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Additional Information

## **Fostering intergenerational learning in the hotel industry: A multiple criteria decision-making model**

**Abstract:** The current research aims to identify the most suitable intergenerational learning activities for the Romanian hotel industry. A multiple criteria decision-making model is developed in order to determine the most appropriate intergenerational learning activities and the factors that strongly influence human resource managers' decisions. Data are collected from 35 HR managers who have extensive work experience in the hotel industry and in managing intergenerational learning activities, and processed using the analytic network process. The results prove that the most appropriate IGL activities for the Romanian hotel industry are mentoring, on-the-job education, and storytelling. Furthermore, the most influential factors are collaboration, commitment, job satisfaction, reward management, and organizational culture. These results have both theoretical and practical implications. On the one hand, they extend the literature regarding intergenerational learning in the hotel industry and on the other hand, they bring forward how the managers could foster intergenerational knowledge sharing and avoid corporate amnesia.

**Keywords:** intergenerational learning; human resource; knowledge sharing; aging society; knowledge loss; hotel.

## **Introduction**

The aging society phenomenon is the most important demographic change that will affect the society in the foreseeable future. According to the United Nations (2019), the countries with the highest old-age dependency ratio are predominantly European; thus, in 2019, the top 5 European countries with the highest prospective old-age dependency ratio were Bulgaria (30), Serbia (27), Ukraine (26), Croatia (25), and Latvia (25), and in 2050, it is expected for the top to be occupied by Bulgaria (36), Italy (35), Portugal (33), Ukraine (33), and Romania (33). Among the European countries, Romania will be the most vulnerable one due to the fact that it will have to deal not only with a falling fertility rate and an increased life expectancy but also with a high migration rate. Hence, the crude birth rate declined from 13.6, in 1990, to 9.7, in 2017, while the life expectancy increased from 69.7, in 1990, to 75.3, in 2017 (World Bank, 2019). Furthermore, the migration rate increased from 0.6, in 2000, to 1.9, in 2017 (United Nations, 2017); almost 3.4 million Romanians have emigrated in the last 10 years, placing the country on the second place in the Global rank, after Syria, and emphasizing the highest migration during peacetime.

Against this background, the hotel industry is the most vulnerable economic sector due to the fact that the high level of labor instability is synonymous with knowledge loss and corporate amnesia. In the last trimester of 2019, 242 547 persons were working in the hotel industry; 13.83% of them had less than 25 years old, 67% had between 25 to 49 years old, 18.72% had between 50 to 64 years old and 0.44% had more than 65 years old (National Institute of Statistics, 2019). Given the socio-economic conditions and the fact that the turnover rate is higher among the youngest employees compared with the older ones, the hotel managers state

that it becomes harder and harder to find and retain qualified employees (Jianu & Corcodel, 2019).

Although several scholars propose digitalization as a potential solution to this climate (Ahmad & Scott, 2019; Choi et al., 2020), hotels remain knowledge-intensive (Chalkiti, 2012), driven by employees (Ingram, 1999). Thus, in order to avoid knowledge loss and corporate amnesia, various intergenerational learning (IGL) activities could be enhanced. These proved to be successfully applied in industries such as education (Alfrey et al., 2017; Brucknerova & Novotny, 2017; Geeraerts et al., 2018), nursing (Galo, 2011; Harvey, 2012), automotive (Gerpott et al., 2017; Short, 2014), and high-tech (Kaminska & Borzillo, 2018). To the best of our knowledge, none of the previously developed studies addresses the issue of IGL from the hotel industry perspective.

Furthermore, the studies regarding IGL focus either on defining the concept and highlighting the activities that may enhance intergenerational knowledge sharing (Geeraerts et al. 2018; Ropes, 2015) or on emphasizing the factors that may interfere in the process (Bjursell, 2015; Burmeister et al., 2018). Despite their valuable insights, their approach is limited. On the one hand, the scholars from the first line of research focus on how to use the professional development programs, such as: mentoring (Kaminska & Borzillo, 2018; Kaše et al., 2018; Pauget & Chauvel 2018), training (Brucknerova & Novotny, 2017; Gerpott et al., 2017; Sprinkle & Urick, 2018), on-the-job education (Pauget & Chauvel, 2018; Ropes, 2013), and workshops (Geeraerts et al., 2018; Ropes, 2015), as a viable framework for intergenerational dialogue; other studies take into account the fast pace of technological development and the social character of IGL and state that enterprise social networks (Geeraerts et al., 2018; Kaminska & Borzillo, 2018) and serious games (Räsänen et al., 2014; Sprinkle & Urick, 2018) can serve as a mean for IGL.

They concentrate on the activities that bring together the members from various generations but they neglect the influence of individual and organizational factors. These are approached by the scholars from the second line of research who prove that IGL depends on employees' socio-demographic and psychological characteristics (Burmeister et al., 2018; Rupčić, 2018) and also on company's human and structural capital (Coetzer et al., 2017; Nisula & Metso, 2019).

Nevertheless, several pitfalls occur. First of all, the interconnections that exist among factors are neglected in the context of IGL although various scholars claim that tenure, gender, and age are the most important predictors of organizational commitment (Marchiori & Henkin, 2004), the organizational culture moderates the relationship between interpersonal trust and commitment (Agyare et al., 2019) while job satisfaction is influenced by various individual (such as, skills, demographics, attitude, self-efficacy, personal fulfillment, etc.), and organizational factors (like, training, salary, job design, organizational culture, promotion, co-workers, communication, etc.) (Kong et al., 2018). Secondly, when it comes to the factors of influence, the focus is on IGL as a general social process and not on IGL activities although Galo (2011) proves that the members of Generation X (born in 1966-1980) prefer on-the-job education and training while the members of Generation Y (born in 1981-1995) value mentoring, coaching, teamwork, and the use of enterprise social network. The characteristics of Generation X and Generation Y are presented in Table 1.

Table 1. General characteristics of Generation X and Generation Y (Leon et al., 2020, p.284)

<b>Criteria</b>	<b>Generation X</b>	<b>Generation Y</b>
Birth period	1966 - 1980	1981 - 1995
Alternative	MTV generation, Gen X, Gen Bust,	Millennials, Linked Generation, iGen,

names	The Middle Child, Karen Generation	Generation Me, Digital Natives, Internet Generation
Personal characteristics	<ul style="list-style-type: none"> <li>• self-reliant;</li> <li>• self-sufficient;</li> <li>• realistic;</li> <li>• independent;</li> <li>• entrepreneurial;</li> <li>• have a psychological need for understanding how things are done.</li> </ul>	<ul style="list-style-type: none"> <li>• ambitious;</li> <li>• talented;</li> <li>• demanding;</li> <li>• optimistic;</li> <li>• impatient;</li> <li>• have a psychological need for external validation;</li> <li>• aim to make a difference in the world.</li> </ul>
Relationship with the organization	<ul style="list-style-type: none"> <li>• are loyal to organizational goals and value system;</li> <li>• are achievement-oriented;</li> <li>• lack employer loyalty;</li> <li>• seek a balance among work, family, and leisure;</li> <li>• concentrate on getting the job done;</li> <li>• are multitasking;</li> <li>• challenge the hierarchical decision-making structure and</li> </ul>	<ul style="list-style-type: none"> <li>• have a lack of respect for ethics and values;</li> <li>• are goal-oriented;</li> <li>• use the organizational experience and information to build their own career trajectories;</li> <li>• concentrate on job content, adopting a short-term and fragmented perspective;</li> <li>• are savvy technology multitasking;</li> <li>• challenge the established order and do not hesitate to voice their critical</li> </ul>

	status-quo; <ul style="list-style-type: none"> <li>• prefer a formal code of conduct.</li> </ul>	opinions; <ul style="list-style-type: none"> <li>• prefer an informal code of conduct</li> </ul>
Learning preferences	<ul style="list-style-type: none"> <li>• continual feedback;</li> <li>• opportunities for autonomy;</li> <li>• professional development programs that include high-tech videos or computer-aided instructions;</li> <li>• problem-solving activities</li> </ul>	<ul style="list-style-type: none"> <li>• immediate feedback and gratification;</li> <li>• hands-on activities;</li> <li>• mentoring;</li> <li>• coaching;</li> <li>• internship</li> </ul>

The current article aims to fill these gaps by providing a nexus between the two lines of research. Thus, the main research questions to which this article aims to answer are:

1. Which is the most appropriate IGL activity for the Romanian hotel industry?
2. Which are the factors that strongly influence the selection made by the HR managers when it comes to developing IGL activities?

Based on the socio-constructivism and connectivism learning theories, the goal of this research is to identify the most appropriate IGL activities for the Romanian hotel industry by using a multi-criteria decision-making model, based on an analytic network process (ANP).

