

A Work Project presented as part of the requirements for the Award of a Master Degree in
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GENERATIONS' DIVERSITY IMPACT ON KNOWLEDGE SHARING AT WORK

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Abstract

This work project studies the impact that several factors have on the matter of knowledge sharing at work for each generation.

To examine this subject, and comprehend the factors that influence it, the following ones have been considered: Organizational Culture, Organization's Human Resources Practices, and Organization-based Self-esteem.

Successful knowledge sharing between generations shows that exist benefits inherent to diversity, particularly in terms of age. In order for those benefits to occur, it is fundamental to focus on what each generation values to be available to share the knowledge possessed, which hence will bring benefits to the organization.

Through the research done, it was possible to conclude that not all the factors have a statistically relevant impact in terms of knowledge sharing. With a sample of 141 people from a Portuguese organization of the energy sector, it was found that there are no relevant differences among generations. Moreover, the factors that have a statistically relevant impact on the generations are the ones that concern the hypotheses of Organizational Learning Culture, and Knowledge and Exchange Combination.

List of Keywords: Diversity Management; Generations; Knowledge Sharing; Organizational Culture; Organization's Human Resources Practices; Organization-based Self-esteem; Impact.

Index

1. Introduction	4
2. Literature and Hypotheses	4
2.1. Knowledge Sharing	4
2.2. Diversity Management	10
2.3. Overview of the Different Generations	11
3. Methods and Data	12
3.1. Sample	12
3.2. Measures	13
3.2.1. Knowledge Sharing Behavior	13
3.2.2. Organizational Culture	14
3.2.3. Organization's Human Resources Practices	14
3.2.4. Organization-based Self-esteem	15
4. Results	15
5. Discussion	19
6. Conclusion	22
7. Bibliography	23
8. Appendix	26

1. Introduction

The research inherent to this work project can be considered relevant due to the fact that it concerns various factors and their association to knowledge sharing for different generations.

Knowledge is a fundamental asset of organizations and it is a factor that distinguishes them, since it is unique and so very difficult to imitate, which makes organization's human capital valuable (Castaneda and Toulson 2013). As knowledge is such an important asset, it should be shared with the largest number of people, so if one leaves the organization does not resent it. Furthermore, knowledge sharing allows to reduce costs in firms, improve group dynamics and increase firms' competitive abilities (Rajput and Talan 2017).

As people are working until later and organizations are retaining older employees, it inevitably results in an increased age diversity in the workplace, as stated by Meulenaere, Boone, and Buyl (2015). Firms have to face new challenges due to the longer life-expectancy, which means different generations have to work together for a longer period, so it is imperative that they are capable of working well together, which includes sharing what they know.

In spite of the clear need for the knowledge to be shared within the organization that is a situation not so simple to happen as it would be wanted by the organization, due to the cooperation between generations. There are some factors that must be considered, and knowing in what they consist is fundamental to better understand their importance. Therefore, the question is: "What are the factors that influence knowledge sharing for different generations?"

2. Literature and Hypotheses

2.1. Knowledge Sharing

Knowledge sharing is "the process where individuals mutually exchange their knowledge and jointly create new knowledge" (Weinberg 2015, 44). The processes of sharing knowledge are influenced by individual factors (enjoyment in helping others and knowledge self-efficacy),

organizational factors (top management support and organizational rewards), technology factors (information and communication technology use), and whether more leads to greater firm innovative capacity, as this is highly related to employees' willingness to give and collect knowledge (Masa'deh et al. 2016). As highlighted by Bencsik and Machova (2016), one main inhibitor of knowledge sharing concerns the fact that it can be treated as a cause of power and superiority, and in the sequence of this finding is the fact that people sharing knowledge with others is unnatural, as they want to be a more valuable asset to the organization. Employees' unique knowledge frequently leads to positive evaluations from Human Resources systems and in personal gains, like bonuses, promotions, among others. This creates disincentives for knowledge sharing because by doing so, it turns out to be a common good idea and individuals lose their singularity compared to others (Wang and Noe 2010). Therefore, organizations have to encourage their employees to share knowledge.

The knowledge owned by an organization represents a strategic and intangible resource that may create competitive advantage and it is an outcome of years of organizational activity in which the individuals' knowledge is combined into a collective whole (King and Marks 2008). The existence of knowledge sharing among employees permits organizations to exploit and capitalize knowledge-based resources. Knowledge sharing and combination are positively linked to reductions in production costs, sooner conclusion of new product development projects, team performance, firm innovation capabilities, and firm performance, as alleged by Wang and Noe (2010). Related to the previous statement is the fact that the organizations that are successful are those that can steadily manage and incorporate knowledge assets into operational activities in order to achieve their objectives and a superior performance. Organizations are recognizing that the knowledge that exists in in their workforce is essential to create economic power and value. Employees obtain ideas, skills, and knowledge on the job, commonly through informal learning experiences, and it is this knowledge that makes an

organization competitive. Organizations need to be able to identify and understand which tools employees can use to enhance knowledge sharing in the organization (Caruso 2017). The matter of knowledge sharing is becoming a challenge for organizations justified by the fact that several generations are working together. If in previous decades sharing knowledge between generations was a natural occurrence, in today's environment of rapid change and increased expectations at work, tensions and conflicts occur frequently (Bencsik and Machova 2016).

