

# TOTAL QUALITY MANAGEMENT PRACTICES RELATED TO HUMAN TALENT MANAGEMENT AND THE GENERATION OF INNOVATION IN THE HIGHER EDUCATION INSTITUTIONS: A LITERATURE REVIEW

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## Abstract

The main objective of this work is to contribute to the literature that analyzes TQM (total quality management) practices related to human talent management and the generation of innovation in the Higher Education Institutions. To do this, a systematic review of the literature on the subject is carried out, using the following databases Elsevier (Science Direct), Springer and Taylor & Francis. The most important findings in the literature review suggest that effective human talent management can be related to or depend on the quality practices that are implemented within the institutions. Thus, innovation is considered a mediating variable that promotes the development of skills and competencies, leadership for decision making, and management of effective staff relationships for the continuous improvement of processes and the satisfaction of internal and external customers. The conclusions of the analysis can serve as a basis for future studies on the TQM practices associated with human talent management, a determining factor in developing an institutions capacity for innovation.

Keywords: TQM, human talent, innovation, literature review, higher education institutions.

## 1 INTRODUCTION

Human talent management is considered a process through which the knowledge of employees are implemented to achieve organizational objectives aimed at productivity, which can be determined by individual factors such as satisfaction, development of skills and level of motivation; group factors related to the management of interpersonal relationships; and organizational factors defined by culture, leadership and work environment [1]. Human talent training programs are essential to improve performance, raise morale and increase the potential of employees who are part of multidisciplinary work teams [2]. In this way, human resources practices are aimed at developing one of the soft practices of total quality management, the social capital of the organization, through strategies that facilitate the transfer of knowledge [3]. In turn, TQM practices could improve innovation processes [4] by satisfying the improvement needs of the internal client of the institutions. When implementing TQM, organizations are likely to perceive that it is necessary to design and execute human talent management based on the principles of TQM (teamwork design, incentives and training, empowerment), which also have a positive effect on social capital, seen as a strategic asset, which contributes to the construction of sustainable competitive advantages [5].

The importance of human talent for organizational success is widely recognized in the literature [6]. Aspects such as the distinctive skills and competencies of the people who work in the organization are crucial to achieve competitiveness [7]. In this sense, the management of the employees has a strategic nature within the organizational structures. The development of organizational knowledge depends on the leader and the work teams directed by him [8]. In this sense, the development of employees' knowledge and creativity has a special influence on innovation [9]. Creativity is the generation of novel and useful ideas or solutions to problems [10] and innovation is the actual implementation and execution of creative ideas [11]. Therefore, leaders must create organizational contexts that promote creativity [12].

Some studies have suggested that employees engaged in creative tasks have indicators of greater well-being at work [13]. Researchers recognize the role that human talent plays in the innovation of Higher Education Institutions (HEI), where the knowledge acquired and incorporated in people contributes to the acquisition and use of new and existing skills [14], determining the relevance of the organizational structure for the administration of human resources [15] based on innovation practices [9]. In the literature there are several authors [16] who support the hypothesis that an appropriate management of the innovation process a combination of management techniques, especially those that contribute to

continuous improvement through research and development [17]. However, there is no information that determines exactly what are the variables that directly relate TQM, human talent management (HTM) and innovation. Therefore, the purpose of this paper is to contribute to the literature that analyzes the possible relationships between these management techniques. The following research questions are formulated:

- Is there a relationship between total quality management and human talent management?
- Does the combination of total quality management and human talent management make it possible to generate innovation processes?
- Are the training of human talent and leadership factors that moderate the relationship between quality management, human talent management and innovation?

To answer the research questions raised a bibliographic review is carried out, which systematically consults studies [18] that consider the philosophy of TQM as an enabler of the development of human talent [19][20], associated with the development of innovation capabilities, especially those based on continuous improvement [21]. Consequently, innovation management can be considered as a multidimensional approach that includes leadership, culture, knowledge, level of training, etc., depending on the human talent that, at the operational level, allow the development of the skills required for organizational performance [22]. Thus, the leadership and people management variables reveal a positive impact on innovation [23]. With this information a theoretical reference framework of the relationships found is elaborated and the conclusions of the study are made.

## 2 METHODOLOGY

The methodology applied in this study focuses on the literature review on the concepts of human talent management, quality management and innovation within the social sciences [18]. First, a preliminary survey of bibliographic information is carried out to define the scope, relevance and size of the literature on the subject; The protocol used includes information on the study objective, research questions, and search strategies. To find the articles related to the research topic, the Elsevier (Science Direct), Springer and Taylor & Francis databases were used by combining the terms: "quality + human talent", "quality + innovation", "human talent + innovation". With the results of the bibliographic review the conceptual background and the dominant perspectives of the relationship of the search criteria were structured; the different theoretical contributions were determined within the framework of each of the analyzed perspectives; and empirical studies that contribute to establishing the possible relationships were identified.