The reminder of the paper is structured as follows. Section 2 reviews the relevant scientific literature about IGL activities and factors of influence while Section 3 presents the research methodology developed for determining which are the most appropriate IGL activities and which are the factors that strongly influence HR managers' decisions. The results obtained

for the Romanian hotel industry are emphasized in Section 4. Finally, the article closes by highlighting the main theoretical and practical implications of these findings.

## **Literature review**

### *IGL activities and factors of influence*

IGL is a special type of organizational learning that “takes place among different generations and results in the acquisition and development of new knowledge, skills, and values, and as such benefits both the organization and the employee” (Ropes, 2014, p.8). Although the activity is as old as humanity itself, it only recently started to capture managers’ attention due to the aging society phenomenon. Therefore, the research in this field is still in an embryonic stage of development, and two lines of research can be distinguished. The first one concentrates on defining the concept and emphasizing the organizational activities that could support intergenerational dialogue and knowledge sharing while the second one sheds light on the factors that affect IGL.

Some of the scholars from the first line of research turn their attention to the socio-constructivism learning theories (Bandura, 1986; Piaget, 1957) and argue that the professional development programs can be successfully used for enhancing IGL. Thus, using qualitative approaches, they prove that mentoring (Babnik & Širca, 2014; Geeraerts et al., 2016, 2018; Kaminska & Borzillo, 2018), training (Brucknerova & Novotny, 2017; Gerpott et al., 2017; Kosir & Soba, 2016), on-the-job education (Pauget & Chauvel, 2018; Ropes, 2013), workshops (Geeraerts et al., 2018; Ropes, 2015), storytelling (Alfrey et al., 2017; Geeraerts et al., 2018; Harvey, 2012), and mixed-aged teams (Babnik & Širca, 2014; Geeraerts et al., 2016, 2018; Ropes, 2013, 2015) enhance IGL in various industries, such as: education (Alfrey et al., 2017;



Brucknerova & Novotny, 2017; Geeraerts et al., 2018), automotive (Gerpott et al., 2017; Short, 2014), and nursing (Harvey, 2012). In the hospitality industry, these activities are still treated as professional development programs, with no connection to IGL (Chi & Wang, 2018; Uen et al., 2018).

Other scholars take into account the connectivism learning theory (Siemens, 2005) and state that serious games (Räisänen et al., 2014; Sprinkle & Urick, 2018; Ypsilanti et al., 2014), enterprise social networks (Geeraerts et al., 2016, 2018; Kaminska & Borzillo, 2018), communities of practice (Rupčić, 2018; Sprinkle & Urick, 2018) and volunteering activities (Pauget & Chauvel, 2018; Sprinkle & Urick, 2018) can foster IGL in nursing (Galo, 2011), education (Räisänen et al., 2014), and high-tech industries (Kaminska & Borzillo, 2018). In the hospitality field, these activities are either neglected or customer-oriented. Thus, the potential of serious games and communities of practice is neglected while enterprise social networks and volunteering activities are usually treated as customer-oriented activities; enterprise social networks are used to explore customer group flow experiences (Herrero et al., 2018; Kolar & Cater, 2018) while the volunteering activities are considered to be a part of the corporate social responsibility strategies (Song & Kang, 2019).

The scholars from the second line of research bring forward the factors that may influence IGL. Thus, a distinction is made between individual and organizational factors. The former concentrates on employees' socio-demographic and psychological profile while the latter focuses on the components of the intellectual capital, namely: human capital and structural capital. Employees' socio-demographic profile brings forward their age (Baily, 2009; Bjursell, 2015; Ropes & Ypsilanti, 2012), gender (Gustavsson & Eriksson, 2010; Johansson & Abrahamsson, 2018; Rees & Monrouxe, 2010), employment length (Brucknerova & Novotny,

2017; Day & Gu, 2007; Plant et al., 2017), and position in the company (Clark & Eastland, 2019; Rupčić, 2018; Yen et al., 2016) while their psychological profile concentrates on their interpersonal trust (Hau et al., 2013; Holste & Fields, 2010; Nisula & Metso, 2019), intrinsic motivation (Burmeister et al., 2018; Kaše et al., 2018; Plant et al., 2017; Ropes & Ypsilanti, 2012), knowledge self-efficiency (Burmeister et al., 2018; Kaše et al., 2018; Milligan et al., 2015; Van Acker et al., 2014), and self-regulation skills (Burmeister et al., 2018; Lee et al., 2016; Milligan et al., 2015; Schauer et al., 2015). At the organizational level, the elements related to human and structural capital are emphasized; the former reunites aspects such as collaboration (Jeung et al., 2017; Brčić & Mihelič, 2015; Ropes, 2013, 2014), commitment (Jeung et al., 2017; Li et al., 2017; Ouakouak & Ouedraogo, 2019), executive skills (Lohman, 2005; Lee et al., 2016; Schauer et al., 2015), inclusiveness (Holste & Fields, 2010; Lohman, 2005; Schauer et al., 2015), job design (Baran & Klos, 2014; Liu et al., 2010), reward management (Kosir & Soba, 2016; Lohman, 2005; Ropes & Ypsilanti, 2012), supervisory skills (Lohman, 2005; Schauer et al., 2015), and job satisfaction (Nisula & Metso, 2019; Ropes & Ypsilanti, 2012), while the latter highlights the role of company's size (Coetzer et al., 2017; Csillag et al., 2019), organizational culture (Geeraerts et al., 2018; Kazak & Polat, 2018; Nisula & Metso, 2019; Rupčić, 2018), organizational memory (Harvey, 2012; Pauget & Chauvel, 2018), organizational structure (Baran & Klos, 2014; Harvey, 2012), and technology (Egloffstein & Ifenthaler, 2017; Kaminska & Borzillo, 2018; Razmerita et al., 2016).

Nevertheless, none of the previously developed studies analyzes the relationships established among them, in the context of IGL, although they are interconnected. According to Marchiori and Henkin (2004), tenure, gender, and age are the most important predictors of organizational commitment while Kollmann et al. (2020) emphasize that age moderates the

relationship between rewards and job satisfaction. Furthermore, Agyare et al. (2019) state that organizational culture moderates the relationship between interpersonal trust and commitment while Lunz (2017) shows that rewards and trust have a powerful impact on organizational culture. Last but not least, Sirca et al. (2013) state that collaboration and organizational structure influence job satisfaction while Kong et al. (2018) review the articles from the hospitality field and show that job satisfaction is influenced by various individual (such as, skills, demographics, attitude, self-efficacy, personal fulfillment, etc.), and organizational factors (like, training, salary, job design, organizational culture, promotion, co-workers, communication, etc.).

Taking these into account, the current article aims to provide a nexus between the two lines of research by proposing a multi-criteria decision-making model for identifying the most influential factors and selecting the most appropriate IGL activity for the hotel industry.

#### *ANP: A multi-criteria decision-making model for the hospitality industry*

In order to deal with increasingly complex problems, various multi-criteria decision-making models have been developed, such as Conjoint Analysis (Krantz, 1964), Analytical Hierarchy Process (AHP) (Saaty, 1980), Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) (Hwang & Yoon, 1981), Preference Ranking Organization METHod for Enrichment of Evaluations (PROMETHEE) (Brans, 1982), Elimination et Choice Translating Reality (ELECTRE) (Roy, 1990), and Vlsekriterijumska Optimizacija i Kompromiso Resenje (VIKOR) (Opricovic & Tzeng, 2004). Most of them are based on the independence assumption although, in many situations, the relationships established between various criteria are not completely independent (Shee et al., 2003). The ANP fills this gap by taking into account the interdependence and feedback that may arise among the decisional elements (Teng et al., 2012).

According to Saaty (1996), ANP is a general theory in the ratio scale that measures influence, based on a methodology that deals with dependence and feedback. Thus, it represents the real-world decision problem using a loose network structure and it brings forward the decisions-ranking priorities. So far, it was successfully applied in fields such as knowledge management (Eslamkhah & Seno, 2019; Hellebrandt et al., 2018), enterprise resource planning (Kilic et al., 2015; Lee et al., 2019), supply chain management (Abidi et al., 2019), and new product development (Chiang et al., 2016).

In the hospitality industry, several attempts have been made regarding the use of ANP for decision-making (Horng et al., 2018; Hsieh et al., 2008; Liu & Chou, 2016; Wu et al., 2018). Hsieh et al. (2008) use ANP to establish a complete service quality evaluation framework for hot spring hotels, and prove that: (i) the service quality of hot spring hotels depends on tangibles, reliability, responsiveness, assurance, and empathy; and (ii) assurance is the most important dimension of service quality. Lin et al. (2009) use fuzzy ANP to determine the appropriate marketing strategy to capture sustained competitive advantage and demonstrate that the differentiation strategy is the best marketing strategy, followed by a cost leadership strategy and segmentation strategy. Wu et al. (2010) are also focusing on the marketing strategy and offer the same solution as Lin et al. (2009) although they combined ANP with TOPSIS. Furthermore, Liu and Chou (2016) complement the previous studies by using fuzzy Delphi, DEMATEL, and ANP in order to identify the most important attributes of Kimmen tourism. Their results show that: (i) brand equity has a direct and indirect influence on the marketing strategy and the travel motivation; and (ii) travel intention is the most critical element of Kimmen tourism.