Organizational Culture and Knowledge Sharing

Organizational culture can be conceptualized as a set of shared values that leads employees to communicate and act clearly in the day-to-day workplace context, whilst organizational climate reflects employees' perceptions of the workplace environment (Castaneda and Toulson (2013). Using the metaphor of the iceberg, present in the same study, but originally developed by Edward T. Hall in 1976, organizational climate can be considered the observable part of the iceberg, whereas organizational culture is what lies below the surface. Also according to Castaneda and Toulson (2013), culture is a key driver as well as an inhibitor of organizational knowledge as it provides the context within which organization's workforce create, acquire, share and manage knowledge. As specified by Caruso (2017), a successful firm should have a strong culture that can attract, hold and reward people for performance roles and achieving goals, and a strong culture is typically characterized by dedication and cooperation in the service of common values. This culture includes knowledge sharing, principally the sharing of skills and knowledge, which is acquired through workplace learning. Moreover, for an organization to have a learning culture must possess diverse characteristics, like teamwork, creativity, independence and continuous learning, innovative atmosphere, among others. Those characteristics influence the knowledge sharing present in an organization, however, a basis for them to exist need to be provided (Bencsik and Machova 2016).

The relevance of organizational culture lies in its ability to have a direct effect on employees' knowledge sharing behavior and an indirect effect too, by influencing managers' attitudes towards knowledge sharing (Wang and Noe 2010). Therefore, according to the previous study, culture is a factor that has importance in the knowledge sharing.

Thus, it is proposed the following hypothesis inherent to Organizational Culture association with Knowledge Sharing Behavior, specifically:

- Hypothesis 1: Organizational Learning Culture is positively associated with Knowledge Sharing Behavior

Organization's Human Resources Practices and Knowledge Sharing

An effective Human Resources strategy can have an important impact on matters like organizational development and homogenization, acquisition of competitive skills and abilities, cultural and role changes, career development, decreasing of tensions and insecurities, commitment and reduced conflict in the workplace, and creative empowerment (Caruso 2017). According to Kooji et al. (2010), employees who considered Human Resources practices as an adapted commitment to them, an investment in them, and an appreciation for their contributions, are expected to later reciprocate through conforming attitudes, and in those attitudes can be included the sharing of knowledge. So, it is important that the Human Resources department adjust its practices and policies to fit the needs of employees of different ages (Kooji et al. 2011). This shows how crucial the HR department is and how it makes the company work in a better way, due to the manner that manages the circumstances related to employees. The Human Resources system represents a crucial mechanism both in terms of age diversity and knowledge sharing as through it organization can enhance and support effective knowledge sharing across age-diverse employees, and it plays a vital role in reducing the risk of detrimental knowledge loss. A prerequisite for implementing a knowledge retention program

is being able to locate and recognize the type and value of the knowledge to be retained, and being aware of what knowledge employees have, what knowledge they need and who knows about what. This type of programs is mostly relevant in organizations where senior employees often possess a great wealth of critical knowledge and where it is crucial to capitalize the knowledge, so the HR department must figure out how to transfer the expertise from those who have it to those who need to know. (Masa'deh et al. 2016; Sammarra et al. 2017).

Furthermore, as indicated by Castaneda and Toulson (2013), Human Resources practices should function in a way to improve organizational performance, through the capacity and motivation of its workforce to share knowledge. They intent to enable employees' knowledge sharing by encouraging fairness in decision-making and open communication.

Thus, it is proposed the following hypotheses inherent to Organization's Human Resources Practices association with Knowledge Sharing Behavior, particularly:

- Hypothesis 2a: Selection Policies are positively associated with Knowledge Sharing Behavior
- Hypothesis 2b: Incentive Policies are positively associated with Knowledge Sharing Behavior
- Hypothesis 2c: Training and Development Policies are positively associated with Knowledge Sharing Behavior
- Hypothesis 2d: Knowledge Exchange and Combination are positively associated with Knowledge Sharing Behavior

Organization-based Self-esteem and Knowledge Sharing

Organization-based self-esteem (OBSE), according to Wang and Noe (2010), is a central part of self-evaluation and a distinct form of self-esteem, and it can be conceptualized as the level to which a person believes that himself or herself is capable, significant, and worthy as an organization member. Pierce et al. (1989) affirm that OBSE is part of an individual's basic

belief system and as a part of personality this belief system, when it is established, is reasonably stable, particularly when there are no substantial environmental changes that may give rise to new kinds of experiences. In the light of Pierce et al. (1989) study, the determinants of OBSE can comprehend global self-esteem, job performance, intrinsic motivation, general satisfaction, citizenship behavior, organizational commitment, and organizational satisfaction.

Previous studies, such as James, McKechnie, and Swanberg (2011) one, estimate that employee engagement is somehow related to OBSE as they are connected with employee's awareness of his or her value to the organization, employee's loyalty and commitment to the organization, and his or her disposition to contribute to the good of the organization.

