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Retention of Generation Y Employees through High Performance Work Systems, Change Management and Employee Engagement

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Abstract:

Purpose: *The aim of the present paper is to examine high skilled Generation Y employee retention in knowledge-intensive services by focusing on various effects of high-performance work systems (HPWS), change management practices and employee engagement.*
Design/Methodology/Approach: *A research model is proposed which investigates the causal effects between the above factors. Data were collected from 499 employees in six European countries who are between 21 and 40 years old with at least a higher education degree.*
Findings: *Empirical findings revealed that high-performance work systems and change management practices have a direct positive impact on the engagement of highly skilled employees that belong to Generation Y, which in turn influences their intention to stay in the same company. Moreover, the impact of HRM on turnover intention is both direct and indirect (mediated through employee engagement). The negative impact of high-performance work systems on turnover intention was also highlighted by the empirical results. Finally, the significant mediating role of employee engagement is underlined, since it mediates the impact of high-performance work systems and change management practices on turnover intention.*
Practical Implications: *HR professionals in knowledge-intensive services should take into consideration that they can effectively retain their high skilled 'Generation Y' employees by enhancing their abilities, increasing their motivation, and providing them with opportunities to participate in the decision-making process while at the same time support them with managing change.*
Originality/value: *: A central issue in this line of research refers to the limited empirical examination regarding talented employees in knowledge-intensive services, mainly in European countries.*

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1. Introduction

Retaining knowledge workers has become important in a knowledge-based business environment, where continuous change and digital transformation have redesigned the nature of work. According to Cunha (2002), the main characteristic of knowledge-intensive firms is their highly educated workforce, which is mainly engaged in intellectual work. In these firms, much of the accumulated knowledge is created by highly skilled employees, which are also the ones that embody the available tacit knowledge of the organisation. Therefore, high levels of employee turnover in these firms constitute a significant issue, since knowledge is lost as people leave the organisation (Chow and Gong, 2010).

Moreover, today's workforce is quite diversified, since significant behavioral and other differences exist between employees of different generations, namely: (a) Baby boomers (1946-1960), (b) Gen X (1961-1980) and (c) Gen Y employees (1981-2000) (Naim and Lenka, 2017). According to Parry and Urwin (2011), people of each group have similar value systems, perceptions and attitudes. This is because they have experienced common formative events. For example, millennials (members of Generation Y) have experienced the growth of the internet, the liberalization of the global economy, the significant rise in social media usage, the growing emphasis on environmental issues and the terrorist attacks of 2001 (Naim and Lenka, 2018). These shared experiences gave birth to similar beliefs and behaviors, developing a common thread between millennials.

Many Human Resource Management (HRM) scholars have argued that high-performance work systems (HPWS) have an impact on the level of employee engagement (Alfes *et al.*, 2013). According to Shuck *et al.* (2017), engagement is defined as the cognitive, emotional and behavioral attachment that employees have towards their job. Employee engagement relates to employee retention in such a way, that when employees are enthusiastic and emotionally involved with their job, they do not intent to leave their workplace voluntarily (Shantz *et al.*, 2014).

According to Cogin (2012), Generation Y employees have different perceptions about the policies and practices of HRM. Moreover, they lack engagement and demonstrate higher rates of turnover intention, due to their ambitious nature and their drive for quick success (Hartman and McCambridge, 2011). Although there have been some studies related to the retention of Generation Y employees, few previous studies have focused on highly skilled "millennials" employed in more dynamic industries. These industries are, usually, volatile, the intensity of their competition is high, while product life cycles are significantly short. This study focuses on knowledge intensive services (companies), since they rely heavily on young employees and the management of both their human and intellectual capital is challenging due to their constantly changing working environment (Von Nordenflycht, 2010; Alkhalil *et al.*, 2014).

The present paper examines skilled Generation Y retention under the prism of HPWS, change management and employee engagement. A central issue in this line of research refers to the limited empirical examination regarding talented employees in knowledge-intensive services, mainly in European countries (Grimshaw and Miozzo, 2009; Kong *et al.*, 2013; Sibiya *et al.*, 2014; Gope *et al.*, 2017).

This study argues that HPWS affect change management practices which constitute an integral component of knowledge intensive services and act as antecedents to employee engagement which in turn strongly influence Generation Y employee retention. Within this context, a newly-developed research model has been developed and empirically tested in knowledge-intensive services (companies) of six different European countries.