Tsai et al. (2010) turn their attention to CSR and combine ANP with DEMATEL in order to present an integrated approach and scientific techniques for CSR program selection decisions

and cost evaluation in the hotel industry. Thus, they state that: (i) the improvement of organization's image is the major dispatch for driving the international tourist hotel to fulfill CSR goals; and (ii) the most appropriate CSR programs are stakeholders' satisfaction plan, healthy and certified local food supply, and satisfactory tourism information.

Hsu et al. (2014) and Teng et al. (2012) go further and concentrate on the link between sustainability and hotel industry; thus, the former combines fuzzy Delphi, DEMATEL, ANP, and VIKOR to select a low carbon supplier according to carbon and energy management while the latter uses ANP to develop and weight energy conservation and carbon reduction indicators for the hotel industry. Horng et al. (2018) also focus on sustainability but they approach the issue from an innovational point of view. Therefore, they combine DEMATEL and ANP in order to determine the essential attributes of sustainable service innovation in the Taiwan hospitality industry and claim that: (i) innovation diffusion has direct and indirect effects on the dimensions of sustainable innovation and also on the organizational factors; and (ii) the sustainable innovation is the most important attribute of the hospitality industry.

Last but not least, Wu et al. (2018) use QFD (Quality Function Deployment) and ANP to select an effective recovery strategy for Vietnamese hotel managers in case of service failures. Their results highlight that: (i) among the major groups of service failure, customers perceive guestroom as the most important one; and (ii) the most effective means to deal with service failures are "immediate correcting of problem", "apology", "replacement", and "discount".

Synthesizing, ANP proved to be a viable method for identifying the most appropriate marketing strategy (Lin et al., 2009; Wu et al., 2010), recovery strategy (Wu et al., 2018), and CSR program (Tsai et al., 2010), and also for determining the essential attributes of tourism (Liu

& Chou, 2016), sustainable service innovation (Horng et al., 2018), and service quality (Hsieh et al., 2008).

Nevertheless, the focus tends to be on the decisions required by the external environment while the internal challenges are omitted. In other words, the scholars (Horng et al., 2018; Hsu et al., 2014; Liu & Chou, 2016; Wu et al., 2018) concentrate on finding the best solution for improving hotel's adaption to market's demands and neglect the fact that, in the hospitality industry, success depends on employees (Hornsey & Dann, 1984) and how the human resources are effectively managed (Teare et al., 1997). Hence, none of the studies developed so far uses ANP for human resources decision-making although these are extremely complex (Leicht-Deobald et al., 2019). The current research aims to fill this gap by developing a multi-criteria decision-making model, based on ANP, for selecting the most appropriate IGL activity.

## **Research methodology**

The current research aims to identify the most appropriate IGL activities for the Romanian hotel industry. Therefore, a multi-criteria decision-making model is developed in order to determine which are the most appropriate IGL activities and which are the factors that strongly influence HR managers' decisions. A multi-phase methodology is employed; this involves combining the literature review with interviews and surveys based on questionnaires, and processing data using the analytic network process.

*Phase 1. Identifying the IGL activities used in the Romanian hotel industry.* First of all, a comprehensive literature review is performed in order to obtain a list of activities used for supporting IGL and the factors that may influence the process. These are presented in the previous section.

Further, their relevance to the Romanian hotel sector is discussed with 35 HR managers. They are selected based on their extensive work experience in the hotel industry and their previous experience in managing IGL activities. Their background information is presented in Table 2. Individual interviews were conducted with the HR managers from January 15 to February 19, 2020, in order to identify the IGL activities that are relevant for the Romanian hotel industry, to determine the main factors of influence, and to establish the interdependencies that may appear among these. Thus, 35 semi-structured interviews were conducted with the HR managers and they included the following questions: (i) *How important is IGL for your hotel?*; (ii) *Do you consider IGL as a one-way street (knowledge is passed from an older to a younger employee) or as a bi-directional process?*; (iii) *What activities do you develop in order to foster IGL?*; (iv) *Which factors do you take into consideration when deciding which IGL activities are going to be developed?*; (v) *Are these factors independent or inter-dependent? If so, how do they influence one another and the IGL activity?*.

Table 2. Interviewers' socio-demographical characteristics

<b>Criteria</b>	<b>Variables</b>	<b>Number of persons</b>
Age	< 40 years old	17
	> 40 years old	18
Gender	Female	27
	Male	8
Work experience in the hotel sector	10 – 15 years	13
	> 16 years	22
The type of hotel in	Large chain	10

which they work	Independent	25
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Based on the results of the interviews, the components of the ANP model are identified (Table 3). According to the HR managers, only 5 out of the 10 IGL activities, presented in the specialized literature, are implemented in the Romanian hotel industry and these mainly belong to the classical professional development programs, namely: on-the-job education, mentoring, and training. The interviewed HR managers gave up using workshops years ago and their decision was cost-related (in terms of money and time). Besides, the mixed-aged teams are currently used only in 7 out of the 35 analyzed hotels; those who gave up using them claimed that they negatively affect the work climate; as one interviewer stated, *“when it comes to mixed-aged teams, the situation is tricky. On the one hand, the quantity and quality of the knowledge shared within the team are amazing and have a strong influence on the results. On the other hand, the relationships established within and among teams are a pure nightmare... Each team acts as an island (closed circuits) and sooner or later they start to compete with one another for financial or natural recognition. Besides, the relationships between the members tend to become so strong ... when one member of the team leaves the company, he/she will try to get with him/her the entire team in less than 3 months”* (HR12, 57 years old, 30 years of experience in the hotel industry). Although limited attention is given to modern IGL activities, such as serious games and enterprise social networks, the hotel managers started to use intensively storytelling and volunteering activities for fostering intergenerational knowledge flows.

Table 3. The components of the ANP model developed for the Romanian hotel industry

<b>Clusters</b>	<b>Nodes</b>
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Socio-demographic profile	Age
	Employment length
	Gender
	Position in the company
Psychological profile	Interpersonal trust
	Intrinsic motivation
	Knowledge self-efficiency
	Self-regulation
Human capital	Collaboration
	Commitment
	Job design
	Job satisfaction
	Reward management
Structural capital	Company's size
	Organizational culture
	Organizational memory
	Organizational structure
Alternatives	Mentoring
	On-the-job education
	Storytelling
	Training
	Volunteering activities

Furthermore, the ANP model is developed (Figure 1) and its goal is to determine the most appropriate IGL activities for the Romanian hotel industry. When deciding which IGL activities to develop, the HR managers take into consideration employees' socio-demographic and psychological characteristics, company's intellectual capital (human and structural capital), and the inner- and interdependences established among them. The interdependencies are highlighted by arrows among clusters while the inner-dependencies are emphasized by the looped arc within the same cluster.

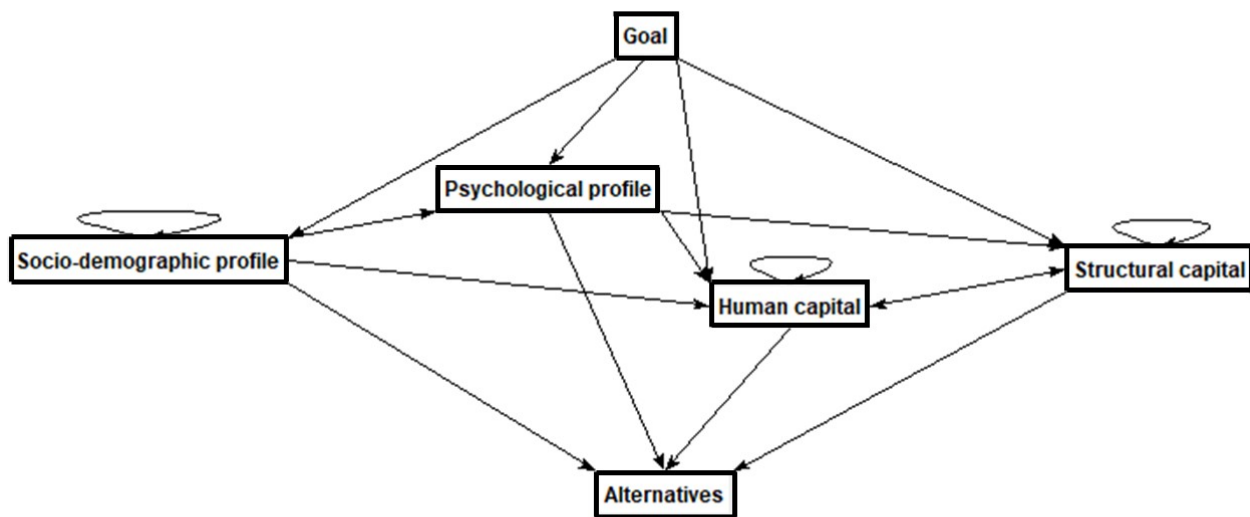


Figure 1. The ANP model developed for the Romanian hotel industry

*Phase 2. ANP development.* The variables and the relationships identified in the previous phase are used for designing a questionnaire. This focuses on building pairwise comparison matrices and uses the nine-point priority scale of Saaty's (2008) (Table 4). Thus, the respondents have to answer to the following type of question: "With regard to age, how important is mentoring compared with on-the-job education?".

