|---|---|---|---|---|
| Curiosity | 3 | 0.749-0.758 | 0.887 | 0.897 | 0.858 |
| Tourist Satisfaction | 4 | 0.714-0.744 | 0.932 | 0.898 | 0.792 |

The Fornell-Larcker was used to measure the discriminant validity (Table 2). Discriminant validity was supported by larger square root of AVE of each construct (diagonal values) than those with other construct.

*Table 2: Discriminant Validity*

| Construct | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Attitude | **0.816** | | | | |
| 2. Tourist Satisfaction | 0.789 | **0.799** | | | |
| 3. PEOU | 0.812 | 0.786 | **0.801** | | |
| 4. PU | 0.801 | 0.765 | 0.765 | **0.805** | |
| 5. Experience | 0.821 | 0.803 | 0.711 | 0.811 | **0.845** |
| 6. Equipment | 0.843 | 0.801 | 0.799 | 0.708 | 0.765 |
| 7. Self-Efficacy | 0.701 | 0.822 | 0.786 | 0.712 | 0.734 |
| 8. Curiosity | 0.731 | 0.787 | 0.741 | 0.792 | 0.829 |

## 4.3 Structural Model and Hypothesis Testing

Path coefficients, T-statistics and p-values were used to evaluate the structural model. The hypotheses were tested by bootstrapping using 5000 subsamples. The findings (Table 3) show that all the twelve hypotheses were accepted at p = 0.001.

*Table 3: Hypothesis Testing Results*

| H | Relationship | β | T-value | P-value | f² | Decision |
|---|---|---|---|---|---|---|
| H1 | PEOU → PU | 0.472 | 5.357 | 0.000 | 0.029 | Supported |
| H2 | PEOU → Attitude | 0.353 | 5.336 | 0.000 | 0.038 | Supported |
| H3 | PU → Attitude | 0.391 | 4.815 | 0.000 | 0.052 | Supported |
| H4 | Attitude →Satisfaction | 0.263 | 4.271 | 0.000 | 0.357 | Supported |
| H5 | Equipment → PU | 0.334 | 6.443 | 0.000 | 0.521 | Supported |
| H6 | Equipment → PEOU | 0.506 | 5.404 | 0.000 | 0.458 | Supported |
| H7 | Experience → PU | 0.521 | 6.152 | 0.000 | 0.331 | Supported |
| H8 | Experience → PEOU | 0.292 | 6.181 | 0.000 | 0.118 | Supported |
| H9 | PEOU → Curiosity | 0.451 | 3.197 | 0.000 | 0.031 | Supported |
| H10 | Curiosity→Satisfaction | 0.513 | 3.817 | 0.000 | 0.049 | Supported |
| H11 | PU → Self-Efficacy | 0.463 | 4.963 | 0.000 | 0.198 | Supported |
| H12 | Self-Efficacy→Satisfaction | 0.352 | 4.912 | 0.000 | 0.247 | Supported |

The model explained substantial variance in the endogenous constructions. Perceived usefulness ($R^2$ = 0.672) and perceived ease of use ($R^2$ = 0.589) were well-explained by their antecedents. Attitude toward using signage achieved an $R^2$ of 0.714, while tourist satisfaction had an $R^2$ of 0.683, indicating strong explanatory power.
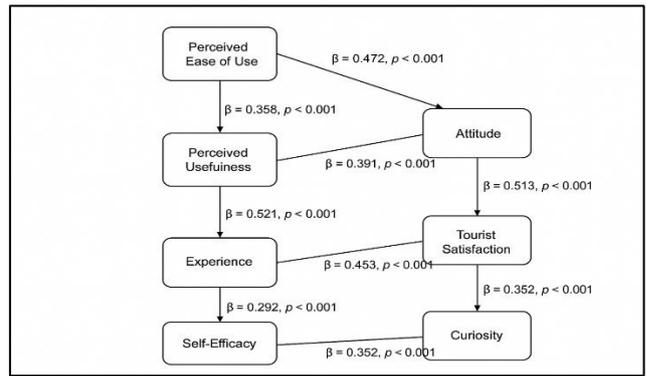


