

Developing and Enhancing Emotional Intelligence in the Tourism Sector: The Role of Transformative Learning



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Abstract A growing body of research in recent years has supported the incremental value of Emotional Intelligence in the contemporary business field. In this context and taking into consideration that Emotional Intelligence can be improved through training, the aim of this research is to investigate whether Emotional Intelligence education and training focusing in the tourism sector, through digital learning environments and implementing Transformative Learning, has distinct outcomes compared to the traditional lecture method. In this context, the purpose of this paper is to investigate the development and enhancement of Emotional Intelligence and the role of Transformative Learning theory on learners' outcomes focusing to the tourism sector. According to the findings, we can conclude that Transformative Learning is an effective and valuable teaching and learning adult theory for the tourism education and training, since it has a positive impact on Emotional Intelligence improvement and on the personal development of tourism employees and executives.

Keywords Emotional intelligence training · Transformative learning · Tourism education · Digital learning environments · Online education

JEL Classifications L8: Industry studies: Services · L83: Sports · Gambling · Restaurants · Recreation · Tourism · Z3 tourism economics · Z32: Tourism and development

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1 Introduction

The development of emotional abilities is considered of outmost importance determining the way an individual behaves, makes decisions, communicates, and manages relationships (Kikilia et al., 2022). In a constantly changing and growing tourism sector, emotional intelligent employees have a crucial role. Interacting authentically with customers leads to customers' satisfaction, loyalty, and business productivity.

Considering the growing demand for employees and executives that can satisfy customer needs and meet their expectations, the need for EI training programs in the tourism sector becomes imperative (Koc, 2019).

In this context, taking into consideration that unlike IQ, EI (or EQ) can be developed and enhanced through training and education, this research investigates the development and enhancement of Emotional Intelligence focusing on employees and executives in the tourism industry (Salovey et al., 2002). More specifically, two training programs were implemented to two separate groups utilizing either Transformative Learning or traditional teaching methods, through online learning environments. According to Mezirow's theory, the adaption of Transformative Learning leads learners to transform their past perspectives and dysfunctional beliefs and change through critical reflection and rational discourse (Mezirow, 2000).

Web conferencing technologies are utilized in this training program providing presence, immediate feedback, flexibility, and interaction (Kallou et al., 2022b; Vlassopoulou et al., 2021).

The purpose of this paper is to investigate the development and enhancement of EI and the role of Transformative Learning theory on learners' outcomes focusing on the tourism sector.

2 Literature Review

2.1 *Emotional Intelligence*

Emotional Intelligence (EI) is a valuable concept in the field of psychology and business and it includes a critical set of skills and abilities linked to personal development and success.

EI (Kallou et al., 2022a) is referred to the ability of an individual to identify, use and evaluate emotions in oneself and others (Salovey & Mayer, 1990). EI has been correlated to job performance, job satisfaction, leadership, effective communication, relieved stress, and low counterproductive work behavior (Samanta & Kallou, 2020; Goleman & Cherniss, 2001).

Furthermore, EI plays a particular role in tourism business as service quality is dependent on tourism employees' performance and the interactions they have with customers, colleagues, and supervisors (Darvishmotevali et al., 2018; Kikilia et al., 2022). Tourism employees, with an elevated level of EI, communicate effectively with

customers, anticipating their needs and satisfying them, influencing on their intention to return. Additionally, they contribute to the improvement of service delivery leading to growth in profits of the tourism business (Kallou et al., 2022a; Koc, 2019). Consequently, EI is a determinant factor for tourism employees achieving better performance results, contributing at the same time to a positive working climate (Darvishmotevali et al., 2018; Kallou et al., 2022a; Koc, 2019).

In this context, focusing on the development and training of EI in tourism employees implementing innovative training programs and educational strategies is of outmost importance since it contributes to the upgrade of the provided services and high business productivity (Kikilia et al., 2022).

2.2 Transformative Learning

Transformative Learning (TL) is a widely accepted adult learning theory outlined by Mezirow. TL refers to how the learning process can transform learners past perspectives and points of view, encouraging critical reflection and rational discourse (Mezirow, 2000). The implementation of TL leads learners to assess their assumptions and deeply held beliefs and transform their personal perspectives, beliefs and attitudes, contributing to their personal development (Mezirow & Taylor, 2009).

The integration and the effect of TL in the tourism field has been acknowledged by the researchers as it plays a vital role including a great variant of activities (Chao, 2017).