Table 4. The nine-point priority scale of Saaty (2008)

<b>Intensity</b>	<b>Verbal definition</b>	<b>Description</b>
1	Equally important	Two variables are equally important.
3	Moderately more important	One variable is moderately more important than the other.
5	Strongly or essentially more important	One variable is strongly more important than the other.
7	Very strong or demonstrated importance	One variable is very strongly more important than the other.
9	Extremely more important	One variable is extremely more important than the other.
2, 4, 6, 8	Intermediate values of judgment	

The questionnaire is used in a Delphi study. In the first round, the 35 HR managers are invited to evaluate factors' and alternatives' importance using the nine-point priority scale of Saaty (2008). In the second round, they receive the consolidated results of the first round and are invited to adjust their initial choice, if they want to. Once consensus is obtained, the reciprocal matrices are built, based on the following equation:

$$(1) \quad A = [a_{ij}] = \begin{bmatrix} 1 & a_{12} & \dots & a_{1n} \\ a_{21} & 1 & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{n1} & a_{n2} & \dots & 1 \end{bmatrix}$$

where  $a_{ij}$  reflects the relative importance of the variable in the  $i^{\text{th}}$  row compared to that in the  $j^{\text{th}}$  column. Thus, for each factor and alternative, a comparison matrix is created. For example, for the factor age, the matrix reflects how important is each IGL activity compared with all the other IGL activities.

Further, the consistency ratio (CR) is estimated based on:

$$(2) \quad CR = \frac{CI}{RI}$$

where: CI is the consistency index of the pairwise comparison;

RI is the random consistency index.

Given the fact that this is lower than 0.1 (Saaty & Vargas, 2006), it can be stated that there are no consistency violations and no further re-judgments are needed.

Once the consistency is ensured, the unweighted supermatrix, which includes all factors and alternatives, is determined, based on the following equation:

$$(3) \quad S = \begin{matrix} & & \begin{matrix} C_1 & C_2 & \dots & C_N \\ e_{11} & e_{12} \dots e_{1n_1} & e_{21} & e_{22} \dots e_{2n_2} & \dots & e_{N1} & e_{N2} \dots e_{Nn_N} \end{matrix} \\ \begin{matrix} C_1 \\ C_2 \\ \vdots \\ C_N \end{matrix} & \begin{matrix} e_{11} \\ e_{12} \\ \vdots \\ e_{1n_1} \\ e_{21} \\ e_{22} \\ \vdots \\ e_{2n_2} \\ \vdots \\ e_{N1} \\ e_{N2} \\ \vdots \\ e_{Nn_N} \end{matrix} & \begin{bmatrix} W_{11} & W_{12} & \dots & W_{1N} \\ W_{21} & W_{22} & \dots & W_{2N} \\ \vdots & \vdots & \dots & \vdots \\ W_{N1} & W_{N2} & \dots & W_{NN} \end{bmatrix} \end{matrix}$$

where:  $C_n$  is the  $n^{\text{th}}$  cluster;

$e_{nm}$  is the  $m^{\text{th}}$  element in the  $n^{\text{th}}$  cluster;

$W_{ij}$  is the priority vector of the influence elements compared in the  $j^{\text{th}}$  cluster to the  $i^{\text{th}}$  cluster.

Then, the weighted supermatrix is determined by factorizing the elements of each column based on their relative weight. Last but not least, the limit matrix is computed, based on the following relation:

$$(4) \quad s = \lim_{k \rightarrow \infty} S^k$$

*Phase 3. Prioritization of the IGL activities.* The results of the previous phase are used for determining the priority vectors of each alternative and factor of influence. Based on these, the IGL activities are ranked from the most appropriate (the one with the highest priority) to the less appropriate (the one with the smallest priority).

*Phase 4. Sensitivity analysis.* Once the IGL activities are ranked, the focus changes to the influence factors. First of all, an influence analysis is performed in order to determine the most influential factors that affect the ranking of IGL activities. According to Adams (2014), this approach brings forward the factors that require the least variation to induce a rank change in IGL activities.

Further, a node sensitivity analysis is performed in order to determine how the changes in factor's importance could affect the selection of the most appropriate IGL activity. Thus, the sensitivity parameter ( $\alpha$ ) is modified from 0.5 to 0.25, respectively 0.75; the former defines a linear decrease of 50% while the latter corresponds to a linear increase of 50%.

*Phase 5. Perspective analysis.* This emphasizes how could the alternatives score change if a certain factor is the most important one (Adams, 2014). The analysis is performed at the level of the most influential factors, identified in the previous phase.

## **Results**

### *Prioritization of the IGL activities*

The relative priority of each IGL activity is presented in Table 5; the normal values are determined based on the pairwise comparison while the ideal values are obtained by dividing either the normalized or the limiting columns by the largest value in the column. As it can be noticed, the most appropriate IGL activities for the Romanian hotel industry are mentoring, on-the-job education, and storytelling. These foster interaction and learning through direct or indirect experience. The same elements are also supported by the volunteering activities which are more important than training for the Romanian hotel industry.

Table 5. Prioritization of the IGL activities in the Romanian hotel industry

<b>IGL activity</b>	<b>Values from Limit Supermatrix</b>	<b>Normal values</b>	<b>Ideal values</b>	<b>Ranking</b>
Mentoring	0.1993	0.23816	1.000	1
On-the-job education	0.1862	0.22249	0.9342	2
Storytelling	0.1659	0.19831	0.8327	3
Training	0.1272	0.15199	0.6382	5
Volunteering activities	0.1582	0.18904	0.7938	4

Furthermore, when they have to select the IGL activities that are going to be developed, the Romanian hotel HR managers value more employees' psychological profile and company's intellectual capital (Table 6). Thus, the former weighs 52.56% while the latter weighs 42.55%. Nevertheless, given clusters' interdependency, structural capital (0.7853) and human capital (0.7306) have the most powerful impact in selecting the most appropriate IGL activity.

Table 6. The influence of each cluster on managers' decision

<b>Clusters</b>	<b>Alternatives</b>	<b>Socio-demographic profile</b>	<b>Psychological profile</b>	<b>Human capital</b>	<b>Structural capital</b>	<b>Goal</b>
Alternatives	0.0000	0.6719	0.6369	0.7306	0.7853	0.0000
Socio-demographic profile	0.0000	0.0470	0.0000	0.0000	0.0000	0.0487
Psychological profile	0.0000	0.1338	0.0000	0.0000	0.0000	0.5256
Human capital	0.0000	0.1472	0.2582	0.1883	0.1488	0.3082
Structural capital	0.0000	0.0000	0.1047	0.0809	0.0657	0.1173

Thus, IGL is treated as a social process capable of transcending the limits of age, gender, employment length, and status. In other words, the hotel HR managers consider that they only have to make sure that their employees are open to share and receive knowledge and to provide the required organizational tools and environment.

### *Sensitivity and Perspective Analysis*

According to the influence analysis (Table 7), the most influential factors that affect the ranking of IGL activities are collaboration, commitment, job satisfaction, reward management, and organizational culture. Collaboration enhances the volunteering activities and reduces the importance of all the other IGL activities while commitment and job satisfaction encourage mentoring. Besides, reward management fosters training while organizational culture enhances storytelling.

