



# Intergenerational Learning - a Topic of Discussion or a Reality? Taking a Closer Look at the Academics

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**Abstract:** In the current sharing economy, intergenerational learning is seen as a solution to the aging society phenomenon. Nevertheless, this field is still in an embryonic stage of development and most studies are either conceptual or based on a qualitative approach. This research concentrates on the academics who analyze the concept of "intergenerational learning" to determine whether they are treating this issue as a research topic or they are actively supporting the process in their daily activity. To achieve this goal, the qualitative and quantitative approaches are combined and a multi-stage research strategy is employed. The latter is dominated by an inductive character which is reflected by the fact that the focus is on analyzing previously researched phenomena from a different perspective. Thus, a documentary study that focuses on the articles published on SCOPUS and Web of Science, during 2008 - 2019, is combined with social network analysis, and the relationships established among the academics are emphasized. The results bring forward that: (i) most academics come from Europe and North America, and they share their knowledge with those who work on the same continent; (ii) most studies regarding intergenerational learning represent the result of the cooperation established between the members of Generation X and Generation Y; and (iii) through intergenerational cooperation, the academics share knowledge regarding education sciences, knowledge management, and human resource management. The results have both theoretical and practical implications. On the one hand, they extend the literature on intergenerational learning by providing an empirical analysis of the intergenerational knowledge flows that are shared among the academics. On the other hand, they ensure the policy-makers that the concept of intergenerational learning is approached from a multi-criteria perspective and it proves that mixed-aged teams are a viable solution for encouraging intergenerational learning.

**Keywords:** intergenerational learning; knowledge sharing; Generation X; Generation Y; Baby Boomers; social network analysis.

## Intergenerational learning a solution for the aging society

The current economy is usually labeled as the "sharing economy" or the "collaborative economy" because it aims to reduce the exploitation of the resources by bringing people and organizations closer to one another. Its development is fostered by technological progress and it provides a solution to the aging society phenomenon. According to the United Nations (2019a), by 2050, one in six people will be over age 65 compared with one in 11, in 2019. The aging society phenomenon will affect the entire world but its evolution will vary from one continent to another, and Europe and North America are the most affected ones (Figure 1).

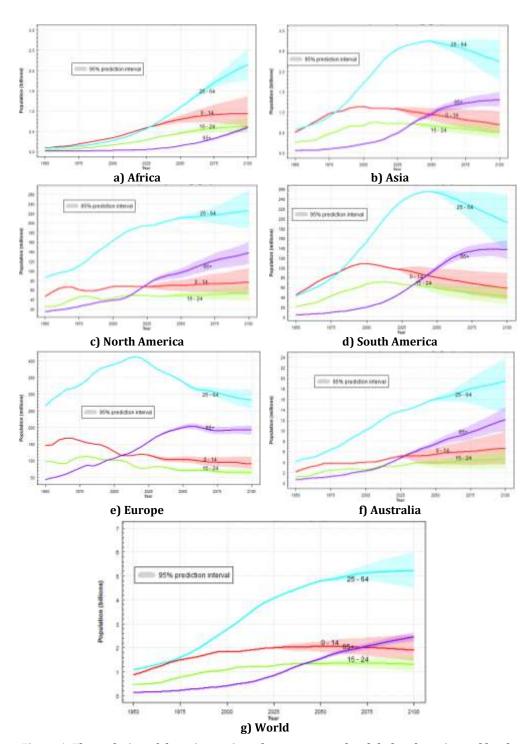


Figure 1. The evolution of the aging society phenomenon at the global and continental level (United Nations, 2019b)

Against this backdrop, several academics (Bratianu & Leon, 2015; Brucknerova & Novotny, 2017; Harvey, 2012; Ropes, 2013) state that the organizations can protect themselves from knowledge loss by fostering intergenerational collaboration and learning. The latter is as old as humanity itself (Bercan & Ovsenik, 2019), serves as a means to an end (Hoff, 2007), and is defined by Ropes (2013, p.714) as "an interactive process 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". This aims to fill the gap between generations by using

their commonalities as a common ground and their particularities as a competitive advantage (Table 1).