## 3 RESULTS

With the development achieved after the industrial revolution, the first human talent management practices emerged in the United States in the mid-nineteenth century with the consolidation of the capitalist model [24]. At that time, large companies focused their efforts on meeting the need to hire thousands of people, without considering their specific training, since their only goal was to have enough labor to operate the machinery required in their production line. Years later, the approval of civil rights gave way to the establishment of motivational compensation systems and the development of training activities for staff [25]. In the eighties, there were significant changes in the management of labor relations for the strengthening and promotion of organizational culture. Starting in the 1990s, the empirical literature on human resource management began to focus its research on demonstrating that employees could influence the organization's financial results [26], applying an approach based on best employee practice strategies to increase organizational performance [27]. The trend in literature is that the efficiency of human resource practices is a function of the vertical fit with the strategy of the firm and its environment [28], as well as the horizontal fit of consistency between the practices themselves [29]. Researches highlight the importance of integrating the management of human talent as part of the strategic business management [30] in order to activate the processes of innovation and generation of sustainable competitive advantages [31].

Currently, TQM includes a set of practices to manage an organization [32]. Among these quality practices, "employee management" [33] [34] promotes work environment conducive to sharing knowledge and information and interaction/relationship between individuals. Employee management fosters innovation [35] in scenarios where specialized skills and competencies of human talent are developed [36] [37] [38]. This development is related to social capital, which consists of embodied knowledge resources [39], which, unlike human capital, are not contained within individual employees;

but all relationships established inside and outside the organization [40]. For this reason, social capital is seen as a relevant asset that allows continuous improvement of radical or incremental innovation capacities, when innovation is considered as a collaborative effort [41]; and creativity [42] guided by the principle of development of people and human relations [43].

The human talent management literature recognizes the existence of human resource quality practice systems, necessary for the implementation of TQM [44]. Organizations and institutions with a stronger orientation towards a TQM philosophy go beyond quality certifications, by designing a model of human resources quality practices which promote and guide quality management principles. Their aim is to eventually develop intangible assets such as social capital [45]. In this sense, from the point of view of the people approach, to achieve effective participation in TQM, the human talent responsible for organizational processes must be convinced of the need for their participation in the quality system and the benefits of its implementation [46]. The global vision of TQM is based on process management practices and systemic thinking [47], configuring itself as a strategy that involves the entire organization, each person from their level of responsibility and training. Based on the criteria of ISO 9001:2015, the level of training of employees within HEIs increases the level of specialization and promotes the use of new skills for innovation [48]. Employees with greater knowledge must continuously obtain new knowledge and skills to keep pace with the development of technologies [14], meanwhile, employees with a high degree of education are the main contributors to the knowhow of the institution, which it implies that they will be in a better position to recognize and value the new external knowledge [49].