Pierce et al. (1989) state that the employees with high OBSE, that are those who see themselves as organizationally appreciated and meaningful, will try to engage in behaviors valued in their organization. To the extent that these behaviors demonstrate personal competence and make an organizational contribution, employees will arise intrinsic satisfaction, connected with a reinforcement of their self-esteem. The success due to these behaviors would strengthen high organization-based self-esteem, and failure would strengthen low organization-based self-esteem. Employees with high OBSE should be motivated to perform at a high level, have positive attitudes about an organization, and engage in other organization-related behaviors that would favor the organization. Low OBSE employees are predicted to do the opposite.

Moreover, as explained by Wang and Noe (2010) employees with high OBSE are expected to share their knowledge as they believe to be capable and competent to contribute to the organization through knowledge sharing.

Thus, it is proposed the following hypotheses inherent to Organization-based Self-esteem association with Knowledge Sharing Behavior, particularly:

- Hypothesis 3a: Organizational Respect is positively associated with Knowledge Sharing Behavior
- Hypothesis 3b: Self-efficacy is positively associated with Knowledge Sharing Behavior

2.2. Diversity Management

Diversity can be theorized as “the mixture of attributes within a workforce that in significant ways affect how people think, feel, and behave at work, and their acceptance, work performance, and satisfaction, or progress in the organization” (Rajput and Talan 2017, 668). The study of Hanappi-Egger (2005) indicates that diversity has four dimensions: personality; internal dimensions, such as gender, age, race, and the like; external dimensions, like religion, education, geographical location, lifestyle, etc.; organizational dimensions within the organizations, such as management status, work experience, seniority, etc.

The existence of diversity in the workplace creates great benefits for organizations since it results in the incorporation of abilities and skills of individuals from diverse backgrounds and from different generations, resulting in quality improvement of decision making and creativity, as well as higher problem-solving capacities and hence higher efficiency, which are multiple benefits for firms (Samarra et al. 2017; Rajput and Talan 2017; Meulenaere, Boone, and Buyl 2015). Managing diversity is becoming the strategic focus area of management in firms and a resource, which allows them to gain a competitive advantage in the market through firm’s most important asset – its people. Plus, diversity management allows the firm to acknowledge the differences among employees and helps to use diversity’s positive contributions for strategic purposes, namely through: improving productivity and remaining competitive, forming better work relationships among employees, enhancing social responsibility and addressing local concerns. The impact that diversity has on areas like productivity is related to the existence of practices by the organization that value that same diversity, which will be reflected in a higher commitment by the employees and therefore on their productive behavior (Romanenko 2012).

2.3. Overview of the Different Generations

Williams (2016) conceptualizes a generation as an identifiable group that shares birth years, important life events at critical development stages and frequently similar job values and attitudes. As a result of the different experiences lived and according to the literature, it would be expected that the different generations would not value the same factors. The number of generations that currently exist in the workplace and the birth years that correspond to each is not consensual, as there are authors that do not take in consideration the Veterans, others the Generation Z, and some do not consider both. This paper acknowledges the existence of 5 generations, which resulted from the combination of several authors in order to simplify. In spite of it, the focus is on the 3 generations that constitute the majority of the labor market: Baby Boomers, Generation X and Generation Y. The other 2 generations are, as mentioned, the Veterans and Generation Z. All generations have work styles with unique features due to the time when they were born and their own life experience. Baby Boomers (born 1946 – 1964) are self-conscious career builders and benefit from the opportunities the digital world has to offer; Generation X (born 1965 – 1979) prioritizes status, career, and financial gain; Generation Y (born 1980 – 1995) is not motivated by fixed long-term workplace and if given the opportunity will switch job often (Bencsik and Machova 2016). Since multiple generations are working together, workplaces are becoming multigenerational and so diversity may influence inter-organizational relationships as age similarity influences relationships, according to Williams (2016). It is essential to emphasize the importance of having several generations in the workplace, as workers of different ages are likely to hold diverse and complementary frameworks, knowledge and abilities. Both older and younger workers can ensure advantages for organizations, as older workers can play a key role through their experimental knowledge and skills, much of which is not documented nor shared, and younger workers can help firms stay current with scientific discoveries and technological developments (Sammorra et al. 2017).

As explained by Kooji et al. (2010), the relations among the maintenance HR practices of performance management, rewards, information sharing, teamwork, and flexible work schedule and work-related attitudes strengthen with age, while the relationship among the development of HR practices of promotion and affective commitment weakens with age. Also, HR policies and practices must be adopted by organizations to ensure that all age groups are given access to training, development and career opportunities (Sammorra et al. 2017).