2. Theoretical Framework and Research Hypotheses

2.1 High-Performance Work Systems and Change Management Practices

High-performance work systems are considered to be a collection of HR practices and constitute an integrated approach which is designed to motivate and encourage employees in order to perform at their highest potential (Evans and Davis, 2005; Wei and Lau, 2010). Human resource managers' challenge is to enhance their employees' competencies and skills by maximizing at the same time their adaptability as well as flexibility (Neal *et al.*, 2005; Becker and Huselid, 2006). Since business environment is continuously changing and becomes uncertain, human resource managers are called to deal with changing conditions focusing on adopting change management practices (Adeniji *et al.*, 2013). In this case, the aim of business leaders is to facilitate the change process by motivating their employees to embrace change and became more adaptive to it (Adeniji *et al.*, 2013; Petrou *et al.*, 2018).

According to Tan and Nasurdin (2010), effective HR practices can lead to the creation of positive relationships among workers which in turn will contribute to organizational change. In this respect, Tummers *et al.* (2015) found that HRM practices, such as quality teamwork, participation in the decision making process and

job autonomy, can be important contributors to the management of organizational change. In addition, in Nigerian banking industry, Adeniji *et al.* (2013) found that human resources have an impact on flexibitity which can lead to employee adaptability and receptiveness to change. Therefore, the following hypothesis is proposed:

H1: High-performance work systems have a positive impact on change management practices.

2.2 High Performance Work Systems and Employee Engagement

Vuong and Sid (2020) argued that HRM plays a vital role in both building and enhancing employee engagement. When organisations implement positive HRM practices on significant issues (like job autonomy and feedback, task and variety significance), employees are more likely to enhance their levels of organizational and work engagement (Shantz *et al.*, 2013; Christian *et al.*, 2011). Various previous empirical studies have investigated the impact of HR practices, high-performance work systems and job resources on employee engagement (Albrecht and Marty, 2020; Juhdi *et al.*, 2013).

More specifically, Huang *et al.* (2018) found that high performance work systems, such as promotion, job design, training and development, performance management, autonomy and teamwork, are positively influence 'new generation' employee engagement. Furthermore, it was found that various dimensions of high-performance HR practices, like internal mobility, extensive training, selective staffing, results-oriented appraisals, employment security, clear job descriptions, incentive rewards and participation, have a positive impact on employee engagement (Zhong *et al.*, 2016). Consequently, the following hypothesis is proposed:

H2: High performance work systems have a positive impact on employee engagement.

2.3 Change Management Practices and Employee Engagement

The impact of change management practices on employee engagement has not been sufficiently investigated in the existing literature (Sonenshein and Dholakia, 2012). As such, various authors (Marks, 2007; Wollard and Shuck, 2011) have argued that future research should bridge that gap. According to previous empirical attempts (Teerikangas and Välikangas, 2015; Edwards *et al.*, 2017), it is of great importance to investigate employee behaviors during organizational change processes, such as merger and acquisitions, and whether their engagement levels are higher or lower.

In an empirical study, Marks (2007) discovered that when change management practices (like knowledge sharing and open communication), are extensively implemented, employees are more engaged with their job, especially during

challenging and uncertain circumstances. Furthermore, according to Kaltiainen et al. (2020), during significant organizational changes, employees' positive change appraisals are related to high levels of engagement. Therefore, it would be interesting to examine the following hypothesis:

H3: Change management practices have a positive impact on employee engagement.

2.4 Employee Engagement and Turnover Intention

Several previous studies have investigated the relationship between employee engagement and intention to quit a job (Bhatnagar, 2012; Halbesleben and Wheeler, 2008). Shuck *et al.* (2017) define employee engagement in a cognitive, emotional and behavioral level, arguing that it captures the level of involvement employees have towards their work, their team and their organization. Employees who are highly engaged, tend to have greater internal incentives, feel more enthusiastic with their work and are more attached to their firm (Shantz *et al.,* 2013).

Turnover intention refers to an attitudinal end result, describing the intention of employees to leave their current job (Falkenburg and Sachyns, 2007; Albrecht and Marty, 2020). Previous studies (Halbesleben and Wheeler, 2008; Albrecht and Marty, 2020) have empirically demonstrated that employee engagement is negatively associated with turnover intention. Additionally, it is found that employee engagement acts as a mediator between different other antecedents, like turnover intention, personality facets, self-efficacy and job resources (Albrecht and Marty, 2020; Schaufeli and Bakker, 2004). Based on the findings of the literature, the following hypothesis is proposed:

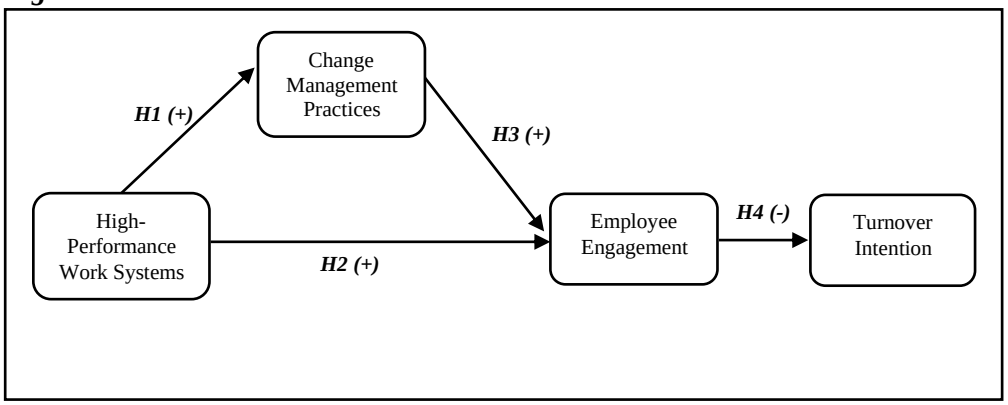
H4: Employee engagement has a negative impact on turnover intention.

Based on the discussion of the literature that was conducted above, the proposed research model (conceptual framework) of this study is depicted schematically in Figure 1. Firstly, the relationship between high-performance work systems (HPWS) and change management practices is being examined. Both HRM and change management are related to knowledge-intensive services, which are dynamic and highly volatile. HRM is responsible for attracting and retaining talented knowledge workers using HPWS, which incorporate valuable knowledge and organizational capabilities (Ambrosius, 2018; Zhong *et al.,* 2016). Moreover, HR practitioners, especially in knowledge-intensive services, are called to manage talented employees, enabling them to be more receptive to change, as well as to be able to cope with constantly changing conditions (Corrocher *et al.,* 2009; Petrou *et al.,* 2016).

Secondly, the relationship between HPWS and change management practices, on the one hand, and employee engagement, on the other hand, is being examined. As stated earlier, the focus is on talented employees in knowledge-intensive services.

Finally, the impact of employee engagement on turnover intention is investigated, arguing that when talented employees in knowledge-intensive services are highly engaged, they do not have the intention to quit their job and leave their organization.

Figure 1. *Research model.*



Source: *Own study.*

3. Research Methodology

3.1 Sample and Data Collection

In order to empirically test the four research hypotheses proposed above, a questionnaire survey methodology was selected. As explained above, the focus of this study is on retaining young and high-skilled knowledge workers in dynamic industries. These types of employees possess high demand skills (Horwitz *et al.*, 2006) that organisations in knowledge intensive industries cannot afford to lose. Therefore, a structured questionnaire was addressed to a number of skilled (highly educated and experienced) Generation Y (born from 1981 to 2000) employees who work in knowledge-intensive services / companies (based on the statistical classification of economic sectors, provided by the European Community) in six European Countries: Portugal, Greece, Italy, Germany, Poland and United Kingdom (UK).

Table 1*. Demographics*

		Frequency (persons)	Frequenc y (%)
Gender	Male	298	59.7%
	Female	201	40.3%
Age	21 - 30	308	61.7%
	31 - 40	191	38.3%
Country of employment	Germany	103	20.6%
	United Kingdom	083	16.6%
	Italy	092	18.4%
	Poland	080	16.0%

	Portugal	095	19.0%
	Greece	046	09.2%
level of education	University Degree	233	46.7%
	Post-Graduate Degree (e.g., MSc)	237	47.5%
	Doctorate (PhD)	029	05.8%
Working experience	3- 5 (Intermediate experience)	326	65.3%
	6 – 10 (Mid-level experience)	119	23.8%
	11-20 (Senior or executive level)	053	10.6%
	> 20 (executive level)	001	0.2%
Size of your organization	1 to 49	149	29.9%
	50 to 249	097	19.4%
	250 plus	253	50.7%
Activity Sector	High-tech	162	32.5%
	Market services	092	18.4%
	Financial services	082	16.4%
	Other	163	32.7%

Source: *Own study.*

Given that the vast majority of EU employees began to telework on a fulltime basis during the covid-19 pandemic, a convenience sampling technique was utilized (Eurofound, 2020). Prolific, a dedicated research platform was selected to recruit 586 participants who had been pre-screened based on country of employment, industry, age, level of education and working experience (Table 1). For identifying outliers, univariate (Z-value) and multivariate (Mahalanobis distance) analyses were performed. Eighty-seven (87) outliers were found; therefore 499 observations were retained for the remainder of the statistical analysis. Regarding the demographics of the sample, it is noteworthy to mention that there is a relevant equivalence between different countries of employment (with the exception of Greece). Furthermore, the sample is generally male-dominated (59.7%) with the majority (61.7%) of respondents being between 21-30 years old, having intermediate and mid-level experience (89.1%).