Additionally, the implementation of TL into tourism education leads individuals to re-evaluate their perspectives that no longer serve them, shifting their points of view through critical reflection and flourishing in an antagonistic working environment such as the tourism sector (Kallou & Kikilia, 2021; Stone & Duffy, 2015).

Furthermore, the implementation of the student-centered TL theory in the tourism education and training can provide retention and enhanced educational results compared to the traditional and teacher centered lecture method (Uyanik, 2016).

3 Aim of the Study and Research Questions

The aim of the research is to investigate whether EI education and training focusing in the tourism sector, through digital learning environments, implementing TL, has distinct outcomes compared to the traditional lecture method. The research questions of this study include:

- (1) Can EI be developed and enhanced through training?
- (2) Has the training program met the expectations of the participants?
- (3) What is the role of TL as a learning and teaching method?

4 Methodology

Capturing the details of the data, this research emphasized in mixed methods collecting quantitative and qualitative data, for a more detailed analysis (Creswell et al., 2004).

The survey conducted in two (2) groups (Fig. 1):

- group A, the experimental group, which TL was implemented
- group B, the control group, which the lecture method was implemented.

The EI training program through digital learning environments included 8 courses for each group, of 1.30 h each.

This paper is a small part of an extensive research that is in progress. The first results from this research will be presented in this paper. More specifically, an EI questionnaire was given to the participants at the beginning and at the end of the survey, measuring EI. This research has principally focused on the short form of the Trait Emotional Intelligence Questionnaire-Short Form-TEIQue-SF (Petrides & Furnham, 2006). More specifically, TEIQue-SF was utilized as it is appropriate for EI training programs (O'Connor et al., 2019). TEIQue-SF contains 30 questions, and its validity and reliability are verified by a huge number of studies. A 7-point Likert scale was used, ranging from 1 (I strongly disagree) to 7 (I strongly agree) (Siegling et al., 2015). TEIQue-SF global factor, for each of the participants was calculated on a 1 to 7 scale per the TEIQue-SF scoring key held by Petrides at London Psychometric Laboratory, University College London (<http://www.psychometriclab.com>) (Petrides, 2009).

Data from the questionnaire survey was processed using the SPSS v.21.

Furthermore, as the required data includes perceptions of the participants, it is obvious that primary data is needed. These perceptions concern views and opinions which cannot be measured quantitatively in a structured questionnaire. More particularly, for each question, answers of all participants will be gathered, and common points and different views will be analyzed.

Consequently, participants are free to reveal their perceptions on open-ended questions measuring parameters of the implemented methodology. The required data from the interviews, includes estimations and expectations about the implemented training program.

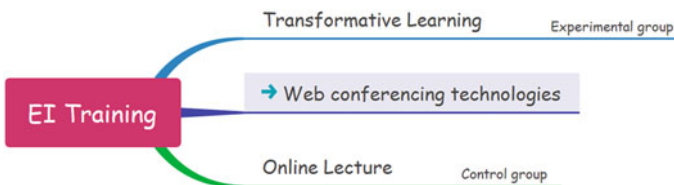


Fig. 1 EI training program in the tourism sector

In the present analysis, codes are produced in combination with sections of text and a connection is made with the conceptual categories of the research implementing open coding method (Cohen et al., 2007).

5 Results

5.1 Research Sample

The current research sample consisted of 50 undergraduate and postgraduate students of the Department of Tourism Management of the University of West Attica, Greece with working experience as employees or executives. More specifically, the sample of the experimental group consisted of 24 participants while the sample of the control group consisted of 26 participants.

The research conducted in accordance with the principles which ensure and define the ethical rules (Petousi & Sifaki, 2020). More specifically, ethical approval was obtained from the Research Ethics Committee of the University of West Attica (number of approval: 17341 - 23/02/2022).

Considering the experimental group, 41.67% were male and 58.33% were female. Concerning their age, 50% were between the age of 18–28, 20.83% were between the age of 29–39, 16.67% were between the age of 40–49, and 12.50% were between the age of 50 and above. Concerning the educational level, about 58.33% were undergraduate students and 41.67% were postgraduate students. All participants had working experience. Concerning their working position, 70.83% were employees, and 29.17% were managers.

Considering the control group, 24.14% were male and 65.52% were female. Concerning their age, 41.38% were between the age of 18–28, 13.79% were between the age of 29–39, 27.59% were between the age of 40–49, and 6.90% were between the age of 50 and above. Concerning the educational level, about 34.48% were undergraduate students and 55.17% were postgraduate students. All participants had working experience. Concerning their working position, 65.52% were employees, and 24.14% were managers.