Thus, it is proposed the following hypotheses inherent to the different Generations and their association with the factors analyzed, particularly:

- Hypothesis 4a: Knowledge Sharing Behavior is valued differently by Baby Boomers, Generation X and Generation Y
- Hypothesis 4b: Organizational Culture is valued differently by Baby Boomers, Generation X and Generation Y
- Hypothesis 4c: Organization's Human Resources Practices are valued differently by Baby Boomers, Generation X and Generation Y
- Hypothesis 4d: Organization-based Self-esteem is valued differently by Baby Boomers, Generation X and Generation Y

3. Methods and Data

3.1. Sample

The sample size was of 141 employees from an organization of the Portuguese energy sector, in concordance with the questionnaires validated. Baby Boomers represented over half of the participants (58.1%), while Generations X (19.9%) and Y (22%) represented a lower percentage, and in terms of gender, the majority were Male (75.2%). The level of education concluded by the respondents was as follows: Primary School (6.4%); High School or equivalent (52.5%); Bachelor's Degree, which includes before Bologna process (26.2%);

Masters' Degree (14.2%); MBA (0.7%). About the time in the organization, the characteristics of the participants were as follow: less than 5 years (12.1%); between 6 and 10 years (9.9%); between 11 and 20 years (12.1%); over 20 years (65.9%). About the role in the organization, the participants' characteristics were the following ones: Manager (14.9%); Senior Specialist (15.6%); Specialist (17%); Technician – Support, Operational and Administrative (52.5%).

3.2. Measures

This work project was executed using a quantitative approach, more specifically the survey questionnaire instrument, for data collection and subsequently to test the hypotheses, as it was most suitable, according to the literature reviewed for the subject in the analysis. The proposed model measures the relation of the independent variables, which are Organizational Culture, Organization's Human Resources Practices and Organization-based Self-esteem, with the dependent variable that is Knowledge Sharing Behavior since it is the variable of interest for the study, as the point is to see the prediction of the other variables towards this one. Age is considered the moderator to examine its possible effects. The variables, both the dependent and the independent ones, were subjected to a factor analysis, which is a technique that facilitates the data analysis, since it allows to aggregate similar variables and put them in a common factor, and therefore it reduces a larger number of variables into a fewer number of factors. The factors resultant from this analysis were then tested for reliability, represented by the Cronbach's α .

The items of all the variables of this work project were based on items formerly used and validated in past literature. In spite of it, some adjustments were made to best suit this study. The items were measured on a 5-point Likert scale (1= Strongly Disagree, 5= Strongly Agree), which implied an adaption to have all the items in accordance, as multiple items from diverse articles were utilized. The respondents were asked to indicate their agreement to each item. The questionnaire is shown in Appendix A and the results were obtained using SPSS for Windows.

3.2.1. Knowledge Sharing Behavior

To measure Knowledge Sharing Behavior a 12-item scale was used, which was developed by several authors. The factor analysis for this variable originated the factors: Self-efficacy, and Knowledge Sharing Within the Department. Each factor was evaluated by 6 items respectively. Choi, Young, and Lee (2008) were relevant for the Self-sharing factor e.g., “On job context, I actually share know-how with others”, as well as Seonghee and Boryung (2008), e.g., “I voluntarily share my knowledge and important information with my colleagues”. Lin (2008) contributed to the Knowledge Sharing Within the Department factor, e.g., “My department conducts quite a few knowledge or experience exchanges with other departments” as did Yang and Chen (2007), e.g., “My department’s employees share know-how from work experiences with each other”. The factor Self-sharing presented an excellent reliability ($\alpha = 0.92$) as well as the factor Knowledge Sharing Within the Department ($\alpha = 0.93$).

3.2.2. Organizational Culture

To measure Organizational Culture an 18-item scale was used, which was developed by several authors. The factor analysis for this variable resulted in the factor labeled Organizational Learning Culture. For this factor, 2 items were excluded, based on the factor analysis done, which means that it was evaluated by 16 items. Yang and Chen (2007), as well as the following authors, were relevant to this factor, e.g., “My department’s employees are valued for their individual expertise”, Cummings and Teng (2003), e.g., “My organization believes that knowledge is more important than job title”, and Janz and Prasarnphanich (2003), e.g., “On my team, I can learn important things from other team members”. The Organizational Learning Culture factor, on the global scale, presented an excellent reliability ($\alpha = 0.94$).

3.2.3. Organization’s Human Resources Practices

To measure Organization’s Human Resources Practices a 20-item scale was used, which was developed by Collins and Smith (2006). That scale was already divided into the following

factors: Selection Policies, Incentive Policies, Training and Development Policies, and Knowledge Exchange and Combination. The factor Selection Policies was evaluated by 4 items, e.g., “Organization ensures that all employees are made aware of internal promotion opportunities”, the Incentive Policies by 3 items, e.g., “Employee’s bonuses or incentive plans are based primarily on the performance of the organization”, the Training and Development Policies by 7 items, e.g., “My organization provides training focused on team-building and on teamwork skills”, and the Knowledge Exchange and Combination by 6 items, e.g., “On my organization, employees see benefits from exchanging and combining ideas with one another”. The factor Selection Policies presented a good reliability ($\alpha = 0.80$) as well as the factor Training and Development Policies ($\alpha = 0.89$). The factor Incentive Policies presented a questionable reliability ($\alpha = 0.61$), while the factor Knowledge Exchange and Combination presented an excellent reliability ($\alpha = 0.94$).