3.2 Measurement

As mentioned earlier, a structured questionnaire was developed, based on the synthesis of previous studies, published in established journals. In terms of HRM practices, in line with previous research (Tian *et al.*, 2016), the present study argues that employee perceptions about HR practices have the most influence on attitudinal and behavioral outcomes (like employee engagement and turnover intention). Drawing on previous work (Kehoe and Wright, 2013), the AMO framework was used, in which HR practices are measured as a second-order construct, consisting of three first-order dimensions: (a) ability enhancing, (b) motivation enhancing and (c) opportunity enhancing HRM practices. Employee perceptions about HRM practices

were measures using 13 items, adopted from previous studies (Bhatti *et al.*, 2020; Edgar *et al.*, 2021; Tian *et al.*, 2016).

Change Management practices were measured using 9 items that were adapted from the papers of Wanberg and Banas (2000) and Wright *et al.* (2013). They are measured as a second-order construct, consisting of three first-order dimensions (or sub-factors): (a) change-related information, (b) participation in change, and (c) social support.

Employee engagement was measured using 9 items that were adapted from Shuck *et al.* (2017). It is operationalized as a second-order construct with three first-order dimensions (or sub-factors): (a) cognitive engagement, (b) emotional engagement and (c) behavioral engagement.

For the measurement of Turnover intention, three items were adopted from Meyer *et al.* (1993). This measurement was turnover intention is based on the Michigan Organisational Assessment Questionnaire.

All items used to measure the various research factors of this study were evaluated using a five-point Likert scale (where 1 represents "strongly disagree" and 5 "strongly agree").

4. Empirical Results

The number of questionnaires gathered was 862 employees who were asked to self-rate their performance towards their job. Initially, thirty questionnaires were discarded because they contained missing values. Then using univariate (Z-value) (Tsai *et al.*, 2008) and multivariate (Mahalanobis distance) analyses, 87 questionnaires were found and removed from the sample as outliers. For the needs of the present research only the observations (499) of those between the ages of 21 and 40 with at least higher education were used.

4.1 Descriptive Statistics

Empirical data were analyzed using two statistical packages, IBM SPSS 25 and IBM AMOS 22. Table 2 reports few descriptive statistics (Means and Standard Deviations), correlations among all factors (constructs) and the Cronbach Alpha measure of each construct (depicted in parentheses). As shown below, all factors have an acceptable degree of internal consistency (Cronbach's alpha is higher than 0,7 for all factors). Moreover, correlations are statistically significant and provide preliminary support for the proposed research model.

Table 2. *Descriptive Statistics and Correlations*.

Constructs	Mean	S.D.	HRM	CM	EE	TI
Human resource practices (HRM)	3.73	.47	**(.90)**			
Change management practices (CM)	3.70	.49	.54*	**(.86)**		
Employee engagement (EE)	4.02	.55	.59*	.58*	**(.89)**	
Turnover intention (TI)	3.85	.83	-.48*	-.45*	-.68*	**(.88)**

Note: ** Correlation is significant at the 0.01 level (2-tailed)*
Source: *Own study.*

Table 3. *Differences in measurements across subgroups*.

Constructs	Mean Score	Gender *(sig.)*	Age *(sig.)*	Education *(sig.)*	Experience *(sig.)*	Size *(sig.)*	Country *(sig.)*
Human resource practices	3.73	.913	**.005**	.920	.439	.404	.228
Change management practices	3.71	.473	**.017**	.294	.128	**.003**	**.**112
Employee engagement	4.03	**.032**	.259	.195	.984	**.013**	.197
Turnover intention	3.85	.375	.222	**.037**	.728	.072	.281

Source: *Own study.*

Furthermore, the mean scores for all dimensions of the proposed model, as well as the statistically significant differences among the medians of the various subgroups of the sample are briefly presented in Table 3. Group differences were assessed using the Mann-Whitney test and the Kruskal-Wallis test, each when appropriate.