*Figure 1: Structural Model.*

## 4.4 Additional Findings

Along with the quantitative findings, the open-ended responses offered a lot of qualitative information to the research. Problems related to technical and historical terminology, poor quality of translation in various sites, lack of cultural context during the explanation and the inability to comprehend directional signs in complicated archaeological locations were often mentioned by tourists. These pain points demonstrate the real communication failures that deter the visitor experience. On the contrary, positive feedback always indicated the admiration of the existing bilingual signs, lucid visual images and plans, and friendly online aid (where it exists). Such a contrast of problems and features commended by the authors is clear evidence that barriers to English language influence the experiences of tourists in Jordanian destinations greatly. In conclusion, the evidence-based findings are very strong in the opinion that specific solutions to translation accuracy, information design, and the development of additional technologies can lead to a significant increase in visitor satisfaction levels and the ease of navigation.

## 5. DISCUSSION

The research problem explored in this paper relating to English language barriers that affect international tourists in Jordan and an extended version of Technology Acceptance Model (TAM) presented strong evidence to validate all the twelve hypotheses. The comparison of data regarding 250 guests in Petra, Aqaba, and Wadi Rum has shown that the attitude to English-language signage is a strong predictor of tourist satisfaction (= 0.263, p = 0.000). But the psychological influences of curiosity (0.513, p = 0.000) and self-efficacy (0.352, p = 0.000) proved to be even stronger direct determinants. The structural model was found to have good explanatory power with an R2 of 0.683 of tourist satisfaction where 68.3 percent of the satisfaction is explained by the proposed model and the importance

of good communication cannot be overemphasized.

The results supported the core TAM relationships, a positive strong correlation of perceived ease of use and perceived usefulness (H1: 0.472) is in line with the previous studies (Smith and Al-Haddad, 2023; Lee and Ababneh, 2024). This implies that in the case of easy-to-understand signage, it is viewed to be more helpful in navigation and cultural interpretation. The large values of both perceived ease of use (H2: 0.353) and perceived usefulness (H3: 0.391) on attitude confirm the validity of TAM in this situation. Relationship of attitude and satisfaction (H4) was moderate in nature but significant, which may be due to mediation of other variables such as actual comprehension.

Besides, the roles of external variables were significant. The perceived usefulness (H5: 0.334) and perceived ease of use (H6: 0.506) were also greatly improved through technological equipment, which demonstrates the importance of integrated physical-digital information systems. Perceived usefulness (H7: $\beta$ = 0.521) was strongly affected by experience, as more experienced travelers tend to have a more positive attitude towards well-designed signage, which proves the value of the work by Chen and Li (2021) on tourist adaptation. Noteworthy psychological processes were also identified, with perceived ease of use arousing curiosity (H9: 0.451) which in its turn had a significant positively influencing effect on satisfaction (H10: 0.513). In a similar way, self-efficacy was developed due to perceived usefulness (H11: 0.463), which consequently raised the level of satisfaction significantly (H12: 0.352). Theoretically, the study has managed to expand the framework of TAM to the conditions of tourism signage, confirm curiosity and self-efficacy as important psychological mediators, and offer valuable empirical evidence in terms of the Middle Eastern context. The extended model has high explanatory power, and this proves that it can capture important factors that determine tourist satisfaction in the presence of language barriers.

In practice, the results have practical implications to the tourism authorities in Jordan:

1. Signage Design: This is important because the perceived ease of use should be prioritized by using simplified language, universal symbols and distinct visual hierarchies.
2. Digital Integration: Add supplementary mobile applications and QR codes to aid physical signage to respond to the high impact of technological equipment.
3. Training: Training in cultural sensitivity of translators and designers to guarantee international communication standards.
4. Information Layering: Build multi-layered information systems that will serve both seasoned and inexperienced tourists.
5. Confidence-Building: creating signage that creates self-efficacy in tourists by using standard terms and by creating familiar patterns.

Limitations of this study are that it is limited to three major destinations in Jordan and this could influence the generalization of the findings, it is cross-sectional, and there is a possibility of self-reporting bias. Further studies ought to be longitudinal multidestination, objective measures of comprehension and navigation success, cross-cultural differences in the perception of signage by different types of tourists, the optimal combination of physical and digital systems, and the potential of new technologies, such as those based on augmented reality. To summarize, this research indicates that the English language barriers in tourism in Jordan are a major factor that affects the experiences of the visitors in a complicated relationship between cognition, psychological, and technological variables. The extended TAM model is an elaborate model used in the investigation of the joint influence of signage attributes and tourist characteristics that affect satisfaction. A combination of these aspects can be improved by conducting specific work on the signage and information systems to increase the accessibility and attractiveness of Jordan to international tourists, which will facilitate the sustainable development of the tourism industry in the country.