Table 1. Comparative analysis of the Baby Boomers, Generation X, and Generation Y

Tuble 1. Compai	rative analysis of the Baby Boomers, Generation X, and Generation Y		
D 1 .	Baby Boomers	Generation X	Generation Y
Born between	1946 - 1965	1966 - 1980	1981 - 1995
Characteristics	- collectivist;	- individualistic;	- forward-looking;
	- hardworking;	- independent;	- creative;
	- loyal;	- adaptable;	<ul> <li>technologically</li> </ul>
	- idealist;	- skeptical;	savvy;
	- optimistic;	- entrepreneurial;	- globally-oriented;
	- competitive;	- value friends and	- confident;
	- value personal health	family.	- value meaning and
	and well-being.		diversity.
Work values	- job security;	- self-reliance;	- professional growth;
	- personal growth;	- career mobility;	- career mobility;
	- teamwork;	- opportunities to	- learning
	- participative	feel empowered	opportunities;
	leadership;	through	- recognition;
	- goal-oriented.	responsibility;	- guidance;
		- work-life balance;	- feedback;
		- achievement-	- eager to voice their
		oriented.	opinion.
Work behavior	- seek promotion	- seek continual	<ul> <li>expect consultation</li> </ul>
	through hard work and	feedback and	on
	determination;	opportunities for	issues which affect
	- are driven to succeed;	autonomy;	them;
	- seek to make a	- expect	- seek a challenging
	difference at work and	organizations to	work environment
	in society;	provide ongoing	which stimulates a
	- are exposed to	skills development	workplace identity
	burnout;	opportunities;	and provide meaning;
	- willing to challenge	- lack employer	- self-assured and
	authority even if they	loyalty;	flexible in different
	are not experts.	- willing to	tasks;
		challenge the	- seeking
		hierarchical	opportunities to
		decision-making	contribute and grow;
		structure or status	- willing to challenge
		quo.	authority when there
			is doubt.
Commonalities	- strive toward personal empowerment and growth;		
	- appreciate opportunities for shared decision making;		
	- appreciate face-to-face communication;		
	- leadership practices that are employee-centered, flexible, and		
	cooperative.		

Source: Dwyer and Azevedo (2016, p.284); Guérin-Marion, Manion, and Parsons (2018, p.52)

Several scholars try to present the conceptual framework of intergenerational learning by defining the process and bringing forward several typologies (Babnik & Širca, 2014; Baily, 2009; Kosir & Soba, 2016; Pauget & Chauvel, 2018; Sprinkle & Urick, 2018) while others concentrate on analyzing how and why is intergenerational learning occurring in the organizational environment (Harvey, 2012; Kuyken, Ebrahimi, & Saives, 2018; Urick, 2017; Ypsilanti, Vivas, Räisänen, Viitala, Ijäs, & Ropes, 2014). The former describes intergenerational learning as an unconscious process and makes the distinction among four types of intergenerational learning, taking into account the form of interaction and the type of content that is shared; according to Brucknerova and Novotny (2017), the main

types are: (i) adopting intergenerational learning, (ii) exploratory intergenerational learning, (iii) transformative intergenerational learning, and (iv) inspiration-driven intergenerational learning. The scholars from the latter category take into consideration the particularities of various industries, such as aerospace and pharmaceutical (Kuyken et al., 2018), automotive (Gerpott, Lehmann-Willenbrock, & Voelpel, 2017; Short, 2014), nursing (Gallo, 2011; Harvey, 2012), high-tech (Kaminska & Borzillo, 2018), manufacturing, retail trade, and transportation and warehousing (Burmeister, Fasbender, & Deller, 2018), and education (Kazak & Polat, 2018; Klein & Shapira-Lishchinsky, 2016; Polat & Kazak, 2015).