The dimension of "Employee Engagement" obtained the highest mean score, followed by the other dimensions, with a score close to 4. The findings showed that there is a statistically significant difference in the mean score of "Employee Engagement" between male and female employees. Post hoc analysis showed that females evaluate the dimension (construct or factor) with a higher score. Moreover, a statistically significant difference was observed in the mean score of "Change management" and "Human Resource practices" between different age groups. Post hoc analysis showed that older people evaluate the above dimension with a higher score. A significant difference was also found in the mean score of "Change management" and "Employee Engagement" between different firm sizes. Post hoc analysis revealed that personnel in larger firm sizes shows better rating of the above dimensions.

4.2 Data Analysis

A two-step approach, with analysis of moment structures and maximum likelihood estimation, was used in order to estimate the parameters of the research model and test the four proposed hypotheses. Firstly, the measurement model was estimated

using correlations among variables, explanatory factor analysis (EFA) and confirmatory factor analysis (CFA) in order to examining the validity and reliability of the measured items. We also analyzed the adequacy of the model for the data observed using multiple indices (Hair *et al.*, 2010; Meyers *et al.*, 2013). Secondly, the structural model was assessed by evaluating the standardized coefficients of the structural relationship as well as their significance, and then, the four hypotheses were tested.

4.3 Measurement Model

Measures of skewness and kurtosis were used in order to test the normality assumption of the empirical data. Results supported that data are not normally distributed. Therefore, the maximum likelihood (ML) estimation technique was utilized. According to various authors (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2010), the ML estimation technique is able to successfully handle data that are not normally distributed, especially when the sample size consists of more than 100 observations.

In order to test the validity and the reliability of the various sub-factors and dimensions used in this study, both Explanatory Factor Analysis (EFA), using IBM SPSS 25, and Confirmatory Factor Analysis (CFA), using IBM AMOS 22, was used. Initially, first-order EFA and CFA were used to separately test the validity and reliability of the nine sub-factors of the study (Table 4a). Secondly, second-order EFA and CFA were used to test the validity and reliability of its three main dimensions. EFA and CFA results, presented in Tables 4a and 4b, demonstrate the unidimensionality, validity and reliability of the tested models.

Concerning the results of the EFA, KMO ranged from .706 to .903 (it should be higher than .700), Bartlett's test of sphericity was statistically significant in all cases ($p < 0.05$), Total Variance Explained (TVE) ranged from 64.21% to 79.69% (it should be higher that 50.00%), while factor loadings were higher than 0.5, as suggested by Hair *et al.* (1998). Furthermore, Cronbach's Alpha values ranged between .790 and .901, providing acceptable reliability (Hair *et al.*, 2006).

Concerning the results of the CFA, Convergent and Discriminant validity was established for all sub-factors and dimensions (constructs), since square factor loadings (SFLs) exceeded the cutoff value of 0.50, the composite reliability (CR) exceeded the 0.70 threshold and the average variance extracted (AVE) exceeded the 0.50 threshold (Hair *et al.*, 2019).

***Table 4a**. First-order Explanatory and Confirmatory Factor Analysis.*

Sub-factors	**Items**	**First-order EFA**					**First-order CFA**		
		Factor Loadings	KMO	Bartlett Test of sphericity	Cronbach's Alpha	Total Variance Explained	Square factors Loadings	Composite Reliability	Average Variance Extracted
Change Related Information	**e1.1**	.845	.786	519.62 (.000)	.809	72.44 %	**.54**	.82	.60
	e1.2	.892					**.80**		
	e1.3	.814					**.50**		
Participation in Change	**e2.1**	.836	.707	435.55 (.000)	.790	70.40 %	**.54**	.79	.56
	e2.2	.834					**.54**		
	e2.3	.847					**.79**		
Social Support	**e3.1**	.845	.706	445.42 (.000)	.793	79.69 %	**.58**	.83	.66
	e3.2	.852					**.61**		
	e3.3	.824					**.50**		
Ability Enhancing	**b1.1**	.778	.826	1104,64 (.000)	.860	64,21%	**.50**	.86	.55
	b1.2	.801					**.54**		
	b1.3	.827					**.62**		
	b1.4	.802					**.56**		
	b1.5	.798					**.54**		
Motivation Enhancing	**b2.1**	.808	.797	699,075 (.000)	.825	65.71%	**.54**	.82	.54
	b2.2	.811					**.54**		
	b2.3	.799					**.52**		
	b2.4	.824					**.58**		
Opportunity Enhancing	**b3.1**	.822	.798	785.905 (.000)	.796	67.86%	**.56**	.84	.57
	b3.2	.807					**.53**		
	b3.3	.838					**.61**		
	b3.4	.829					**.59**		
Cognitive Engagement	**d1.1**	.910	.717	791.531 (.000)	.871	79.59%	**.77**	.87	.70
	d1.2	.915					**.80**		
	d1.3	.849					**.53**		
Emotional Engagement	**d2.1**	.899	.738	727.485 (.000)	.868	79.15%	**.73**	.86	.69
	d2.2	.889					**.68**		
	d2.3	.881					**.65**		
Behavioral Engagement	**d3.1**	.876	.736	729.959 (.000)	.868	79.13%	**.63**	.86	.68
	d3.2	.891					**.69**		
	d3.3	.902					**.75**		
Turnover Intention	**e3.1**	.901	.841	635.453 (.000)	.894	81.63%			
	e3.2	.903							
	e3.3	.875							