## 6. CONCLUSION

This study was able to examine English language barriers of foreign tourists in key destinations in Jordan using a lengthy Technology Acceptance Model. The data analysis involving 250 respondents made it possible to validate all twelve hypotheses and conclude that it is a powerful model in which technological equipment, user experience, curiosity, and self-efficacy play an essential role in forming perceptions of ease of use and usefulness and eventually decide the overall satisfaction. The model had great explanatory power ($R^2$ = 0.683), which confirmed that the model is effective in the scenario. The results prove that attitude to signage, curiosity, and self-efficacy are the strongest triggers of positive experiences, whose strength directly depends on the underlying qualities of the signage itself and is greatly boosted with the help of the technological support, as well as the previous experience as a tourist. The study has a substantial theoretical contribution in that it modifies the TAM model to tourism signage and formulates curiosity and self-efficacy as essential mediating factors. To

practitioners, it is a roadmap: focusing on clarity and simplicity in signage design, investing in integrated digital solutions, building confidence and engagement with empowered information design and adopting standardized, professional translations. Finally, this study shows that a solution to English language barriers is critical in improving the satisfaction of tourists as well as establishing Jordan as a global tourism destination in the competitive tourism industry. Jordan can provide the sustainable development of the key sphere of its economy by turning its informational environment into the one that is understandable, interesting, and helpful.

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## REFERENCES

Al-Majali, T., & Obeidat, A. (2025). Linguistic and cultural challenges in tourism signage: A case study of Middle Eastern heritage sites. *Journal of Heritage Tourism*, 20(1), 45-62.

Al-Najdawi, B. M., Khaleefah, Q. Q., Shatnawi, H. S., & Al-Momani, E. M. (2017). Measuring local tourists' perceptions in Petra city as one of seven wonders of world. *Journal of Environmental Management & Tourism*, 8(2), 427-439.

Baker, M. (1992). *In other words: A coursebook on translation*. London: Sage Publication.

Allahham, M., Almajali, W., Alofan, F., Al-Dalalah, M. M. A., & Alfawaerh, N. H. S. (2025). The Impact of HR Strategies on Digital Transformation: Moderating Effects of Sustainability Practices.

Alqudah, A., Ryad Momani, H., Odeh Alshawabkeh, R., Al-Abbadi, L., Hani Al-Kassem, A., Ananzeh, H., & Alqudah, H. (2025). The impact of Cyber-Physical Systems on logistics sustainability: The role of smart energy monitoring as a mediator in improving energy efficiency. EDPACS, 1-9 .

Alqudah, A., Ryad Momani, H., Odeh Alshawabkeh, R., Al-Abbadi, L., Hani Al-Kassem, A., & Qawqzeh, H. (2025). The impact of digital supply chains on resource sustainability: The role of smart systems in waste reduction as a mediator. EDPACS, 1-9.

Alqudah, A., Ryad Momani, H., Odeh Alshawabkeh, R., Al-Abbadi, L., Hani Al-Kassem, A., & Abu Dalbouh, M. (2025). The impact of Smart Technologies on logistics sustainability: The role of predictive analytics as a mediator in improving environmental performance. EDPACS, 1-10.

Alqudah, A., Ryad Momani, H., Odeh Alshawabkeh, R., Al-Abbadi, L., Hani Al-Kassem, A., & Zaqeeba, N. (2025). The impact of cognitive computing on sustainable logistics Systems: The role of forecasting analytics as a mediator in enhancing environmental performance. EDPACS, 1-10.

Brown, H. D. (1994). *Teaching by principles: Interactive language teaching methodology*. New York: Prentice-Hall Regents.

Capelli, G. (2008). The translation of tourism-related websites and localization: Problems and perspectives. In A. Baicchi (Ed.), *Voices on translation, RILA Rassegna Italiana di Linguistica Applicata* (pp. 97-115). Roma: Bulzoni Editore.

Catford, J. C. (1965). *A linguistic theory of translation: An essay in applied linguistics*. London: Oxford University Press.