Although a variety of industries are considered, most of the studies (Alfrey, Enright, & Rynne, 2017; Bratianu & Leon, 2015; Lefter, Bratianu, Agapie, Agoston, & Orzea, 2011; Santoro, Pietsch, & Borg, 2012; Satterly, Cullen, & Dyson, 2018) developed so far analyze the process of intergenerational learning within the educational institutions and generate different results. Bratianu and Leon (2015) and Lefter et al. (2011) focus on the higher education institutions and emphasize that the most used strategies for enhancing intergenerational learning are mentoring, mixed-aged teams, and workshops. Geeraerts, Vanhoof, and Van den Bossche (2018a) extend the list of practices and state that a wide range of activities is used in the post-secondary and secondary educational institutions to foster intergenerational learning such as subject team meetings, informal moments, classroom visitations, mentoring sessions, digital learning platforms, training sessions, pedagogical seminars, and collaboration with colleagues. On the other hand, some academics (Alfrey et al., 2017; Santoro et al., 2012; Satterly et al., 2018) decide to analyze a single activity that could support intergenerational learning. Thus, Santoro et al. (2012) and Satterly et al. (2018) focus on mentoring and claim that this fosters the development of a mutually beneficial learning process while Alfrey et al. (2017) concentrates on the early career academics and prove that storytelling is a useful technique for intergenerational learning; one the one hand, it serves as an excellent solution for the advice-seeking situations and on the other hand, it supports the ongoing development of the academics. Kyndt, Gijbels, Grosemans, and Donche (2016, p.1140) go further and based on a literature review, state that "the main difference between the beginning and more experienced teachers lies not in the type of learning activities they undertake but rather in their attitudes toward learning, their learning outcomes, and how they are influenced by their context".

Last but not least, Polat and Kazak (2015) and Geeraerts, Tynjala, and Heikkinen (2018b) change the perspective from methods to content. Polat and Kazak (2015) show that the younger generations of teachers assist the older ones more with technological issues while the older generations of teachers convey their experiences in classroom management to the younger ones. Further, Geeraerts et al. (2018b) state that the teachers learn innovative teaching methods and ICT skills from younger colleagues, whereas classroom management skills, self-regulation, and community building are learned mainly from older colleagues.

Despite the valuable insights provided by the aforementioned studies, it must be pointed out that their generalization power is limited. Thus, they represent the result of qualitative analysis and bring forward only the opinion of those who were interviewed during data collection. To fill this gap, the current research aims to use social network analysis for emphasizing the knowledge flows that cross the academic community when research on intergenerational learning is developed.

The content of the paper is organized around 4 sections. Thus, in the second section, the research methodology is brought forward, emphasizing the research goal and strategy; thus, a documentary study is combined with social network analysis to highlight the relationships established among the academics who analyze the concept of intergenerational learning and the knowledge flows that cross among them. Further, the main results are highlighted. Last but not least, the article closes by drawing several conclusions and indicating some potential research avenues.

## Methodology

This research concentrates on the academics who analyze the concept of "intergenerational learning" in order to determine whether they are treating this issue as a research topic or they are actively supporting the process in their daily activity. To achieve this goal, the qualitative and quantitative approaches are combined and a multistage research strategy is employed. The latter is dominated by an inductive character which is reflected by the fact that the focus is on analyzing previously researched phenomena from a different perspective.

First of all, a documentary study is developed; according to Fram (2013, p.7), "the theoretical framework is a process at the abstract level using relative theories and definitive concepts as comparisons to gain understandings in order to describe, explain, or predict social phenomena, which occurs when the etic perspective is maintained". Thus, based on an ethical approach, 421 articles are selected from the SCOPUS and Web of Science databases. The criteria used for selection were for the articles: (i) to be published during 2008 – 2019; and (ii) to include in title, abstract, and keywords one of the following phrases: "intergenerational learning", "generations", "intergenerational knowledge sharing", "intergenerational cooperation", and "intergenerational collaboration". Then, the duplicates are removed following the same procedure as Boon, Den Hartog, and Lepak (2019), Langley et al. (2019), and North (2019). As a consequence, 320 articles remain. 2.81% of these approaches intergenerational learning from a general perspective while the rest of them concentrate on specific issues such as the educational process (58.75%), social phenomenon (21.25%), and organizational practices and policies (17.19%). Against this backdrop, it can be stated that intergenerational learning in organizations represents a research topic that is still in an embryonic stage of development. Furthermore, most studies are published in 4 journals, namely: Learning Organization (14.71% of the relevant articles), International Journal of Innovation and Learning (5.88%), Development and Learning in Organizations (5.88%), and Education and Information Technologies (5.88%).