3.2.4. Organization-based Self-esteem

To measure Organization-based Self-esteem a 10-item scale was used, which was developed by Pierce et al. (1989). The factor analysis for this variable resulted in the factors: Organizational Respect, and Self-efficacy. The factor Organizational Respect was evaluated by 5 items, e.g., “I am respected in my organization”, as well as the factor Self-efficacy, e.g., “I believe I can make a difference in my organization”. The factor Organizational Respect presented an excellent reliability ($\alpha = 0.96$), along with the factor Self-efficacy ($\alpha = 0.92$).

4. Results

The various hypotheses were tested using proper statistical techniques, namely, Correlations, Coefficients, and ANOVA.

The **Correlations Matrix**, which has the results presented in Table 1, allows seeing what are the independent variables that have a higher correlation with the variable Knowledge Sharing

Behavior, and its two factors. Considering the value of 0.7 of the Pearson Correlation as an indicator, for the factor Self-Sharing, there is no variable significantly correlated, nevertheless, the factor with a more significant correlation is Organizational Learning Culture, with a value of 0.41. About the factor Knowledge Sharing Within the Department, the factor Organizational Learning Culture is significantly correlated as its value is 0.75, besides it, also the factor Knowledge Exchange and Combination can also be considered significantly correlated since its value is 0.65, close to 0.7. Except for these two factors, no other shows a strong correlation with the variable Knowledge Sharing Behavior and its factors.

Table 1: Descriptive Statistics and Correlations among Variables

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Self-Sharing	4.32	0.56	-								
2. Knowledge Sharing Within the Department	3.69	0.77	0.41**	-							
3. Organizational Learning Culture	3.82	0.63	0.41**	0.75**	-						
4. Selection Policies	3.34	0.74	0.16*	0.47**	0.65**	-					
5. Incentive Policies	3.39	0.68	0.13	0.45**	0.64**	0.71**	-				
6. Training and Development Policies	3.23	0.76	0.13	0.57**	0.70**	0.73**	0.68**	-			
7. Knowledge Exchange and Combination	3.59	0.75	0.18*	0.65**	0.80**	0.64**	0.63**	0.67**	-		
8. Organizational Respect	3.77	0.82	0.27**	0.58**	0.76**	0.58**	0.60**	0.67**	0.68**	-	
9. Self-efficacy	4.10	0.57	0.28**	0.42**	0.56**	0.32**	0.37**	0.26**	0.48**	0.53**	-

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

N = 141

Organizational Learning Culture

To test the Hypothesis 1, a **Linear Regression** was conducted, with the Knowledge Sharing Behavior factors in the first block and Organizational Learning Culture in the second block.

The results, presented in Tables 2a and 3a, demonstrate a significant and positive relationship between Organizational Learning Culture and both factors of Knowledge Sharing Behavior with a sig <0.000, which means that Organizational Learning Culture explains significantly the variable Knowledge Sharing Behavior. Therefore, Hypothesis 1 is supported.

Organization's Human Resources Practices

To test the Hypotheses 2a, 2b, 2c, and 2d, a **Linear Regression** was conducted, with the Knowledge Sharing Behavior factors in the first block and Organization's Human Resources Practices factors in the second block. The results, presented in Tables 2a and 3a, demonstrate a relatively significant and positive relationship between one of the factors of Organization's HR Practices, the Knowledge Exchange and Combination, and the factors of Knowledge Sharing Behavior with a sig =0.01 for the Self-sharing and with a sig =0.07 for the Knowledge Sharing Within the Department, which is close to sig of reference <0.005 and so means that the factor Knowledge Exchange and Combination explains the variable Knowledge Sharing Behavior. The other factors associated with Organization's HR Practices do not explain the dependent variable. Therefore, only the Hypothesis 2d is supported.

Organization-based Self-esteem

To test the Hypotheses 3a and 3b, a **Linear Regression** was conducted, with the Knowledge Sharing Behavior factors in the first block and Organization-based Self-esteem factors in the second block. The results, presented in Tables 2a and 3a, do not show a significant and positive relationship between any of the factors of Organization-based Self-esteem and the two factors of Knowledge Sharing Behavior, as all were higher than the sig of reference <0.005, which means that the factors associated with Organization-based Self-esteem do not explain the variable Knowledge Sharing Behavior. Therefore, the Hypotheses 3a and 3b are not supported.

Table 2a: Coefficients ^a and **Table 2b:** Results of the Analysis for the variable Self-sharing

Model	Standardized Coefficients		t	Sig.
	Beta			
Generation	-.10		-1.30	.20
Organizational Learning Culture	.83		5.50	.00
Selection Policies	.01		.06	.95
Incentive Policies	-.10		-.81	.42
Training and Development Policies	-.21		-1.56	.12
Knowledge Exchange and Combination	-.33		-2.53	.01
Organizational Respect	.02		.17	.86
Self-efficacy	.06		.58	.56

a. Dependent Variable: Self-sharing

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.52 ^a	.27	.23	.488	.27	6.21	8	132	.00

a. Predictors: Generation, Organizational Learning Culture, Selection Policies, Incentive Policies, Training and Development Policies, Knowledge Exchange and Combination, Organizational Respect, Self-efficacy
According to the R², the independent variables introduced in the model, explain 27% relatively to the variable Knowledge Sharing, more specifically the variable Self-sharing.