Table 7. Influence analysis

Top-level network	Parameter	Distance	Mentoring	On-the-job education	Storytelling	Training	Volunteering activities
Original Values	0.5	0	0.2381	0.2224	0.1983	0.1519	0.1890
Collaboration: upper	0.9	0.5836	0.1762	0.2812	0.0951	0.1479	0.2993
Commitment: upper	0.9	0.6456	0.3919	0.1297	0.2967	0.0917	0.0898
Job Design: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Job satisfaction: upper	0.9	0.2032	0.2606	0.2136	0.1853	0.1828	0.1575
Reward Management: upper	0.9	0.7037	0.2382	0.2371	0.1445	0.2589	0.1210
Interpersonal trust: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Intrinsic motivation: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Knowledge self-efficiency: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Self-regulation: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Age: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890



Employment length: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Gender: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Position in the company: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Company's size: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Organizational culture: upper	0.9	0.5758	0.1863	0.2162	0.2976	0.0644	0.2352
Organizational memory: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Organizational structure: upper	0.9	0	0.2381	0.2224	0.1983	0.1519	0.1890
Collaboration: lower	0.1	0.2945	0.2669	0.1934	0.2567	0.1134	0.1693
Commitment: lower	0.1	0.1218	0.2130	0.2398	0.1741	0.1700	0.2029
Job Design: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Job satisfaction: lower	0.1	0.0532	0.2274	0.2276	0.2016	0.1441	0.1991
Reward Management: lower	0.1	0.1978	0.2400	0.2166	0.2169	0.1219	0.2044
Interpersonal trust: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Intrinsic motivation: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Knowledge self-efficiency: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Self-regulation: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Age: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Employment length: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Gender: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Position in the company: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Company's size: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
Organizational culture: lower	0.1	0.4090	0.2486	0.2329	0.1413	0.2141	0.1628
Organizational memory: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890

Organizational structure: lower	0.1	0	0.2381	0.2224	0.1983	0.1519	0.1890
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Furthermore, if collaboration is considered (Table 8), several changes appear in the ranking. If its weight of importance decreases by 50% ( $\alpha = 0.25$ ), the overall change in IGL activities will sum -2.68% and although the three most appropriate IGL activities will remain the same, on-the-job education and storytelling will switch places. If the weight of importance of collaboration increases by 50% ( $\alpha = 0.75$ ), the overall change in IGL activities will sum 5.31% and the volunteering activities will become the second most appropriate IGL activity; the top three most appropriate IGL activities will include on-the-job education (0.269), volunteering activities (0.267), and mentoring (0.190). Thus, enhancements in collaboration act as a stimulus for IGL activities, especially for on-the-job education, training, and volunteering activities.

Table 8. Sensitivity to Collaboration

Sensitivity parameter IGL activity	0.25		0.5	0.75	
	Value	Change		Value	Change
Mentoring	0.252	5.88%	0.238	0.190	-20.17%
On-the-job education	0.209	-5.86%	0.222	0.269	21.17%
Storytelling	0.225	13.64%	0.198	0.117	-40.91%
Training	0.136	-10.53%	0.152	0.158	3.95%
Volunteering activities	0.178	-5.82%	0.189	0.267	41.27%
<i>Total change</i>		-2.68%			5.31%

If commitment is considered (Table 9), several variations appear in the ranking. If its weight of importance decreases by 50% ( $\alpha = 0.25$ ), the overall change in IGL activities will sum 3.58% and the three most appropriate IGL activities will be on-the-job education, mentoring, and volunteering activities. If its weight of importance increases by 50% ( $\alpha = 0.75$ ), the overall change in IGL activities will sum -15.40%, and the top three most appropriate IGL activities will remain the same although storytelling and on-the-job education will switch places. Furthermore, commitment stimulates mentoring and storytelling while acting as an inhibitor for on-the-job education, training, and volunteering activities.

Table 9. Sensitivity to Commitment

Sensitivity parameter IGL activity	0.25		0.5	0.75	
	Value	Change		Value	Change
Mentoring	0.223	-6.30%	0.238	0.354	48.74%
On-the-job education	0.233	4.95%	0.222	0.150	-32.43%
Storytelling	0.184	-7.07%	0.198	0.281	41.92%
Training	0.163	7.24%	0.152	0.098	-35.53%
Volunteering activities	0.198	4.76%	0.189	0.117	-38.10%
<i>Total change</i>		3.58%			-15.40%

According to data presented in Table 10, job satisfaction acts as a stimulus for IGL activities, especially for mentoring and training. On the other hand, the enhancements in job satisfaction tend to inhibit on-the-job education, storytelling, and volunteering activities.

Table 10. Sensitivity to Job satisfaction

Sensitivity parameter IGL activity	0.25		0.5	0.75	
	Value	Change		Value	Change
Mentoring	0.233	-2.10%	0.238	0.256	7.56%
On-the-job education	0.225	1.35%	0.222	0.216	-2.70%
Storytelling	0.200	1.01%	0.198	0.188	-5.05%
Training	0.147	-3.29%	0.152	0.174	14.47%
Volunteering activities	0.194	2.65%	0.189	0.166	-12.17%
<i>Total change</i>		<i>-0.38%</i>			<i>2.11%</i>

Regarding reward management, it can be noticed that its enhancements stimulate IGL activities, especially on-the-job education and training (Table 11). On the other hand, decreasing its weight of importance may foster mentoring, storytelling, and volunteering activities.

Table 11. Sensitivity to Reward management

Sensitivity parameter IGL activity	0.25		0.5	0.75	
	Value	Change		Value	Change
Mentoring	0.239	0.42%	0.238	0.237	-0.42%
On-the-job education	0.219	-1.35%	0.222	0.235	5.86%
Storytelling	0.209	5.56%	0.198	0.155	-21.72%

Training	0.135	-11.18%	0.152	0.233	53.29%
Volunteering activities	0.198	4.76%	0.189	0.140	-25.93%
<i>Total change</i>		<i>-1.80%</i>			<i>11.08%</i>

The IGL activities are also highly sensitive to organizational culture (Table 12). If its weight of importance decreases by 50% ( $\alpha = 0.25$ ), the overall change in IGL activities will sum 4.26% but the top three most appropriate IGL activities will remain the same. If its weight of importance increases by 50% ( $\alpha = 0.75$ ), the overall change in IGL activities will sum -6.00%, and the top three most appropriate IGL activities will be storytelling, volunteering activities, and on-the-job education. Thus, its enhancements inhibit the classical professional development programs (such as, mentoring, on-the-job education, and training) and enhance the activities based on interaction and voluntary knowledge sharing (such as, storytelling and volunteering activities).

Table 12. Sensitivity to Organizational culture

Sensitivity parameter IGL activity	0.25		0.5	0.75	
	Value	Change		Value	Change
Mentoring	0.245	2.94%	0.238	0.202	-15.13%
On-the-job education	0.227	2.25%	0.222	0.216	-2.70%
Storytelling	0.172	-13.13%	0.198	0.278	40.40%
Training	0.181	19.08%	0.152	0.078	-48.68%
Volunteering activities	0.176	-6.88%	0.189	0.227	20.11%
<i>Total change</i>		<i>4.26%</i>			<i>-6.00%</i>

Furthermore, if the perspective analysis is performed (Table 13), several changes appear in the ranking. If the most important factor is represented by job satisfaction, the first two positions remain occupied by mentoring (0.2630) and on-the-job education (0.2126) while storytelling is replaced by training, on the third position (Figure 2). On the other hand, if commitment becomes the most important factor, the occupiers of the first three positions remain the same but storytelling and on-the-job education switch places; thus, storytelling (0.3026) ranks second, replacing on-the-job education (0.1195).

Table 13. Perspective analysis

Top-level network	Parameter Value	Distance	Mentoring	On-the-job education	Storytelling	Training	Volunteering activities
Original Values	0.5	0	0.2381	0.2224	0.1983	0.1519	0.1890
Reward Management	0.9992	0.1550	0.2496	0.2341	0.1351	0.2694	0.1116
Commitment	0.9984	0.2614	0.4119	0.1195	0.3026	0.0903	0.0754
Collaboration	0.9968	0.1994	0.1687	0.2886	0.0825	0.1405	0.3195
Organizational culture	0.9937	0.1641	0.1776	0.2169	0.3076	0.0584	0.2392
Job satisfaction	0.9875	0.0589	0.2630	0.2126	0.1840	0.1872	0.1528
Job Design	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Interpersonal trust	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Intrinsic motivation	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Knowledge self-efficiency	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890

Self-regulation	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Age	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Employment length	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Gender	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Position in the company	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Company's size	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Organizational memory	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890
Organizational structure	0.95	0	0.2381	0.2224	0.1983	0.1519	0.1890

If the organizational culture would be the most important factor (Figure 2), the most suitable IGL activities would be represented by storytelling (0.3076), volunteering activities (0.2392), and on-the-job education (0.2169). On the other hand, if collaboration becomes the most important factor, managers' attention will have to focus on fostering volunteering activities (0.3195), on-the-job education (0.2886), and mentoring (0.1687).