Secondly, content analysis is employed which according to Duriau, Reger, and Pfarrer (2007) has analytical flexibility, it is nonintrusive and it entails the specification of category criteria for reliability and validity tests. Based on this, data are collected regarding authors' names, affiliation, area of expertise, and age.

Last but not least, data are processed using social network analysis which "is a set of theories, tools, and processes for understanding the structure of relations among social units and the influences associated with these relations" (Han, Chae, & Passmore, 2019, p.221). Within this framework, each actor or node is represented by a member of the academic community that wrote at least one article about intergenerational learning during 2008 - 2019, and the relational ties or the edges emphasize the knowledge flows established among the academics. This approach has already been used successfully for co-authorship networks (Arroyo Moliner, Gallardo-Gallardo, & de Puelles, 2017; Chen & Jackson, 2018; Fagan et al., 2018), supply chain networks (Barsing, Daultani, Vaidya, & Kumar, 2018; Hsu, Chang, & Lin, 2020; Leon et al., 2017), and online and offline communities of practice (Crowley, McAdam, Cunningham, & Hilliard, 2018; Jan, Vlachopoulos, & Parsell, 2019; Leon & Romanelli, 2019).

### Intergenerational learning in the academic community: relationships and content

The results of the documentary study show that the articles regarding intergenerational learning in organizations have been written by 65 authors from 4 continents, namely: Europe (69.23%), North America (13.85%), Australia (10.77%), and Asia (6.15%). Thus, the academics from the oldest continent seem to recognize the challenge raised by the aging phenomenon and try to find a solution to it before it occurs.

However, according to data presented in Figure 2, the academic community interested in intergenerational learning is full of contrasts. First of all, although the aging society is a global phenomenon, there is a lack of collaboration between continents, except for one team that reunites academics from Europe and North America. Secondly, although the analyzed academics are interested in intergenerational learning and support collaboration among the members of the organization, their networks are formed by 2 persons. Thirdly, it can be stated that the level of individualism is unexpectedly higher in Europe compared with the other three continents; several European academics are the sole author of the articles written about intergenerational learning. However, the European academics are the ones who develop the largest networks; while the academics from Australia and North America are part of a network that has 3-4 members, the Europeans develop networks of 5-6 members, connected directly or indirectly.

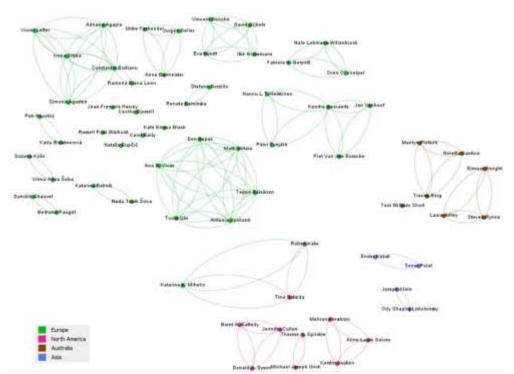


Figure 2. The relationships established among the academics who analyze intergenerational learning from the organizational perspective. An intercultural approach

The situation remains similar when the authors' age is taken into consideration (Figure 3). As it can be noticed, the concept of intergenerational learning represents an interesting research topic for the academics from three generations, namely: Baby Boomers (born between 1946 and 1965), Generation X (born between 1966 and 1980), and Generation Y (born between 1981 and 1995). However, only one network involves the members of all three generations while all the others bring together either the members of the same generation or the members of two generations.