5.2 Emotional Intelligence Training Results

Considering the responses of students measuring EI and according to the results, we conclude that EI has improved in both groups.

More specifically, in the initial measurement of EI in group A, we have noticed an average value of 4.98 points in conjunction with the final measurement of an average value of 5.45 points. That means a difference in improvement value of 0.47 points.

Table 1 TEIQue-SF scores

	Global Trait Group A (n = 24)	Global Trait Group B (n = 26)
Start of the program	4.98	5.08
End of the program	5.45	5.46
Improvement value	0.47	0.37

On the other hand, in the initial measurement of EI in group B, we have noticed an average value of 5.08 points in conjunction with the final measurement of an average value of 5.46 points. That means a difference in improvement value of 0.37 points. (Table 1).

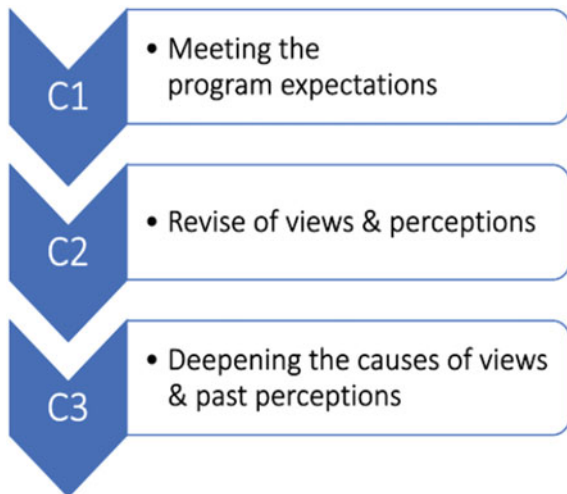
- Based on the above results, the training program which utilized TL theory (group A) seems to have higher improvement outcomes of EI than the training program based on the lecture method (group B).

5.3 Qualitative Analysis

The qualitative analysis concerns the research questions which have already been posed. A variety of themes emerged from the interviews regarding participants’ perceptions about the EI training program implemented.

The interview consisted of 4 related questions according to relevant research questions. The interview questions content was labeled by a code (Fig. 2).

Fig. 2 Code labeling of the interview questions content



Results are presented in the next paragraphs.

C1: Meeting the program expectations

The first question, before the program starts, deals with the expectations from the EI training program: (Q1. What are your expectations from this program?).

The majority of the participants in the experimental group (group A) have expectations regarding the use of EI at work (12 out of 24). A large percentage considers it as an interesting and original topic that gives a new perspective (10 out of 24). A significant percentage have expectations regarding relations with others and understanding them (9 out of 24). Several participants also want to improve their EI and develop as individuals (7 out of 24). Also, six participants have expectations related to knowledge about EI and 2 participants have expectations related to understanding and controlling emotions. One participant has elevated expectations. The majority of the participants in the control group (group B) have expectations regarding knowledge about EI (15 out of 26), while a significant percentage has expectations regarding relationships with others (14 out of 26). Several of them have expectations related to the application of EI at work (11 out of 26), while in a smaller percentage are the expectations related to personal development (7 out of 26), the interest in the subject (7 out of 26) the processing, understanding, and managing of emotions (3 out of 26).

After completing the training program, the participants were asked if this program met their expectations: (Q2. Did this program meet your expectations?).

All participants in the experimental group which TL was implemented, met their expectations about the training program. The majority of the participants was satisfied to the highest degree (13 out of 24). Also, a significant percentage (8 out of 24) was also satisfied to a remarkably high degree.

All the participants in the control group met their expectations about the training program too. Most of the participants in the control group satisfied their expectations regarding the program to the highest degree (8 out of 26) and to a remarkably high degree (6 out of 26), while a small percentage (5 out of 26) were quite satisfied.

- Based on the above, and regarding the research question 1, we can conclude that most of the participants in the experimental group were to a much greater extent satisfied regarding their expectations from the program, compared to the participants in the control group.

C2: Revision of views and perceptions

The 3rd question deals with revising opinions and perceptions of the participants: (Q3. Did the program help you revise your opinions and perceptions about emotions in the working environment?).