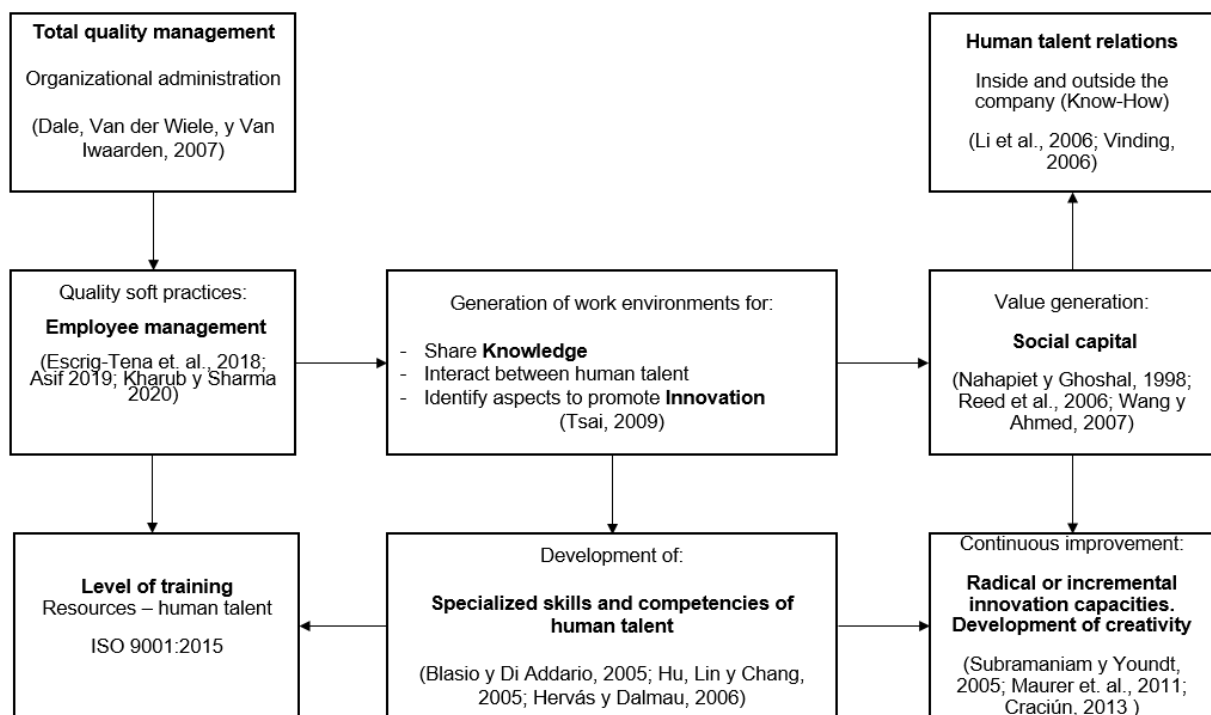


Figure 1: Model of human talent quality practices.

### 3.1 Relationship of training with quality and innovation

Human resource management have positive links with innovative organizational performance [9]. Transfer of knowledge [15] is one of the transversal objectives of greater commitment and institutional impact. In this sense, Garay and Giménez en Pardo [50] propose that any process of education, training and professional qualification is not effective if it is not accompanied by intellectual and cultural growth, that is, a comprehensive training with a high impact on the business productivity. Today it is considered that competency-based training, being an open and flexible process for the development of identified labor competencies, develops in the participants capacities to integrate into society as citizens and as workers [51]. Competency-based training creates within of the organization an atmosphere of trust that generates the personal initiative of the employees to create new ideas from the knowledge acquired.

According to Escrig-Tena [33], some authors argue that TQM improves innovation performance through practices such as training. In addition, it maintains that the soft dimension of TQM, when referring to social elements, emphasizes the strengthening of culture and behavior relationships, employee

participation and quality mentality for continuous improvement. In this way, increased training, which generally includes quality principles and the development of skills to solve problems [52], promotes and strengthens the empowerment of employees by expanding their participation in design, planning and decision-making to innovate [53]. Hair [54] argues that innovative performance is a multidimensional concept that refers not only to the achievement of agreed results but also to the proactive behavior and attitudes executed by staff in daily work. Therefore, continuous improvement is essential for innovation as it drives change and creativity [55] [52].

The literature emphasizes that human resource management practices can be seen as significant variables that affect proactive behavior by increasing employee's motivation to learn and develop skills in order to improve their performance [56] [57]. The knowledge acquired and transferred to the staff guides the fulfillment of the objectives of organizations, positively influencing the performance of the innovation [58] [59]; [60]. From this point of view, innovation could be understood as a process of creating and implementing ideas to produce organizational and institutional value [61]. Thus, innovation is related to the need for organizations to adapt and evolve in order to meet the changing needs of its stakeholders, including its internal customers. The TQM and innovation focus on models of excellence that formalize customer satisfaction as a long-term quality component [62] that increases the value for the customer [63]. The quality of innovation is an indicator that shows the willingness of HEIs to manage all their innovation processes by strengthening their human talent [64]. Innovation, product of the generation of knowledge by trained personnel, can be classified as radical or incremental [65]. Innovation is radical when, based on knowledge, new products or new ways of working are implemented. It is incremental when the innovations improve or adapt existing products and processes. At the same time, work performance and the execution of tasks depends on the human talent. The employee works to keep their knowledge related to the tasks that are under their responsibility in their job updated [66]. Thus, it is important to foster the culture of organizational well-being, which on the scale proposed by Ryff and Keyes [67] can be analyzed by the degree of self-acceptance, mastery of the environment, positive relationships, purpose in life, personal growth and employee autonomy. In this sense, creativity manifests itself in the organization as the engine of innovation, growth and social development [11], the ability to help solve problems and produce satisfaction and positive affection for workers with a level of training that allows them to be creative [68].

The exchange of knowledge inside the organization is too a main source of knowledge accumulation. This exchange of knowledge is highly dependent on organizational culture [69]. Thus, culture is a means of supporting the generation of innovation [70], since it is about creating an atmosphere aimed at improving the work environment through the development of knowledge, training of employees and use of information [71]. This knowledge sharing orientation causes organizational change, which goes beyond doing things differently, it refers rather to the capacity of the organization to adapt to its environment and to promote adjustments in the conditions of human talent that can affect the results of the processes [72]. The change is related to the level of training of the personnel of an organization. It implies, in the first instance, unfreezing an old behavior or knowledge, taking it to a new level and refreezing the new behavior or knowledge at a new level [73].