Taking into account the data presented in Figure 3, it can be argued that: (i) the academics from Generation X tend to be more individualistic than those from Generation Y and Baby Boomers; (ii) the academics from Generation Y are more open to collaborating with the academics from other generations than the academics from Generation X (all the academics from Generation Y collaborate with at least one member from another generation while the academics from Generation X tend to collaborate especially with the members from the same generation); (iii) most networks involve the academics from Generation X and Generation Y; (iv) only six networks are bringing together the academics

from Generation X and Baby Boomers and most of them (4 out of six) have only two members; and (v) only one network is developed based on the relationship established between the academics from Generation Y and Baby Boomers.

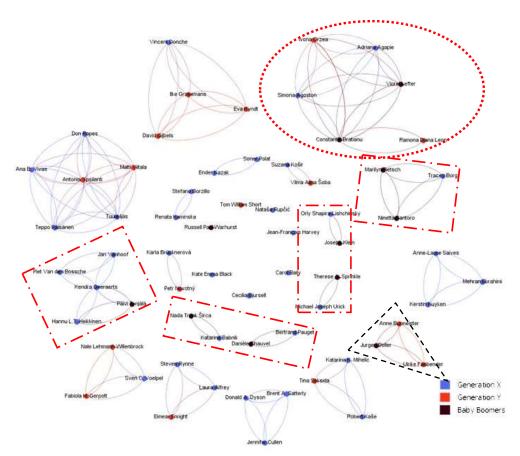


Figure 3. The intergenerational cooperation established among the academics who analyze intergenerational learning from the organizational perspective. A generational approach

Against this backdrop, intergenerational learning becomes a research topic for the academics from Generation X and a reality for those from Generation Y and Baby Boomers. This situation may be caused by the fact that the Baby Boomers are close to retirement and are interested in transmitting their know-how to the younger generation while Generation Y is still at the beginning of their career or on the growth path and are interested in acquiring more knowledge and learning from their colleagues' experience. The academics from Generation X are in a mature stage of their career; on the one hand, they have to acquire knowledge from the Baby Boomers and Generation Y to know what's old and what's new, and on the other hand, they have to foster the interdisciplinary research (Figure 4).

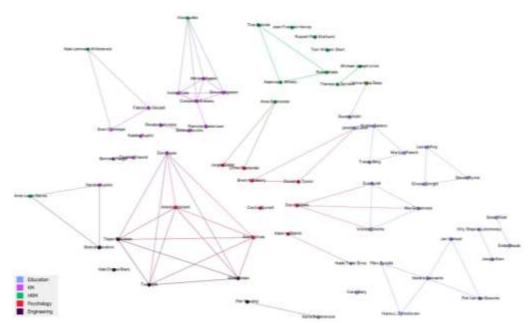


Figure 4. The knowledge shared among the academics who analyze intergenerational learning from the organizational perspective. An expertise area approach

The intergenerational learning field of research is strongly influenced by the theories developed in five areas, namely: education sciences, knowledge management (KM), human resource management (HRM), psychology, and engineering and computer science (Figure 4). The development of each of them is influenced by the learning theories and each of them supports, one way or another, the individual and organizational level. The education sciences, knowledge and human resource management, and psychology provide the psycho-social foundation of the learning process while the engineering and computer sciences bring forward the tangible tools that can be used to encourage and/or support learning, in general, and intergenerational learning, in particular. More exactly, the later brought forward the advantages of using online courses, enterprise social networks, and serious games.

On the other hand, as it can be observed from Figure 4, the academics who are specialized in human resource management and education science are more reluctant to analyzing intergenerational learning from an interdisciplinary approach compared with those specialized in knowledge management and psychology. Thus, most academics specialized in human resource management cooperate with those specialized in psychology and knowledge management while the experts in education sciences collaborate especially with academics specialized in psychology.