The majority of the participants (21 out of 24) of the experimental group which TL was implemented, considered that the training program helped them revise their opinions and perceptions regarding the significant role of EI, and the role of emotions in the tourism industry. Respondents have described perceptions related to the fact that the employee should not bring his/her emotions to work, which were replaced by views that focus on the significant role that emotions play in the workplace. The

respondents have realized that emotions should be expressed at work and that they are an integral part of it. Additionally, they understood that they should also manage them properly, using empathy, to improve their relationships with clients, colleagues, and supervisors. The use of constructive dialogue and effective communication among participants is particularly important for a better cooperation. Cultivating cooperation and trust in the tourism sector was considered of paramount importance by the participants. These views have triggered dysfunctional attitudes, which had been established by old perceptions.

Through the participation in groups and based on participants experiences, and in combination with the rational dialogue, which was developed, the perception that the supervisors should be harsh, distant, and strict, without considering any feelings, was abandoned. This perception was replaced by the one that supervisors can use emotional information and operate with empathy.

The majority of the participants of the control group (15 out of 26) considered that the training program assisted them to revise opinions and perceptions related to the role of emotions and their better control at work, the relationships with colleagues and supervisors, and the way they interact with others using empathy. Participants, also, changed their perspectives, in terms of managing conflicts with others and improved even their personal relationships. The program did not help a significant number of participants to revise their opinions and perceptions about the role of emotions in the workplace (10 out of 26). One participant didn't have any stereotypes (1 out of 26).

- Based on the above, we can conclude that most of the participants in the training program which TL was implemented were helped to change their opinions and perceptions. The dialogue and critical thinking, developed during the exchange of views during the discussions in virtual teams, helped participants abandon a wide range of old and dysfunctional perceptions and replace them with new, more functional perceptions. On the other hand, the participants of the control group were helped to change their opinions and perceptions, to a lesser extent, and there was also a significant percentage that was not helped.

Consequently, the participants in the program which TL was implemented (the experimental group) revised their views and their perceptions to a much greater extent in relation to the control group.

C3: Deepening the causes of views and past perceptions

The 4th question deals with deepening into the causes of old views and perceptions: (Q4. Did the program help you delve into the deep causes of opinions and perceptions?).

The majority of the participants in the experimental group (18 out of 24) which TL was implemented, considered that the program helps them get to the root causes of their views and perceptions. More specifically, through interaction, dialogue, and the experiences of the other participants in the virtual teams, they reflected on and identified the causes of these perceptions. These old mindsets were based on experiences from the family, and the society, which convey stereotypes and they do not particularly focus on the importance of emotions. The old mindsets that had been

cultivated about emotions and passed down from generation to generation resulted in the creation of these perceptions.

In addition, the education system, which does not focus as much as it should on the role of emotions, and past experiences or little work experience have also played a role. The participants also considered that personality factors also play a role.

On the other hand, the majority of the participants of the control group (18 out of 26) considered that the program did not help them penetrate the deep causes of their views and perceptions. A few of the participants (6 out of 26), who were helped to penetrate the deep causes of their perceptions, believe that childhood experiences and the fact that school does not pay much attention to emotions, play a role.

- Based on the above, we can conclude that the vast majority of the participants in the program which TL was implemented as a learning theory (group A), was deeply penetrated in the causes of past assumptions and perceptions. The dialogue and critical thinking developed during the exchange of views in the discussions in virtual teams helped to delve deeper into the causes of the dysfunctional perceptions. On the other hand, the vast majority of the participants in the control group did not investigate further the causes of the opinions and past perceptions (Table 2).

Table 2 Summary of interview findings

Questions	Codes	Group A (experimental)	Group B (control)
<i>Before the program starts</i>			
1. What are your expectations from this program	C1	Relationships, use of EI, interesting topic, improving EI, emotions	Knowledge about EI, relationships, use of EI, personal development, emotions, personal development
<i>At the end of the program</i>			
2. Did this program meet your expectations	C1	The vast majority were very satisfied	The majority were satisfied
3. Did the program help you revise your opinions and perceptions about emotions in the working environment?	C2	The vast majority revised their views and perceptions	The majority revised their views and perceptions A significant number didn't revise their views and perceptions
4. Did the program help you delve into the deep causes of opinions and perceptions?	C3	The vast majority was deeply penetrated into the causes of past assumptions and perceptions	The vast majority did not investigate further the causes of the opinions and past perceptions

6 Discussion

The present paper investigates the role of TL in an EI training program proposing an innovative approach in developing and enhancing EI in the tourism sector through digital learning environments.