Table 3a: Coefficients ^a and **Table 3b:** Results of the Analysis for the variable Knowledge Sharing Within the Department

Model	Standardized Coefficients		t	Sig.
	Beta			
Generation	-.06		-.98	.33
Organizational Learning Culture	.63		5.46	.00
Selection Policies	-.11		-1.18	.24
Incentive Policies	-.08		-.90	.37
Training and Development Policies	.14		1.40	.17
Knowledge Exchange and Combination	.18		1.81	.07
Organizational Respect	-.02		-.20	.84
Self-efficacy	.02		.30	.76

a. Dependent Variable: Knowledge Sharing Within the Department

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.76 ^a	.58	.56	.512	.58	22.80	8	132	.00

a. Predictors: Generation, Organizational Learning Culture, Selection Policies, Incentive Policies, Training and Development Policies, Knowledge Exchange and Combination, Organizational Respect, Self-efficacy
According to the R², the independent variables introduced in the model, explain 58% relatively to the variable Knowledge Sharing, more specifically the variable Knowledge Sharing Within the Department.

Through the **Analyses of Variance (ANOVA) test**, that allows examining potential differences between Generations in the matter of Knowledge Sharing, it was possible to conclude, by the results presented in Table 4, that they do not have an impact on the sharing of knowledge, since every factor has a sig >0.05, i.e., being from Baby Boomers, Generation X or Generation Y is not actually relevant as they do not value the factors in different ways. Therefore, the Hypotheses 4a, 4b, 4c and 4d are not supported.

Table 4: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Self-sharing	Between Groups	.20	2	.10	.31	.73
Knowledge Sharing Within the Department	Between Groups	.85	2	.43	.72	.49
Organizational Learning Culture	Between Groups	.02	2	.01	.02	.98
Selection Policies	Between Groups	2.21	2	1.10	2.04	.13
Incentive Policies	Between Groups	.40	2	.20	.44	.65
Training and Development Policies	Between Groups	2.52	2	1.26	2.21	.11
Knowledge Exchange and Combination	Between Groups	.04	2	.02	.03	.97

5. Discussion

The results of the research show that the generations do not have significant differences among them when it comes to sharing knowledge, as they presented a very low number of relations

between the variables in the study. Besides, there were no significant differences among the several companies of the organization analyzed, neither between gender or role.

This work project contributes to the literature by examining the several factors together, unlike the previous articles that analyzed each factor separately.

Implications for Theory and Practice

Organizations can only influence employees to share knowledge until a certain point, i.e., according to the results only two factors have an impact in knowledge sharing, which are Organizational Culture, specifically Organizational Learning Culture, and one of the Organization's Human Resources Practices, the Knowledge Exchange and Combination. These results contrast to the expected ones based on multiple articles from the past literature that state that the different generations intend to be treated differently by the organizations as they do not value the same matters. In what concerns the Organizational Culture, the results are in concordance with some literature. Sammarra et al. (2017) report that the promotion of interactions between age-diverse members benefits the promotion of knowledge sharing. Yet, the authors Yang and Chen (2007), indicate that knowledge sharing and cultural knowledge capabilities have no association, which goes against the results of the research, explaining that finding with the fact that it is hard to define culture and it covers a range of concepts. In contrast with such, the Organizational Learning Culture factor is confirmed to be the most relevant for the different generations when it comes to sharing knowledge, which means that Hypothesis 1 is supported. About the Organization's HR Practices, the argument of Collins and Smith (2006) that Knowledge Exchange and Combination is the factor with a higher influence on Knowledge Sharing Behavior is confirmed, while the remaining factors – Selection Policies, Incentive Policies, and Training and Development Policies – did not show any significant relation. The significance of the factor Knowledge Exchange and Combination may be justified by the fact

that is the one directly related to the knowledge sharing and so has a higher impact on it. The literature states that Training and Development Policies represent a meaningful example where it is likely to foster knowledge sharing among age-diverse employees (Sammarra et al. 2017). However, the results show that this factor does not influence employees in what concerns sharing knowledge. An equal situation applies to the Incentives Policies, as the same study, mentions that financial rewards and incentives are needed to promote knowledge sharing, even though it is added that those only motivate some types of knowledge sharing behavior, something that is disproved by the results from the sample of the research done. Then, only Hypothesis 2d is supported. Regarding the variable Organization-based Self-esteem, unlike what is stated in the article of Wang and Noe (2010) that refers that OBSE influences employees' knowledge sharing, the research done denies such, as the results indicate that does not exist any significant association between those two variables. So, both hypotheses related to OBSE were not supported. About the Generations, Freund (2006) states that the ones in the young adulthood, which can be translated as the Generation Y, focus on optimization, meaning investing time and energy in the addition of goal-relevant means, modeling successful others, and the practice of goal-relevant skills, whereas the older adults, namely Baby Boomers, focus on compensation goals. Yet, those differences were not proved basis on the results obtained through the sample. So, the hypotheses related to the Generations were not supported.