Nevertheless, the most complex networks combine knowledge management and engineering theories either with psychology theories or with human resource theories. These collaborations may have been generated by the fact that: (i) lately, the technological progress influenced the learning process and brought forward new tools that can support intergenerational learning, such as online training, serious games, online communities of practice, enterprise social networks, etc., and (ii) the knowledge management theories are dominated by two schools of thought, namely: the cognitivist one that argues that knowledge can be extracted from peoples mind and stored using codes and codebooks (Agis, Gottifredi, & Garcia, 2019; Von Krogh, 1998; Zhong, Ozsoy, & Nof, 2016) and the constructivist one that states that knowledge is a human process that occurs in social interactions (Amin & Cohendet, 2003; Lindsay, Sheehan, & De Cieri, 2020; Styhre, 2009).

#### **Conclusions**

The research focused on the academics who analyze the concept of "intergenerational learning" in order to determine whether they are treating this issue as a research topic or they are actively supporting this process in their daily activity. As aforementioned, most authors come from Europe and North America, the continents that are going to be strongly affected by the aging society phenomenon, according to the United Nations (2019a). Besides, most articles are written by at least two authors who belong to different generations and have different areas of expertise.

Thus, although the analyzed academics are interested in intergenerational learning and support collaboration among the members of the organization, their networks are formed frequently by 2 persons who tend to belong to Generation X and Generation Y. Only one network involves the members of all three generations while all the others bring together either the members of the same generation or the members of two generations. The knowledge flows that cross among the academics come from diverse areas, such as education sciences, knowledge management, human resource management, psychology, and last but not least, engineering and computer science. The former provides the psychosocial foundation of the learning process while the latter (the engineering and computer sciences) brings forward the tangible tools that can be used to enhance intergenerational learning.

Hence, these results prove that intergenerational learning is more than just a research topic; it is a reality of the academic environment. Besides, they emphasize the fact that mixed teams are a viable solution for enhancing intergenerational learning among academics. These findings are in line with Bratianu and Leon (2015) who argue that developing mixed-aged teams is the main strategy used for fostering intergenerational learning in the academic community. Furthermore, they support the idea advanced by Geeraerts et al. (2018a) who claim that homophily effects are fundamental for the success of intergenerational learning in the academic community; thus, their common interest in analyzing the topic of intergenerational learning provides the required framework for sharing ideas, thoughts, and beliefs. Last but not least, they side with the opinion of Ropes (2013, 2014, 2015) according to which teamwork fosters problem-solving and knowledge creation; in other words, various types of knowledge from different domains (such as educational science, knowledge management, psychology, human resource management, and engineering and computer science) are combined to find out what intergenerational learning is and how it can be encouraged.

On the other hand, the current results contradict Geeraerts et al. (2018b) who state that the older employees learn from their co-workers through mentoring and teamwork while the younger employees learn from their older colleagues through seminars, online training, and storytelling. As previously emphasized, both older and younger employees learn through teamwork; mixed-aged teams manage to analyze the concept of intergenerational learning from more complex perspectives than the single-generation teams.

The results have both theoretical and practical implications. On the one hand, they extend the literature on intergenerational learning by providing an empirical analysis of the intergenerational knowledge flows that are shared among the academics. On the other hand, they ensure the policy-makers that the concept of intergenerational learning is approached from a multi-criteria perspective and it proves that mixed-aged teams are a viable solution for encouraging intergenerational learning.

Nevertheless, the research is limited by the context in which it was developed. It only focused on the articles published on SCOPUS and Web of Science, and neglected the ones published on Emerald, Sage, and PROQUEST; thus, it analyzed only a fraction from what it was written and the relationships that were established. Starting from these, several future research directions are identified, namely: (i) replicating the current research on a

larger scale, by extending the analyzed databases and timeframe; (ii) employing a content analysis to determine the topics analyzed by the mixed-aged teams and connections that may be established among them; and (iii) analyzing the list of publication of each author to determine how they used the knowledge acquired in the mixed-aged team.

**Acknowledgments**: This work is part of the research project entitled "Strategic development of Intellectual capital. The human resource management practices that foster intergenerational learning" and supported by the Multidisciplinary Doctoral School of SNSPA (Decision 47/04.06.2019).

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Received: January 10, 2020 Accepted: April 10, 2020

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