According to the findings of this paper, and considering the 1st research question, both the experimental and the control group have improved EI in agreement with previous research, which stresses that EI can be developed with training and practice (Salovey et al., 2002; Salcido et al., 2019). More specifically, the training program which TL was utilized seems to have higher improvement outcomes of EI than the training program based on the lecture method. This is in line with previous research that acknowledged that the implementation of TL can enhance educational outcomes compared to the lecture method (Uyanik, 2016).

Additionally, regarding the qualitative part of this paper, and according to the 2nd research question, the participants in the experimental group which TL was implemented, met their expectations and were more satisfied compared to the participants in the control group.

According to the 3rd research question, most of the participants of the experimental group were helped to revise and change their opinions and dysfunctional perceptions regarding the significant role of EI, and the role of emotions in the tourism industry, to a much greater extent in relation to the control group. These findings are consistent with the relevant literature concluding that TL leads learners to transform their past perceptions and beliefs, searching for new ways of thinking. This process can also help them restore harmony in their lives while old perceptions and stereotypes referring to the role of emotions in the tourism working environment are replaced by new ones (Koulaouzides, 2019; Mezirow, 2000).

Furthermore, TL not only helped participants recognize their dysfunctional assumptions but also consider in depth their impact and the causes that created them. These findings are consistent with the relevant literature concluding that critical reflection and constructive dialogue, interpreting at the same time experiences, involves the in-depth process of examining the assumptions on which one's worldview is based, as well as the investigation of the sources of origin (Mezirow, 2000, Koulaouzides, 2019). In this way, TL guides learners to gain more control of their lives and make decisions for action leading to their personal development (Koulaouzides; Mezirow, 2000; Mezirow & Taylor, 2009).

7 Conclusions

Enhancing and developing EI based on contemporary and innovative teaching and learning methods is a pivotal criterion for tourism employees' growth and development. Emotionally intelligent employees can recognize customers' needs and fulfill their expectations satisfying them by contributing in parallel to major revenues for

the tourism business (Kallou & Kikilia, 2021). The implementation of TL in an EI training program in the tourism sector has better learning outcomes and also helps learners evaluate and reconstruct their personal meaning.

Considering the paper findings, we can conclude that TL is an effective and valuable teaching and learning adult theory for the tourism education and training, since it has a positive impact on EI improvement and on the personal development of tourism employees and executives (Chao, 2017; Kallou & Kikilia, 2021).

8 Limitations

This study has reasonable limitations. As we mentioned above, this paper is a small part of an extensive research that is in progress. The sample of the study is small. Future research will mix more quantitative and qualitative results for the current mixed research.

In conclusion, this paper investigates the role of TL in a training program for EI development and enhancement in the tourism sector, making a significant contribution to the growing body of literature, through practical implications on how to improve tourism employees EI, achieving better outcomes and personal growth.

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References

- Chao, R. F. (2017). Using transformative learning theory to explore the mechanisms of citizen participation for environmental education on the removal of invasive species: The case of Green Island, Taiwan. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(6), 2665–2682. <https://doi.org/10.12973/eurasia.2017.01246a>.
- Cohen, L., Manion, L., & Morrison, C. (2007). *Research methods in education* (6th ed., p. 638). Routledge.
- Creswell, J. W., Fetters, M. D., & Ivankova, N. V. (2004). Designing a mixed methods study in primary care. *The Annals of Family Medicine*, 2(1), 7–12. <https://doi.org/10.1370/afm.104>.
- Darvishmotevali, M., Altinay, L., & De Vita, G. (2018). Emotional intelligence and creative performance: Looking through the lens of environmental uncertainty and cultural intelligence. *International Journal of Hospitality Management*, 73, 44–54. <https://doi.org/10.1016/j.ijhm.2018.01.014>.
- Goleman, D., & Cherniss, C. (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. Jossey-Bass.
- Kallou, S., & , A. (2021). A transformative educational framework in tourism higher education through digital technologies during the COVID-19 pandemic. *Advances in Mobile Learning Educational Research*, 1(1), 37–47. <https://doi.org/10.25082/AMLER.2021.01.005>.