***Table 4b**. Second-order Explanatory and Confirmatory Factor Analysis.*

Constructs	Sub-factors	Second-order EFA					Second-order CFA		
		Factor Loadings	KMO	Bartlett Test of sphericity	Cronbach's Alpha	Total Variance Explained	Square factors Loadings	Composite Reliability	Average Variance Extracted
Change Management	Change Related Information	.856	.857	1798.42 (.000)	.861	71.85 %	.54	.83	.63
	Participation in Change	.0837					.69		
	Social Support	.0792					.64		
Human Recourse Practices	Ability Enhancing	.887	.903	3120.033 (.000)	.901	66.136%	.51	.86	.57
	Motivation Enhancing	.795					.92		
	Opportunity Enhancing	.861					.58		
Employee Engagement	Cognitive Engagement	.888	.862	2640.025 (.000)	.890	79.40%	.60	.80	.58
	Emotional Engagement	.832					.55		
	Behavioral Engagement	.842					.59		

***Table 5**. Discriminant validity.*

Constructs	Change Management	Human Resource Practices	Employee Engagement	Turnover Intension
Change Management	**.79**			
Human Resource Practices	.54	**.81**		
Employee Engagement	.58	.59	**.76**	
Turnover Intension	-.45	-.48	-.68	**.89**

(The square root of Average Variance Extracted is presented diagonally, while correlations are presented below)

***Table 6**. Fit indices of the Second-order models.*

Models	**X^2**	**Df**	**X^2/ Df**	**CFI**	**GFI**	**NFI**	**RMR**	**RMSEA**
Recommended Values	*N/A*	*N/A*	*<3*	*>.90*	*>.90*	*>.90*	*<.05*	*<.08*
Employee Engagement Model	47.39	24	1.97	.987	.979	.982	.015	.044
Change Management Model	74.94	24	3.12	.971	.969	.959	0.02	.065
Human resource practices Model	218.37	62	3.52	.949	.936	.931	.018	.071
Proposed model (first step)	11.13	2	5.56	.988	.989	.986	.013	.096
Proposed model (second step)	2.17	1	2.17	.999	.998	.997	.005	.048

Additionally, using the methodology proposed by Fornell and Larker (1981), discriminant validity was also ensured. More specifically, correlations between the four constructs of the study were found to be lower than the square root of the variance between each construct and its items (Table 5).

Finally, Goodness-of-Fit (GoF) indices for the Second-order models are within their acceptable values, indicating that the proposed structural model fits the data well. According to Hair *et al.* (2010), these finding underline that the research model has increased statistical validity.

4.4 Hypothesis Testing

After confirming that the model fit is acceptable, the hypotheses were empirically tested. According to the methodology proposed by Grapentine (2000), in order to calculate the mean score of each dimension (factor), namely Change Management, Human Resource Practices, Employee Engagement, the mean scores of all sub-factor measuring this dimension were added and, then, divided by the number of sub-factors [e.g., HRM = (Ability Enhancing + Motivation Enhancing + Opportunity Enhancing) / 3)]. In the case of Turnover Intention, its mean score was calculated as the average of its three items.