Limitations and Future Research

The results of the work project did not always meet the results presented in the articles that served as the basis for its realization. That may have occurred for several reasons, namely some limitations inherent as the study being conducted in only one organization, the country in the study was not analyzed before and the Generations X and Y were not represented in the same proportion for the analysis. Other limitation may be related to the fact that the people who answered the questionnaire usually are the ones that actually share knowledge, or on the other

hand, they claim to share due to social desirability. Additionally, the fact that the data was not collected at two separate points in time can be considered a limitation as well.

In a future research, it would be curious to have people answering the same questionnaire in two separate points in time, to verify if they maintain the same answers in both times, or they were conditioned once and gave different answers, and consequently skewed the results. Moreover, it would be interesting to replicate the study but by asking the managers and the team members to evaluate the person as well, due to the matter of social desirability. It would also be important to assure the same representation of the three generations in the study to guarantee with more certainty its validity. Lastly, it would also be curious to see what results another researcher would obtain using the same survey and how he or she would evaluate them.

6. Conclusion

The aim of this work project was to find the effect that the factors Organizational Culture, Organization's HR Practices, and Organization-based Self-esteem, have when it comes to inhibit or promote knowledge sharing in organizations, more exactly within generations.

During the research, it was found that generations do not have different relevancies for the topic of knowledge sharing, and the factors that supposedly exerted a greater impact did not all have that great influence. Actually only the factors Organizational Learning Culture, and Knowledge Exchange and Combination, exert influence on employees' Knowledge Sharing Behavior, as these are the factors more directly related to it. Thus, the organizations should focus on these two factors to ensure that the knowledge is really shared among employees. By being able to know the relevance of each factor, organizations can create and/or adapt mechanisms to change what is perceived as an inhibitor of knowledge sharing, in order to be successful and for employees to have a larger spectrum of knowledge and thus be more successful as well. The answer to the research question "What are the factors that influence knowledge sharing for

different generations?” is that different generations do not need to be distinguished in the matter of knowledge sharing, though the factors Organizational Learning Culture, and Knowledge Exchange and Combination are the ones that truly influence it, according to the results obtained.

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8. Appendix

Appendix A: Questionnaire measurement items

Estimated Participant,

Thank you in advance for your willingness to devote part of your time to answer this questionnaire. My name is Inês Isabel Valente Martins and I am at this moment realizing my Masters' Thesis in Nova School of Business and Economics, and its topic is Generations' Diversity Impact on Knowledge Sharing at Work. I would like to ask for your help in completing the questionnaire that involves questions about your day-to-day work in your company. The questionnaire takes about 10 minutes to answer.

The results of this study will be published in the form of a completed thesis, but confidentiality of all participants will be maintained since names will not be published.

If you have any questions or concerns about the research, please feel free to contact Inês Martins (27378@novasbe.pt)

Instructions

1. When responding to the questions, think about X¹'s practices/actions as a whole.
2. Please indicate your response to each question by selecting one of the provided responses. Please answer all the questions and ensure that they are your honest responses since it will determine the validity of the research study.
3. Please make sure that your questionnaire is completed by 23rd November 2017.

I would like to thank you in advance for your participation.

¹ To guarantee the confidentiality of the organization, the same is named X

Profile Questions

What is your gender?

- Male
- Female

What is your age? (whole number)

What is the highest level of education you have completed?

- Primary school
- High school or equivalent
- Bachelor's degree (includes before Bologna process)
- Masters' degree
- MBA
- Doctoral degree

How long have you worked for X? (whole number)

Which of the following best describes your role in X?

- Manager
- Senior Specialist
- Specialist
- Technician (Support, Operational and Administrative)

At which company you belong inside X's group?

- Comercial
- Distribuição
- Imobiliária
- Inovação
- Internacional
- S.A.
- Sãvida
- Soluções Comerciais
- SU
- Valor
- Produção
- Labelec

Please answer the following questions according to your level of agreement.