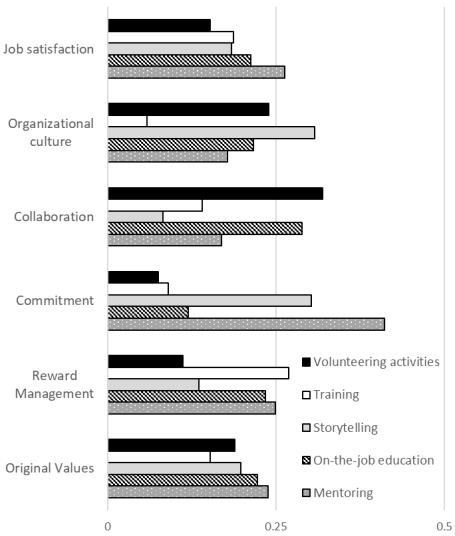


Figure 2. Ranking the IGL activities if each factor of influence becomes the most important one

Last but not least, if reward management would be the most important factor of influence, then the most appropriate IGL activities for the Romanian hotel industry would be training (0.2694), mentoring (0.2496), and on-the-job education (0.2341). In other words, if the hotel HR managers will focus on rewarding intergenerational knowledge sharing, then they will feel the need to encourage the classical professional development programs which provide quantifiable results.

### **Discussion and Conclusions**

The current research focused on identifying the most appropriate IGL activities for the Romanian hotel industry. Thus, using a multi-phase methodology that combined the literature review with interviews, survey based on a questionnaire, and ANP, it was proved that the most appropriate IGL activities for the Romanian hotel industry are mentoring, on-the-job education, and storytelling. Furthermore, based on the influence analysis, it was shown that the most influential factors that affect the ranking of IGL activities are collaboration, commitment, job satisfaction, reward management, and organizational culture. As presented in Table 14, the enhancements in collaboration foster on-the-job education, training, and volunteering activities while the enhancements in organizational culture stimulate storytelling and volunteering activities.

Table 14. The enhancements that may foster IGL activities

<b>IGL activity</b>	<b>Mentoring</b>	<b>On-the-job education</b>	<b>Storytelling</b>	<b>Training</b>	<b>Volunteering activities</b>
<b>Enhancement</b>					



<b>Collaboration</b>	-	+	-	+	+
<b>Commitment</b>	+	-	+	-	-
<b>Job satisfaction</b>	+	-	-	+	-
<b>Reward management</b>	-	+	-	+	-
<b>Organizational culture</b>	-	-	+	-	+

These findings have both theoretical and practical implications. At the theoretical level, they extend the literature from the hospitality field by bringing forward not only the activities that can support IGL but also the factors that may influence their development. Thus, these findings are in line with Brucknerova and Novotny (2017), Geeraerts et al. (2018), and Ropes (2013) who argue that the professional development programs can be successfully used for enhancing IGL, given their roots in the socio-constructivism learning theories (Bandura, 1986; Piaget, 1957). As aforementioned, mentoring and on-the-job education, two classical professional development programs, are the most suitable IGL activities for the Romanian hotel industry. However, it must be mentioned that the same rules do not apply to all the other professional development programs. On the one hand, the interviewed HR managers gave up on using workshops and mixed-aged teams due to their negative effects on costs and organizational climate. On the other hand, the results showed that training, another classical professional development program, occupies the last position in the rank when it comes to prioritizing the IGL activities. In light of these, it can be stated that IGL is fostered only by those classical professional development programs that support open communication and learning by doing among the members from different generations.

Secondly, these findings complement the results of Pauget and Chauvel (2018) and Sprinkle and Urick (2018). Although they claim that volunteering activities can be seen as an IGL activity and not only as a part of the corporate social responsibility program, their statements are not supported with empirical evidence. The current research fills this gap by proving that the HR managers from the Romanian hotel industry consider the volunteering activities to be more appropriate for IGL than training; they rank on the fourth position, having a priority vector of 0.18904. Besides, the results highlight that the development of the volunteering activities is enhanced by collaboration and organizational culture.

Thirdly, the results of this research complement the findings of Jeung et al. (2017) and Ropes (2014) by quantifying the influence of collaboration on IGL activities. Thus, it was demonstrated that: (i) if the importance of collaboration decreases by 50%, the overall change in IGL activities sums -2.68%; and (ii) if the importance of collaboration increases by 50%, the overall change in IGL activities sums 5.31%. In other words, the effect of its increase is almost twice as strong as its decrease.

Last but not least, the current findings contradict Li et al. (2017) and Ouakouak and Ouedraogo (2019) by highlighting that commitment does not enhance knowledge sharing, especially when this process occurs among the members from different generations. Thus, commitment fosters mentoring and storytelling but it has a negative overall effect on the IGL activities. As previously presented, if the importance of commitment increases by 50%, the overall change in IGL activities sums -15.40% while the one in mentoring equals 48.74%. Against this backdrop, it can be stated that the more committed an employee is, the less open he/she is to learn from or to teach the employees from different generations. This situation may appear due to the high turnover rate that characterizes the hospitality industry. Thus, the

committed employee may perceive IGL as a risky situation; they may invest time and energy in teaching an employee how things are done only to find out that, in a couple of months, the person with whom they shared their knowledge leaves the firm and/or uses what they taught him/her for a competitor's gains. However, further analysis is required in order to determine why commitment tends to act as an inhibitor for most of the IGL activities.

Regarding the practical implications, the current research provides a viable tool for hotel managers in order to face the challenges generated by the aging society phenomenon. In other words, if the hotel managers want to avoid corporate amnesia by facilitating IGL among their employees, they could concentrate on encouraging the use of mentoring, on-the-job-education, and storytelling. Still, this is not a successful recipe and must be adapted to several organizational factors, such as: collaboration, commitment, job satisfaction, reward management, and organizational culture. Furthermore, if the hotel managers tend to focus on creating a collaborative work environment then they could involve their multigenerational human resources in programs like on-the-job education and training, and also in volunteering activities. Besides, if the hotel managers value employees' commitment then mentoring and storytelling may be used in the multi-generational groups of employees. Hence, if the hotel managers concentrate on developing their employer brand by increasing employees' job satisfaction or by promoting an attractive reward management system, two groups of IGL activities could be developed; in the first case, the use of mentoring and training is recommended while in the second case, it is appropriate to develop on-the-job education and training programs. Synthesizing, this research helps the hotel managers to decide which is the best solution for promoting IGL among their multi-generational human resources, based on the employees' characteristics and the company's structural and human capital.

Despite its valuable insights, the current research is limited by the fact that: (i) it concentrates only on the national hotel industry; (ii) it reflects the perspective of the HR managers on IGL and it neglects employees' perspective on the matter; and (iii) it overlooks the relationship between inter- and intra-generational learning. Taking these into account, several future research directions can be identified, namely: (i) extending the analysis on the international level in order to determine if cultural specificity influences the selection of the IGL activities; (ii) analyzing employees' preferences regarding the IGL activities; and (iii) analyzing the relationship between inter- and intra-generational learning.

## References

- Abidi, H., Dullaert, W., De Leeuw, S., Lysko, D., & Klumpp, M. (2019). Strategic partner evaluation criteria for logistics service provider networks. *International Journal of Logistics Management*, 30(2), 438-466.
- Adams, W.J.L. (2014). ANP row sensitivity and the resulting influence analysis. Retrieved on December 6, 2019 from <https://www.isahp.org/uploads/p744093.pdf>.
- Agyare, R., Yuhui, G., Abrokwah, E., & Agyei, J. (2019). Organisational culture moderation of interpersonal trust and affective commitment in health care non-governmental organisations in Ghana. *Journal of Psychology in Africa*, 29(3), 217-222.
- Ahmad, R., & Scott, N. (2019). Technology innovations towards reducing hospitality human resource costs in Langkawi, Malaysia. *Tourism Review*, 74(3), 547-562.
- Alfrey, L., Enright, E., & Rynne, S. (2017) Letters from Early Career Academics: The Physical Education and Sport Pedagogy field of play. *Sport, Education and Society*, 22(1), 5-21.
- Babnik, K., & Širca, N.T. (2014). Knowledge creation, transfer and retention: the case of intergenerational cooperation. *International Journal of Innovation and Learning*, 15(4), 349-364.
- Baily, C. (2009). Reverse intergenerational learning: A missed opportunity?. *AI & Society*, 23, 111-115.