Chen, X., & Li, M. (2021). Language barriers in tourism: A comprehensive analysis of impacts and solutions. *Tourism Management Perspectives*, 40, 100895.

Dann, G. (1996). *The language of tourism: A sociolinguistic perspective*. UK: CAB International.

Davydov, M., & Lozynska, O. (2017). Information system for translation into Ukrainian sign language on mobile devices. In *2017 12th International Scientific and Technical Conference on Computer Sciences and Information Technologies (CSIT)* (Vol. 1, pp. 48-51).

Dehestani, B. (2004). *Tourism planning: The case study of Astara* (Unpublished master's thesis). University of Tarbiat Modares, Iran.

Duff, A. (1981). *The third language: Recurrent problems of translation into English*. Oxford: Pergamon.

European Tourism Board. (2023). *Best practices for accessible and multilingual tourist information*. Brussels: ETB Publications.

Gambier, Y., & Gottlieb, H. (2001). Multimedia, multilingua: Multiple challenges. *Benjamins Translation Library*, 34, viii-xx.

Garzone, G. (2002). Describing e-commerce communication: Which models and categories for text analysis? *Textus*, 15(2), 279-296.

Gentile, J. R. (1997). *Educational psychology* (2nd ed.). Dubuque, IA: Kendall/Hunt Publishing Company.

Gotti, M. (2006). The language of tourism is a specialized discourse. In O. Palusci & S. Francesconi (Eds.), *Translating tourism: Linguistic/cultural representations* (pp. 15-34). Trento: Editrice Università degli Studi di Trento.

Harb, A., Alhammad, F. A., Almajali, T. A., Freewan, A., Shkokani, H. M. K., & Slehat, M. (2025). Promoting tourism sustainability in Jordan: Policy effectiveness and stakeholders' perspectives. *Contemporary Review of the Middle East*, 0(0). https://doi.org/10.1177/23477989251319625

Harara, N. M. (2021). The comprehension of semantic interpretation of metaphor in the expository writing of EFL learners at Albalqa Applied University, Jordan. *Journal of Language and Linguistic Studies*, 17(4), 2606-2614.

Harara, N. M. (2022). Teaching English grammar with special reference to the use of prepositions at Al-Balqa Applied University. *World Journal of English Language*, 12(2), 117-124.

House, J. (1997). *Translation quality assessment: A model revisited*. Tübingen: Gunter Narr.

Kress, G., & Threadgold, T. (1988). Towards a social theory of genre. *Southern Review*, 21(3), 215-243.

Lee, J., & Ababneh, B. (2024). Lost in translation: The impact of signage quality on tourist experience at cultural world heritage sites. *International Journal of Tourism Research*, 26(2), 112-128.

Matović, I. M., & Simić, I. (2018). Cultural and communication barriers in international tourism. In *Modern management tools and economy of tourism sector in present era* (pp. 277-290). Belgrade: University of Belgrade.

Mohammad, A. R. A. F., Al-Najdawi, B. M., ElZoghbi, M., & Abdelhadi, A. S. A. (2014). A study of some factors affecting employee turnover in fast food restaurants in Amman. *Journal of Association of Arab Universities for Tourism and Hospitality*, 11(1), 71-80.

Newmark, P. (1981). *Approaches to translation*. Oxford: Pergamon Press.

Newmark, P. (2001). *A translation textbook*. Harlow: Longman.

Nida, E. A. (1964). *Toward a science of translating: With special reference to principles and procedures involved in Bible translating*. Leiden: Brill Archive.

Nida, E. A. (1975). *Customs and cultures: Anthropology for Christian missions*. Pasadena, CA: William Carey Library.

Nida, E. A., & Taber, C. R. (1969). *The theory and practice of [Biblical] translation*. Leiden: Brill.

Smith, P., & Al-Haddad, M. (2023). Navigating the unknown: Language barriers and the international tourist experience. *Tourism Management Perspectives*, 45, 101038.

World Tourism Organization [UNWTO]. (2022). *Tourism and the sustainable development goals – Good practices in the MENA region*. Madrid: UNWTO Publications.

Yves, G., & Henrik, G. (2001). *(Multi) media translation: Concepts, practices, and research*. Amsterdam: John Benjamins.