### **3.2 Relationship of leadership with quality and innovation**

Leadership stands out as one of the most significant aspects in the innovative performance of an organization because leaders can develop new ideas, defining objective goals and promoting innovation initiatives among all employees who are part of the organization [74]. All employees must have the opportunity to make decisions to make the most of their knowledge and creative capacity [75]. In this sense, from both the academic and professional perspective, leadership, as a TQM factor, influences the success rate in the implementation of quality principles in the use of human talent skills [76]. This leadership gain importance in modern work environments where innovation is considered a main pillar for competitive advantage and transformation capacity [77]. It is in this type of organization where TQM social practices are incorporated into the planning, which from the ISO 9001 standard approach implies that the level of leadership is decisive when evaluating the management of human talent.

The adoption of TQM in innovative activities helps the organization to update itself with respect to the needs of its internal and external customers [78], reducing, based on leadership commitment, the rates of desertion or negligence, common in unfavorable work environments. Since innovation refers to the application of new knowledge, ideas, methods and skills that can generate unique skills and improve the competitiveness of the organization [79], innovation is a fundamental component to increase productivity through participative leadership, the result of a work environment where staff feel motivated and/or encouraged [80]. Taking into account that leaders have the responsibility to mobilize the

necessary resources for any innovative action; quality and innovation processes are interconnected and should not be treated separately, defining the relationship between TQM and innovation as a platform that facilitates the exchange of knowledge and skills [81].

When an innovation is accomplished, there is a feeling of completion of tasks and activities. This feeling is a source of motivation directly related to human talent and it influences the efficiency and productivity of organizational processes [82]. Maslow's hierarchy of needs establishes that the motives of human behavior are specific to each being, their motivation, action and innovation are born from within each one [82]. Therefore, attainment of objectives and goals becomes a mechanism that allows the person to satisfy their physiological, security, social, appreciation and self-realization needs, which are fulfilled within a work environment. In this way, the adoption of TQM practices in innovation activities helps the organization to satisfy the needs of its employees [78]. Subsequently, improving TQM capabilities allows improving research and development (R&D) capabilities, resulting in better performance of the personnel working in the organization or institution. These practices can train experts and specialists, they foster leaders to create opportunities to implement the principles and techniques of quality management in their innovative activities through the exchange of knowledge [78].

Innovation leaders are responsible for building employee confidence, praising the willingness of experts to collaborate and support the work of other employees, and reinforcing the exchange of knowledge and information among all team members [83]. The literature shows the relationship between the variables leadership and management commitment, participation and empowerment of employees, development and training of employees. Since innovation is a process that requires active management which is affected by the environment and the collaboration between the members of a work team [84]; an effective leadership is manifested in the degree to which a leader pushes their work team towards their effective participation in TQM. The aim of continuously performance improving [85] is based on policies to support R&D and innovation, training and skills development, support for collaboration at work, and promotion of incentives for human talent to encourage innovation.

#### **4 CONCLUSIONS**

Organizations seek quality through innovation or quality improvement [81]. Therefore, quality and innovation are two orientations that allow evaluating the performance of HEIs through the knowledge acquired and generated by human talent. When employees learn to think more creatively about how work can be done and transfer their ideas to other employees, TQM practices foment leadership commitment to contribute to innovation.

To improve innovation processes, organizations and institutions must consider aspects to facilitate training activities and motivation of human talent. Innovation management of the internal client of HEIs is important to strengthen the implementation of TQM. Some authors point out the importance of analyzing the mediating role of innovation in the relationships between quality management and performance [86] through the use of accumulated knowledge and knowledge sharing [87]. In this way, organizations can rely on enabling factors that favor innovation such as having qualified workers based on their level of training and adaptation to change [88].

According to the data obtained from the bibliographical review, the management of human talent can direct its efforts only to evaluate if the organization's personnel fulfill the tasks assigned to their job. However, to generate true empowerment and leadership, the organizational culture must facilitate the processes of learning, that is, work as a means to learn and innovate [89]. In this process of adopting innovations [90], it is important to establish the process by which human talent is capable of perceiving problems, obtaining information, formulating an opinion and evaluating the options to give or propose solutions as a leader or part of a team. In this way, the existence of generalized knowledge can increase organizational efficiency when introducing creative innovations adjusted to quality standards [91].

As indicated by Bowen and Ostroff [92], a strong human talent management system can increase the performance of the organization. Institutions that seek to improve their skills and innovation must consistently implement quality practices associated with strengthening the skills and knowledge generation of their employees with the aim of creating and disseminating a shared innovative vision [93]. Thus, the organization's innovation policy must include actions to support R&D, which depend on the motivational level achieved thanks to discovering the needs of its customers or the incentives for innovation.

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