- Kallou, S., A., & Kalogiannakis, M. (2022a). Emotional intelligence development in tourism education and training through digital technologies. In D. Guralnick, M. E. Auer, & A. Poce (Eds.), *Innovations in learning and technology for the workplace and higher education*. TLIC 2021. Lecture Notes in Networks and Systems, vol. 349. Springer. https://doi.org/10.1007/978-3-030-90677-1_15.
- Kallou, S., A., & Kalogiannakis, M. (2022b). An investigation of the acceptance and success of web conferencing technologies in tourism higher education during the COVID-19 Pandemic. In V. Katsoni & A. C. Şerban, A.C. (Eds.), *Transcending borders in tourism through innovation and cultural heritage*. Springer Proceedings in Business and Economics. Springer. https://doi.org/10.1007/978-3-030-92491-1_26.
- Kikilia, K., Kallou, S., & Kalogiannakis, M. (2022). An emotional intelligence training program in the tourism sector. In C. Silva, M. Oliveira, & S. Silva, (Eds.), *Proceedings of the 5th International Conference on Tourism Research, ICTR 2022*, (pp. 159–168), School of Hospitality and Tourism (ESHT) Polytechnic Institute of Porto Portugal, 19–20 May 2022.
- Koc, E. (2019). *Emotional intelligence in tourism and hospitality*. CABI.
- Koulaouzides, A. (2019). *A dialogue on adult education. Tips and guidelines for new trainers*. Athens. Metaihmio.
- Mezirow, J., & Associates. (2000). *Learning as transformation. Critical perspectives on a theory in progress*. Jossey-Bass.
- Mezirow, J., & Taylor, E., and associates. (2009). *Transformative learning in practice: Insights from community, workplace, and higher education*. Jossey-Bass
- O'Connor, P. J., Hill, A., Kaya, M., & Martin, B. (2019). The measurement of emotional intelligence: A critical review of the literature and recommendations for researchers and practitioners. *Frontiers in Psychology*, 10, Article 1116. <https://psycnet.apa.org/doi/10.3389/fpsyg.2019.01116>.
- Petrides, K. V. (2009). Psychometric properties of the trait emotional intelligence questionnaire. In C. Stough, D. H. Saklofske, & J. D. Parker (Eds.), *Advances in the assessment of emotional intelligence*. Springer. https://doi.org/10.1007/978-0-387-88370-0_5.
- Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a genderspecific model of organizational variables. *Journal of Applied Social Psychology*, 36(2), 552–569. <https://doi.org/10.1111/j.0021-9029.2006.00019.x>
- Petousi, V., & Sifaki, E. (2020). Contextualizing harm in the framework of research misconduct findings from a discourse analysis of scientific publications. *International Journal of Sustainable Development*, 23(3/4), 149–174. <https://doi.org/10.1504/IJSD.2020.10037655>
- Salcido- Cibrián L. J., Ramos N. S., Jiménez, O., & Blanca M. J. (2019). Mindfulness to regulate emotions: The Mindfulness and Emotional Intelligence Program (PINEP) and its adaptation to a virtual learning platform. *Complementary Therapies in Clinical Practice*, 36, 176–180. <https://doi.org/10.1016/j.ctcp.2019.07.003>
- Salovey, P., Mayer, J. D., & Caruso, D. (2002). (2002). The positive psychology of emotional intelligence. In C. R. Snyder & S. J. Lopez (Eds.), *The handbook of positive psychology* (pp. 159–171). Oxford University Press.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3):185–211. <https://doi.org/10.2190/FDUGG-P24E-52WK-6CDG>.
- Samanta, I., & Kallou, S. (2020). The role of emotional intelligence in counterproductive work behavior. *European Business & Management*, 6(2), 20–27. <https://doi.org/10.11648/j.ebm.20200602.11>.
- Siegling, A. B., Ashely, K., Vesely, P. K. V., & Saklofske, D. H. (2015). Incremental validity of the trait emotional intelligence questionnaire-short form (TEIQue-SF). *Journal of Personality Assessment*, 97(5), 525–535. <https://doi.org/10.1080/00223891.2015.1013219>.
- Stone G. A., & Duffy L. N. (2015). Transformative learning theory: A systematic review of travel and tourism. *Scholarship Journal of Teaching in Travel & Tourism*, 15(3), 204–224. <https://doi.org/10.1080/15313220.2015.1059305>.

- Uyanık, G. (2016). Effect of environmental education based on transformational learning theory on perceptions towards environmental problems and permanency of learning. *International Electronic Journal of Environmental Education*, 6(2), 126–140. <https://doi.org/10.18497/iejee-green.59815>.
- Vlasopoulou, M., Kalogiannakis, M., & Sifaki, E. (2021). Investigating teachers' attitude and behavioral intentions for the impending integration of STEM education in primary school. In St. Papadakis & M. Kalogiannakis (Eds.), *Handbook of research on using education robotics to facilitate student learning* (pp. 235–256). IGI Global. <https://doi.org/10.4018/978-1-7998-6717-3.ch009>.