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Baran, M., & Klos, M. (2014). Managing an intergenerational workforce as a factor of company competitiveness. *Journal of International Studies*, 7(1), 94-101.
- Bjursell, C. (2015). Organizing for Intergenerational Learning and Knowledge Sharing. *Journal of Intergenerational Relationships*, 13(4), 285-301.
- Brans, J.P. (1982). Lingénierie de la décision. Elaboration dinstruments daide à la décision. Méthode PROMETHEE. In Nadeau, R., & Landry, M. (Eds.), *L'aide à la décision: Nature, instruments et perspectives d'avenir* (pp.183-214). Québec, CA: Presses de l'Université Laval.
- Brčić, Ž.J., & Mihelič, K.K. (2015). Knowledge sharing between different generations of employees: an example from Slovenia. *Economic Research-Ekonomska Istraživanja*, 28(1), 853-867.
- Brucknerova, K., & Novotny, P. (2017). Intergenerational learning among teachers: overt and covert forms of continuing professional development. *Professional Development in Education*, 43(3), 397-415.
- Burmeister, A., van der Heijden, B., Yang, J., & Deller, J. (2018). Knowledge transfer in age-diverse coworker dyads in China and Germany: How and when do age-inclusive human resource practices have an effect?. *Human Resource Management Journal*, 28, 605-620.
- Chalkiti, K. (2012). Knowledge sharing in dynamic labour environments: insights from Australia. *International Journal of Contemporary Hospitality Management*, 24(4), 522-541.

- Chi, N.W., & Wang, I.A. (2018). The relationship between newcomers' emotional labor and service performance: the moderating roles of service training and mentoring functions. *International Journal of Human Resource Management*, 29(19), 2729-2757.
- Chiang, Y.M., Chen, W.L., & Ho, C.H. (2016). Application of analytic network process and two-dimensional matrix evaluating decision for design strategy. *Computers & Industrial Engineering*, 98, 237-245.
- Choi, Y., Mehraliyev, F., & Kim, S. (2020). Role of virtual avatars in digitalized hotel service. *International Journal of Contemporary Hospitality Management*. doi: 10.1108/IJCHM-03-2019-0265.
- Clark, K.R., & Eastland, R. (2019). Managers' Perspectives on Generational Differences in Medical Imaging Departments. *Radiologic Technology*, 90(5), 442-449.
- Coetzer, A., Kock, H., & Wallo, A. (2017). Distinctive Characteristics of Small Businesses as Sites for Informal Learning. *Human Resource Development Review*, 16(2), 111-134.
- Csillag, S., Csizmadia, P., Hidegh, A.L., & Szaszvari, K. (2019). What makes small beautiful? Learning and development in small firms. *Human Resource Development International*, 22(5), 453-476.
- Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: sustaining commitment and effectiveness over a career. *Oxford Review of Education*, 33(4), 423-443.
- Egloffstein, M., & Ifenthaler, D. (2017). Employee Perspectives on MOOCs for Workplace Learning. *Techtrends*, 61(1), 65-70.

- Eslamkhah, M., & Seno, S.A.H. (2019). Identifying and Ranking Knowledge Management Tools and Techniques Affecting Organizational Information Security Improvement. *Knowledge Management Research & Practice*, 17(3), 276-305.
- Gallo, A.M. (2011). Beyond the classroom: Using technology to meet the educational needs of multigenerational perinatal nurses. *The Journal of Perinatal & Neonatal Nursing*, 25(2), 195-199.
- Geeraerts, K., Tynjala, P., & Heikkinen, H.L.T. (2018). Inter-generational learning of teachers: What and how do teachers learn from older and younger colleagues?. *European Journal of Teacher Education*, 41(4), 479-495.
- Geeraerts, K., Vanhoof, J., & Van den Bossche, P. (2016). Teachers' perceptions of intergenerational knowledge flows. *Teaching and Teacher Education*, 56, 150-161.
- Gerpott, F.H., Lehmann-Willenbrock, N., & Voelpel, S.C. (2017). A phase model of intergenerational learning in organizations. *Academy of Management Learning & Education*, 16(2), 193-216.
- Gustavsson, M., & Eriksson, A.F. (2010). Gendered learning environments in managerial work. *Studies in the Education of Adults*, 42(2), 141-155.
- Harvey, J. (2012). Managing organizational memory with intergenerational knowledge transfer. *Journal of Knowledge Management*, 16(3), 400-417.
- Hau, Y.S., Kim, B., Lee, H., & Kim, Y.-G. (2013). The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions. *International Journal of Information Management*, 33(2), 356-366.



- Hellebrandt, T., Heine, I., & Schmitt, R.H. (2018). ANP-based knowledge management solutions framework for the long-term complaint knowledge transfer. *Total Quality Management & Business Excellence*, 29(9-10), 1074-1088.
- Herrero, A., Martin, H.S., & Collado, J. (2018). Market orientation and SNS adoption for marketing purposes in hospitality microenterprises. *Journal of Hospitality and Tourism Management*, 34, 30-40.
- Holste, J.S., & Fields, D. (2010). Trust and Tacit Knowledge Sharing and Use. *Journal of Knowledge Management*, 14(1), 128-140.
- Hong, J.S., Liu, C.H.S., Chou, S.F., Tsai, C.Y., & Hu, D. (2018). Developing a sustainable service innovation framework for the hospitality industry. *International Journal of Contemporary Hospitality Management*, 30(1), 455-474.
- Hornsey, T., & Dann, D. (1984). *Manpower Management in the Hotel and Catering Industry*. London, UK: Batsford Academic and Educational Limited.
- Hsieh, L.F., Lin, L.H., & Lin, Y.Y. (2008). A service quality measurement architecture for hot spring hotels in Taiwan. *Tourism Management*, 29(3), 429-438.
- Hsu, C.W., Kuo, T.C., Shyu, G.S., & Chen, P.S. (2014). Low Carbon Supplier Selection in the Hotel Industry. *Sustainability*, 6, 2658-2684.
- Hwang, C.L., & Yoon, K. (1981). *Multiple Attribute Decision Making: Methods and Applications*. New York: Springer-Verlag.
- Ingram, H. (1999). Hospitality: a framework for a millennial review. *International Journal of Contemporary Hospitality Management*, 11(4), 140-147.

- Jeung, C.-W., Yoon, H.J., & Choi, M. (2017). Exploring the affective mechanism linking perceived organizational support and knowledge sharing intention: a moderated mediation model. *Journal of Knowledge Management*, 21(4), 946-960.
- Jianu, F., & Corcodel, S. (2019). *Carta Albă a Turismului din România [The White Book of the Romanian Tourism]*. Bucharest, RO: CNIPMMR & Groupama.
- Johansson, K., & Abrahamsson, L. (2018). Gender-equal organizations as a prerequisite for workplace learning. *Learning Organization*, 25(1), 10-18.
- Kaminska, R., & Borzillo, S. (2018). Challenges to the learning organization in the context of generational diversity and social networks. *Learning Organization*, 25(2), 92-101.
- Kaše, R., Saksida, T., & Mihelič, K.K. (2018). Skill development in reverse mentoring: Motivational processes of mentors and learners. *Human Resource Management*, 58(1), 57-69.
- Kazak, E., & Polat, S. (2018). School administrators' instructional leadership behaviors, intergenerational atmosphere, and intergenerational learning in schools. *Journal of Intergenerational Relationships*, 16(4), 441-462.
- Kilic, H.S., Zaim, S., & Delen, D. (2015). Selecting "The Best" ERP system for SMEs using a combination of ANP and PROMETHEE methods. *Expert Systems with Applications*, 42(5), 2343-2352.
- Kolar, T., & Cater, B. (2018). Managing group flow experiences in escape rooms. *International Journal of Contemporary Hospitality Management*, 30(7), 2637-2661.
- Kollmann, T., Stoeckmann, C., Kensbock, J.M., & Peschl, A. (2020). What satisfies younger versus older employees, and why? An aging perspective on equity theory to explain

- interactive effects of employee age, monetary rewards, and task contributions on job satisfaction. *Human Resource Management*, 59(1), 101-115.
- Kong, H., Jiang, X.Y., Chan, W., & Zhou, X.G. (2018). Job satisfaction research in the field of hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 30(5), 2178-2194.
- Kosir, S., & Soba, V.A. (2016). Theoretical and some practical perspectives on age diversity and comparative age management. *International Journal of Innovation and Learning*, 20(3), 309-327.
- Krantz, D.H. (1964). Conjoint Measurement: The Luce-Tukey Axiomatization and Some Extensions. *Journal of Mathematical Psychology*, 78, 248-277.
- Lee, A.H., Chen, S.C., & Kang, H.Y. (2019). A decision-making framework for evaluating enterprise resource planning systems in a high-tech industry. *Quality Technology and Quantitative Management*. doi: 10.1080/16843703.2019.1626073.
- Lee, J.-C., Shiue, Y.-C., & Chen, C.-Y. (2016). Examining the impacts of organizational culture and top management support of knowledge sharing on the success of software process improvement. *Computers in Human Behavior*, 54, 462-474.
- Leicht-Deobald, U., Busch, T., Schank, C., Weibel, A., Schafheitle, S., Wildhaber, I., & Kasper, G. (2019). The Challenges of Algorithm-Based HR Decision-Making for Personal Integrity. *Journal of Business Ethics*, 160, 377-392.
- Leon, R.D., Tănăsescu, R.I., & Tănăsescu, C.E. (in press). Predicting Employees Performance: An Intergenerational Approach. In Leon, R.D. (Ed.), *Strategies for Business Sustainability in a Collaborative Economy* (pp.281-305). Hershey, PA: IGI Global.

