

Too authentic to try? The analysis of tourist experiences with authentic food images

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Objectives | The demand for authentic travel experiences has been stably growing (Ferreira et al., 2020). At the same time, multiple studies highlight the gap between "real" and "staged" authenticity (Gardiner et al., 2022). Tourist product design needs to meet tourists' expectations towards authentic cultural experiences to ensure further engagement. Contemporary technologies provide new opportunities to analyse tourist experiences (Li et al., 2015; Prayag, 2020). This study aims to explore the tourist experience created by authentic food images and identify the factors determining the intention to try these foods with the help of a data combination that includes traditional self-report method and sensor-based neurophysiological response data.

Methodology | This study builds on the consumer behaviour theory, which states that customers' cognitive and emotional reactions to stimuli influence their behavioural intentions (Achar et al., 2016; Bigné et al., 2008; Holbrook & Hirschman, 1982). Guided by this assumption, this study compares the differences in tourists' cognitive and emotional feedback on authentic food between the groups with and without the intention to try the food. The study was designed as a controlled experiment with 22 German participants exposed to 5 cases of authentic foods considered exotic to their culinary traditions. A sample with a single cultural background was used to have a homogeneous group. The study recorded neurophysiological response data that indicates visual attention (eye tracking), depth of emotions (electrodermal activity) and range of emotions (facial expression analysis). Then, self-reported perceptions of the experience and intentions to try the food were collected. The data analysis procedures included a quantitative comparison of the attention and emotional reactions between the groups with and without the intention to try this food. Then, the insights were triangulated with the explanatory self-reported data and recorded heat maps.

Main results and contributions | The findings indicate that authentic food triggers a range of emotions. However, statistically significant differences were identified only for two components of

experiences. Thus, the group with no intention to try the food exhibited a higher rate of disgust with the food details (e.g. heads and teeth of the cooked creatures), while the group with the intention to try demonstrated a stronger interest (number of fixations) to them. As a theoretical contribution, the study provides a holistic picture of tourists' experiences with food that is authentic for some countries while exotic for them. It further generates explanatory insights into tourist experiences with authentic food with a view to their intention to try this food, thereby contributing to the research on authentic cultural experience. The findings of this study also offer a practical contribution to destination management organisations and tourism providers in developing tourism experiences centred around traditional local cuisine. Understanding the determinants of tourists' behavioural intentions, combined with automated tourist experience analysis, opens the floor for real-time design and delivery of personalised experiences. Therefore, the study provides a forward-looking recommendation for improving tourist business competitiveness.

Limitations | The key limitation of the study is the single cultural context of German tourists. While it allowed the analysis of experience within a homogeneous group, thereby ensuring the data validity, the study's results cannot be generalised to other cultural contexts. More extensive research is required to have a more holistic understanding of the effect of tourists' emotional and cognitive reactions on their behavioural intentions.

Conclusions | The study combines traditional and innovative data collection methods to provide new insights into tourists' emotional and cognitive reactions to authentic food images. The comparison of these reactions revealed that the emotion of disgust and the visual interest in the food images are the key differentiating factors that share the tourists' intention to try the food. Understanding the relationships between tourist experiences with food images and the automation of data collection and analysis opens the floor for designing real-time personalised experiences.

References

- Achar, C., So, J., Agrawal, N., & Duhachek, A. (2016). What we feel and why we buy: the influence of emotions on consumer decision-making. *Current Opinion in Psychology*, 10, 166–170. <https://doi.org/10.1016/j.copsyc.2016.01.009>
- Bigné, J. E., Mattila, A. S., & Andreu, L. (2008). The impact of experiential consumption cognitions and emotions on behavioral intentions. *Journal of Services Marketing*, 22(4), 303–315. <https://doi.org/10.1108/08876040810881704>
- Ferreira, B., Morais, D., Szabo, A., Bowen, B., & Jakes, S. (2020). A gap analysis of farm tourism microentrepreneurial mentoring needs in North Carolina, USA. *Journal of Agriculture, Food Systems, and Community Development*, 1–17. <https://doi.org/10.5304/jafscd.2020.101.025>

- Gardiner, S., Vada, S., Yang, E. C. L., Khoo, C., & Le, T. H. (2022). Recreating history: The evolving negotiation of staged authenticity in tourism experiences. *Tourism Management*, 91, 104515. <https://doi.org/10.1016/j.tourman.2022.104515>
- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132–140. <https://doi.org/10.1086/208906>
- Li, S., Scott, N., & Walters, G. (2015). Current and potential methods for measuring emotion in tourism experiences: a review. *Current Issues in Tourism*, 18(9), 805–827. <https://doi.org/10.1080/13683500.2014.975679>
- Prayag, G. (2020). The role and measurement of emotion in tourism experiences. In S. K. Dixit (Ed.), *The Routledge Handbook of Tourism Experience Management and Marketing* (pp. 77–87). Routledge. <https://doi.org/10.4324/9780429203916-6>