Figure 2. *Empirical results of the proposed model (first step).*

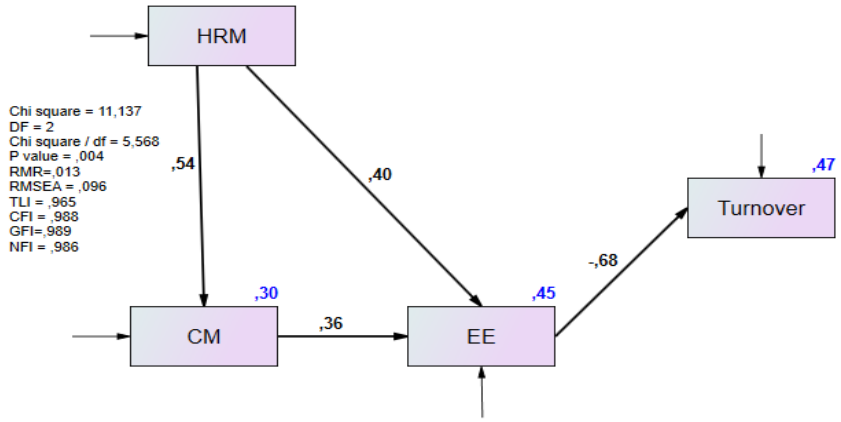
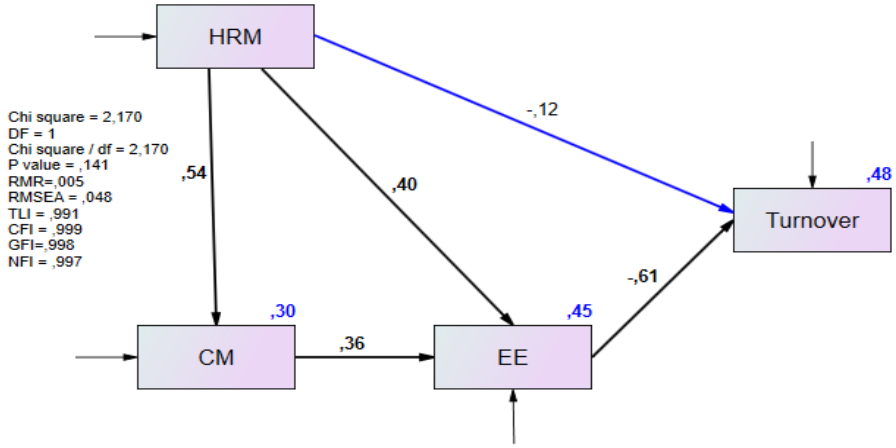


Figure 3. *Empirical results of the proposed model (second step).*



Based on the modification indices of the initial analysis (Figure 2), a new relationship between Human Resource Practices and Turnover Intention was added (Figure 3), resulting in enhanced model fit (Byrne, 1998). According to the final empirical results, approximately 48% of the variance of the main dependent factor, Turnover Intention, can be explained by the empirical data. Moreover, Employee Engagement is explained by 45% and Change Management by 30%. All the initial hypotheses were accepted (Table 7).

Table 8 presents the total, direct, and indirect standardized causal effects between the independent factors and, most importantly, their impact on Turnover Intention (dependent factor). The strongest direct effect that emerged in the model is from Employee Engagement to Turnover Intention (-.609).

Additionally, Human Resource practices have a strong direct effect on Change Management (.543), on Employee Engagement (.401) and on Turnover Intention (-.122), and an indirect effect on Employee Engagement (.198) and Turnover Intention (-.365). Moreover, Change Management Practices have a strong direct effect on Employee Engagement (.364), and an indirect effect on Turnover Intention (-.222).

Table 7. *Path coefficients and their statistical significance.*

Causal effects			**Estimate**	**t- value**	**p -value**
Change Management	←	Human Resource Practices	.543	14.44	0.000
Employee Engagement	←	Human Resource Practices	.401	10.155	0.000
Employee Engagement	←	Change Management	.364	9.223	0.000
Turnover Intention	←	Human Resource Practices	-.122	-3.008	0.000
Turnover Intention	←	Employee Engagement	-.609	-15.034	0.000

Table 8. *Standardized Direct, Indirect and Total effects.*

		Human resource practices	**Change Management**	**Employee Engagement**
Change Management	**Direct**	.543	.000	.000
	Indirect	.000	.000	.000
	Total	.543	.000	.000
Employee Engagement	**Direct**	.401	.364	.000
	Indirect	.198	.000	.000
	Total	.599	.364	.000
Turnover Intention	**Direct**	-.122	.000	-.609
	Indirect	-.365	-.222	.000
	Total	**-.487**	**-.222**	**-.609**

5. Discussion

This study examines talent retention in knowledge-intensive services of six different European countries, focusing on high skilled Generation Y employees. Under this context, a research model (conceptual framework) was developed and empirically tested using the SEM methodology. The model investigates the impact of high-performance work systems and change management practices on employee engagement, while also examining the impact of employee engagement on employee turnover intention.