- Li, X., Zhang, J.X., Zhang, S.S., & Zhou, M.J. (2017). A multilevel analysis of the role of interactional justice in promoting knowledge-sharing behavior: The mediated role of organizational commitment. *Industrial Marketing Management*, 62, 226-233.
- Lin, C.T., Lee, C., & Wu, C.S. (2009). Optimizing a marketing expert decision process for the private hotel. *Expert Systems with Applications*, 36, 5613-5619.
- Liu, C.H.S., & Chou, S.F. (2016). Tourism strategy development and facilitation of integrative processes among brand equity, marketing and motivation. *Tourism Management*, 54, 298-308.
- Liu, K., Chang, C., & Hu, I. (2010). Exploring the effects of task characteristics on knowledge sharing in libraries. *Library Review*, 59(6), 455-468.
- Lohman, M.C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly*, 16(4), 501-27.
- Lunz, S. (2017). Factors Affecting Knowledge Management in Organizational Culture in Pakistani. *Competition Policy International*, 13(1), 31-39.
- Marchiori, D.M., & Henkin, A.B. (2004). Organizational commitment of a health profession faculty: dimensions, correlates and conditions. *Medical Teacher*, 26(4), 353-358.
- Milligan, C., Fontana, R.P., Littlejohn, A., & Margaryan, A. (2015). Self-regulated learning behaviour in the finance industry. *Journal of Workplace Learning*, 27(5), 387-402.
- National Institute of Statistics (2019). Populatia ocupata pe activitati, grupe de varsta si sexe [Active population by domain of activity, age and sex]. Retrieved on November 27, 2019 from <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>.

- Nisula, A.M., & Metso, S. (2019). Factors fostering vocational students' workplace learning success in the real workplace environment. *Journal of Education and Work*, 32(6-7), 552-569.
- Opricovic, S., & Tzeng, G.H. (2004). Compromise solution by MCDM methods: A comparative analysis of VIKOR and TOPSIS. *European Journal of Operational Research*, 156(2), 445-455.
- Ouakouak, M.L., & Ouedraogo, N. (2019). Fostering knowledge sharing and knowledge utilization. The impact of organizational commitment and trust. *Business Process Management Journal*, 25(4), 757-779.
- Pauget, B., & Chauvel, D. (2018). Intergenerational Learning and Memory. *Learning Organization*, 25(2), 74-80.
- Piaget, J. (1957). *Construction of reality in the child*. London, UK: Routledge & Kegan Paul.
- Plant, K., Barac, K., & De Jager, H. (2017). Developing early career professional auditors at work What are the determinants of success?. *Meditari Accountancy Research*, 25(3), 368-390.
- Räisänen, T., Ypsilanti, A., Ropes, D., Vivas, A.B., Viitala, M., & Ijäs, T. (2014). Examining the requirements for an intergenerational learning game. *Education and Information Technologies*, 19(3), 531-547.
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), 1225-1246.

- Rees, C.E., & Monrouxe, L.V. (2010). 'I should be lucky ha ha ha ha': The construction of power, identity and gender through laughter within medical workplace learning encounters. *Journal of Pragmatics*, 42(12), 3384-3399.
- Ropes, D. (2013). Intergenerational learning in organizations. *European Journal of Training and Development*, 37(8), 713-727.
- Ropes, D. (2014). Intergenerational learning in organizations. An effective way to stimulate older employee learning and development. *Development and Learning in Organizations*, 28(2), 7-9.
- Ropes, D. (2015). Addressing the challenges of an ageing workforce: An intergenerational learning toolkit. *Development and Learning in Organizations*, 29(4), 14-18.
- Ropes, D., & Ypsilanti, A. (2012). Factors influencing intergenerational learning: towards a framework for organisations to ensure successful learning in older employees. In European Centre for the Development of Vocational Training (Ed.), *Working and ageing. The benefits of investing in an ageing workforce* (pp. 280-307). Luxembourg: European Centre for the Development of Vocational Training.
- Roy, B. (1990). Decision-aid and decision-making. *European Journal of Operational Research*, 45, 324-331.
- Rupčić, N. (2018). Intergenerational learning and knowledge transfer - challenges and opportunities. *Learning Organization*, 25(2), 135-142.
- Saaty, T. L. (1996). *The analytic network process*. New York, NY: McGraw-Hill.
- Saaty, T.L. (1980). *The analytic hierarchy process*. New York, NY: McGraw-Hill.
- Saaty, T.L. (2008). Relative measurement and its generalization in decision making. Why pairwise comparisons are central in mathematics for the measurement of intangible

- factors. The analytic hierarchy/network process. *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas*, 102(2), 251-318.
- Saaty, T.L., & Vargas, L.G. (2006). *Decision making with the analytic network process*. Berlin, DE: Springer.
- Schauer, A., Vasconcelos, A.C., & Sen, B. (2015). The ShaRInK framework: a holistic perspective on key categories of influences shaping individual perceptions of knowledge sharing. *Journal of Knowledge Management*, 19(4), 770–790.
- Shee, D.Y., Taeng, G.H., & Tang, T.I. (2003). AHP, fuzzy measure and fuzzy integral approaches for the appraisal information service providers in Taiwan. *Journal of Global Information Technology Management*, 6(1), 8-30.
- Short, T.W. (2014). Workplace mentoring: an old idea with new meaning (part 1). *Development and Learning in Organizations*, 28(1), 8-11.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.
- Sirca, N.T., Babnik, K., & Breznik, K. (2013). Towards organisational performance: Understanding human resource management climate. *Industrial Management & Data Systems*, 113(3), 367-384.
- Song, H.J., & Kang, K.H. (2019). Implementing corporate social responsibility strategies in the hospitality and tourism firms: A culture-based approach. *Tourism Economics*, 25(4), 520-538.
- Sprinkle, T.A., & Urick, M.J. (2018). Three generational issues in organizational learning Knowledge management, perspectives on training and "low-stakes" development. *Learning Organization*, 25(2), 102-112.

- Teare, R., Farber Canziani, B., & Brown, G. (1997). *Global Directions: New Strategies for Hospitality and Tourism*. London, UK: Casell.
- Teng, C.C., Horng, J.S., Hu, M.L., Chien, L.H., & Shen, Y.C. (2012). Developing energy conservation and carbon reduction indicators for the hotel industry in Taiwan. *International Journal of Hospitality Management*, 31(1), 199-208.
- Tsai, W.H., Hsu, J.L., Chen, C.H., Lin, W.R., & Chen, S.P. (2010). An integrated approach for selecting corporate social responsibility programs and costs evaluation in the international tourist hotel. *International Journal of Hospitality Management*, 29(3), 385-396.
- Uen, J.F., Chang, H.C., McConville, D., & Tsai, S.C. (2018). Supervisory mentoring and newcomer innovation performance in the hospitality industry. *International Journal of Hospitality Management*, 73, 93-101.
- United Nations (2017). *International Migration Report 2017*. New York, NY: United Nations
- United Nations (2019). *World Population Ageing 2019*. New York, NY: United Nations.
- Van Acker, F., Vermeulen, M., Kreijns, K., Lutgerink, J., & van Buuren, H. (2014). The role of knowledge sharing self-efficacy in sharing Open Educational Resources. *Computers in Human Behavior*, 39, 136-144.
- World Bank (2019). World Development Indicators. Retrieved on November 20, 2019 from <https://databank.worldbank.org/reports.aspx?source=2&series=SP.DYN.CBRT.IN&country=>
- Wu, C.S., Lin, C.T., & Lee, C. (2010). Optimal marketing strategy: A decision-making with ANP and TOPSIS. *International Journal of Production Economics*, 127, 190-196.



- Wu, W.Y., Qomariyah, A., Sa, N.T.T., & Liao, Y. (2018). The Integration between Service Value and Service Recovery in the Hospitality Industry: An Application of QFD and ANP. *International Journal of Hospitality Management*, 75, 48-57.
- Yen, M., Trede, F., & Patterson, C. (2016). Learning in the workplace: the role of Nurse Managers. *Australian Health Review*, 40(3), 286-291.
- Ypsilanti, A., Vivas, A.B., Räisänen, T., Viitala, M., Ijäs, T., & Ropes, D. (2014). Are serious video games something more than a game? A review on the effectiveness of serious games to facilitate intergenerational learning. *Education and Information Technologies*, 19(3), 515-529.