1. Do you feel that your job is secure?

- Yes
- No

2. On job context, I actually share know-how with others

-
- Strongly Disagree** **Strongly Agree**

3. On job context, I actually share project documents with others

-
- Strongly Disagree** **Strongly Agree**

4. On job context, I actually share task knowledge with others

Strongly Disagree Strongly Agree

5. I actually share learning resulting from internal/external training with others

Strongly Disagree Strongly Agree

6. I actually share operation information with others

Strongly Disagree Strongly Agree

7. I voluntarily share my knowledge and important information with my colleagues

Strongly Disagree Strongly Agree

8. My department conducts quite a few knowledge or experience exchanges with other departments

Strongly Disagree Strongly Agree

9. My department's employees share business proposals and good business practice documents with each other

Strongly Disagree Strongly Agree

10. My department's employees share expertise obtained from education and training

Strongly Disagree Strongly Agree

11. My department's employees share each other's success and failure stories

Strongly Disagree Strongly Agree

12. My department's employees share business knowledge gained from news, magazines, and journals

Strongly Disagree Strongly Agree

13. My department's employees share know-how from work experiences with each other

Strongly Disagree Strongly Agree

14. My department's employees are valued for their individual expertise

Strongly Disagree Strongly Agree

15. My department's employees understand the importance of knowledge about the business and the organization

Strongly Disagree Strongly Agree

16. My department's employees are encouraged to interact with other departments

Strongly Disagree Strongly Agree

17. The benefits of sharing knowledge outweigh the costs

Strongly Disagree Strongly Agree

18. My organization supports failures that are the product of overreach

Strongly Disagree Strongly Agree

19. My organization encourages the capacity to be continually aware of internal processes
and the external environment

Strongly Disagree Strongly Agree

20. My organization anticipates future demands rather than rest on past successes

Strongly Disagree Strongly Agree

21. My organization believes that knowledge is more important than job title

Strongly Disagree Strongly Agree

22. When we work together on the team, we try to make sure everyone on the team learns from each other

Strongly Disagree **Strongly Agree**

23. When we work together on the team, I have to make sure the other members of the team learn if I want to do well on the project

Strongly Disagree **Strongly Agree**

24. When we work together on the team, everyone's ideas are needed if we are going to be successful

Strongly Disagree **Strongly Agree**

25. On my team, I like to share my ideas and work material with other members of the team

Strongly Disagree **Strongly Agree**

26. On my team, I can learn important things from other team members

Strongly Disagree **Strongly Agree**

27. On my team, I like to share my ideas and work materials with my teammates when I think it will help them

Strongly Disagree Strongly Agree

28. The members of my team learn a lot of important things from each other

Strongly Disagree Strongly Agree

29. We take the time as a team to examine areas in which we need more skills or experience

Strongly Disagree Strongly Agree

30. We rarely stop to consider how we can work better as a team

Strongly Disagree Strongly Agree

31. We have recently discussed what we did right or wrong on a particular project or on job

Strongly Disagree Strongly Agree

32. Internal candidates are given consideration over external candidates for job openings

Strongly Disagree Strongly Agree

33. My organization selects employees based on an overall fit to the company

Strongly **Strongly**
Disagree **Agree**

34. Organization's selection system focuses on the potential of the candidate to learn and grow with the organization

Strongly **Strongly**
Disagree **Agree**

35. Organization ensures that all employees are made aware of internal promotion opportunities

Strongly **Strongly**
Disagree **Agree**

36. Employee's bonuses or incentive plans are based primarily on the performance of the organization

Strongly **Strongly**
Disagree **Agree**

37. Salaries for employees are higher than those of our competitors

Strongly **Strongly**
Disagree **Agree**

38. Goals for incentive plans are based on business unit performance

Strongly **Strongly**
Disagree **Agree**

39. My organization provides multiple career path opportunities for employees to move across multiple functional areas of the company

Strongly **Strongly**
Disagree **Agree**

40. My organization provides training focused on team-building and on teamwork skills

Strongly **Strongly**
Disagree **Agree**

41. My organization sponsors company social events for employees to get to know one another

Strongly **Strongly**
Disagree **Agree**

42. My organization offers an integration program to the employees that includes training on its history and processes

Strongly **Strongly**
Disagree **Agree**

43. My organization uses job rotation to expand the skills of employees

Strongly **Strongly**
Disagree **Agree**

44. On my organization, performance appraisals are used primarily to set goals for personal development

Strongly **Strongly**
Disagree **Agree**

45. On my organization, performance appraisals are used to plan skill development and training for future advancement within the company

Strongly Disagree Strongly Agree

46. On my organization, employees see benefits from exchanging and combining ideas with one another

Strongly Disagree Strongly Agree

47. On my organization, employees believe that by exchanging and combining ideas they can move new projects or initiatives forward more quickly than by working alone

Strongly Disagree Strongly Agree

48. At the end of each day, employees feel that they have learned from each other by exchanging and combining ideas

Strongly Disagree Strongly Agree

49. Employees at my organization are proficient at combining and exchanging ideas to solve problems or create opportunities

Strongly Disagree Strongly Agree

50. Employees at my organization are capable of sharing their expertise to bring new projects or initiatives to fruition

Strongly Disagree Strongly Agree

51. The employees in this company are willing to exchange and combine ideas with their co-workers

Strongly Disagree Strongly Agree

52. I count around my organization

Strongly Disagree Strongly Agree

53. I am respected in my organization

Strongly Disagree Strongly Agree

54. My opinion is taken seriously in my organization

Strongly Disagree Strongly Agree

55. I am trusted in my organization

Strongly Disagree Strongly Agree

56. There is faith in my capacities in my organization

Strongly Disagree Strongly Agree

57. I believe I can make a difference in my organization

Strongly Disagree Strongly Agree

58. I am valuable in my organization

Strongly Disagree Strongly Agree

59. I am helpful in my organization

Strongly Disagree Strongly Agree

60. I am efficient in my organization

Strongly Disagree Strongly Agree

61. I am cooperative in my organization

Strongly Disagree Strongly Agree