The final results indicated that all hypotheses were confirmed. In particular, the findings showed that high-performance work systems have a positive impact on change management practices (H1). This finding confirms previous empirical studies (Adeniji *et al.* 2013; Tan and Nasurdin, 2010), in which HR practices facilitate organizational change. Moreover, both high-performance work systems and change management practices were found to have a statistically significant positive impact on the engagement of Generation Y employees (H2 and H3, respectively). When it comes to human resource management, it was examined by many studies as an antecedent of employee engagement taking many forms, such as job characteristics, HR practices, high-performance work systems (HPWS) and job resources (Albrecht and Marty, 2020; Juhdi *et al.*, 2013). All these forms of human resource management were found to enhance employee engagement. Although change management practices have not been extensively investigated as antecedents of employee engagement, few studies (Marks, 2007; Wollard and Shuck, 2011), argue that the involvement of employees in the whole change process contributes to higher levels of engagement with both their work and their organization.

In addition, the hypothesis 4 (H4) was also confirmed, as findings revealed that employee engagement has a negative impact on turnover intention. Its worth noting that the strongest direct impact emerged from the research model is the impact of employee engagement on turnover intention. This comes to an agreement with previous research (Shuck *et al.*, 2014; Halbesleben and Wheeler, 2008) which

supports that highly engaged employees are not aim at quitting their job and leaving their organization intentionally.

Furthermore, except for the proposed hypotheses, new direct and indirect effects were also found. More specifically, it was found that high-performance work systems have a direct negative effect on turnover intention. This could be attributed to the fact that when Generation Y employees feel supported by their organization through the use of HRM practices, they do not intent to leave their work. Additionally, in terms of indirect effects emerged from the analysis, high-performance work systems and change management practices have a negative indirect effect on turnover intention through employee engagement. At the same time, high-performance work systems have a positive indirect effect on employee engagement through change management practices.

Therefore, it seems that employee engagement mediates the negative relationship between high-performance work systems, change management practices and turnover intention. Similarly, change management practices act as a mediator between high-performance work systems and employee engagement.

6. Conclusions

6.1 Main Conclusions

Firstly, high-performance work systems as well as change management practices have a positive impact on the engagement of Generation Y employees. Moreover, employee engagement is the mediator between high-performance work systems and turnover intention, as well as change management practices and turnover intention. However, high-performance work systems have also a negative direct impact on turnover intention. Additionally, employee engagement has a negative effect on Generation Y employee turnover intention.

6.2. Theoretical Implications

In theoretical level, the present study contributes to the human resource and change management literature by investigating various effects in knowledge-intensive services. Although, some of these variables have been examined in previous studies, they did not use this kind of sample (i.e., 'Generation Y' employees) from six different European countries who work in knowledge-intensive services. However, the impact of change management practices on employee engagement has rarely been explored in the existing literature, which constitutes a significant theoretical contribution of this study.

Another theoretical contribution is the new direct effect of high-performance work systems on employee turnover intention by clarifying that employee perception of high levels of HRM practices will result in lower levels of intention to quit. Further

theoretical contributions of this study are the mediation effects emerged from the research analysis. This means that when Generation Y employees feel supported by their organization, they are more likely to be more receptive and resilient to organizational change and consequently, they are more willing to participate in organizational processes, resulting in higher levels of engagement as well as higher levels of retention.

6.3 Practical Implications

In managerial level, several implications could be considered, especially for HR professionals in knowledge-intensive services. Based on the findings of the study, both HRM and change management practices have a positive impact on the engagement of 'Generation Y' employees. This finding should be taken into consideration by HR practitioners who are responsible for the formation of the appropriate organizational conditions, enabling them to effectively retain their high skilled 'Generation Y' employees by enhancing their abilities, increasing their motivation, and providing them with opportunities to participate in the decision-making process while at the same time support them with managing the contant change they usually face in their industry.

6.4 Limitations and Future Research

The present study has various limitations. Additionally, future research suggestions are indicated. First, one limitation of this study might be the industry in the research took place. It is proposed that future studies should focus on the examination of other industries, such as manufacturing or public sector as there are also high skilled Generation Y employees in these sectors. Secondly, the research model investigated in this study has taken into consideration only one generational group, i.e., Generation Y employees or millennials. Therefore, future research should focus on more generational groups, such as Baby Boomers and Generation X (Naim and Lenka, 2018).

A third limitation is the self-report measures used for data collection. Therefore, it is recommended the use of more objective measurements. For example, future research could investigate talent retention, as an outcome variable, by asking HR managers the following question: "How many Generation Y employees left the organization in the past three years?". A fourth limitation is that this study was cross-sectional in design. Consequently, it is suggested that further research should test this study's research model using longitudinal and experimental designs in order to better understand the causality between variables. A fifth limitation is the limited number of antecedents. Future investigations should include more antecedents of employee engagement and talent retention, such as knowledge management practices which are associated with the research sample, i.e., high skilled Generation Y employees as well as the industry under examination, i.e., knowledge-intensive services.

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