Validation of the Human Resource Agility Model in Medium and Large Companies in Aran and Bidgol Industrial Town

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Introduction

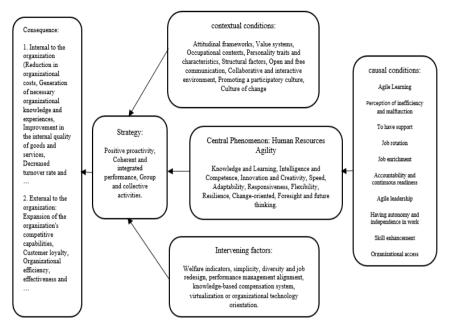
One of the most superior managerial strategies that enables organizations to respond effectively and continuously to environmental opportunities and threats is human resource agility. The core of human resource agility is the ability to change the capabilities and capacities of human resources and, in line with that, the training of human resources to fully master knowledge and skills. Therefore, creating agile organizations and cultivating skilled and trained personnel in high-risk work environments is of paramount importance. Despite the significance of agile human resources within organizations, a substantial portion of research in the realm of human resource agility has remained conceptual and theoretical. There is a notable deficiency of models and indicators for human resource agility as well as a lack of empirical research assessing agility in medium and large companies. Therefore, the present study aims to design and validate a human resource agility model in medium and large companies of the Aran and Bidgol Industrial Town.

Materials and Methods

This research employed a mixed-methods approach, combining exploratory research with a model of constructing a data collection tool that focused on quantitative methods. Through 15 semi-structured interviews with university experts, faculty members, and 15 deputy managers and directors from medium and large industrial companies in Aran and Bidgol (as the qualitative sample), the components of human resource agility were identified using a grounded theory paradigm model. The sample size was selected gradually and purposefully with theoretical saturation of the categories of human resources agility serving as the criterion for ending sampling. The data collection tool was a semi-structured interview. The data was analyzed using MAXQDA qualitative data analysis software and the coding procedures of Strauss and Corbin (2016). To ensure the credibility of the qualitative research, this study employed Lincoln and Guba's criteria. Reliability was achieved by using structured convergent interviewing, systematic data recording, coding, and interpretation procedures. Two interviewers conducted separate parallel interviews to strengthen the reliability of the data. The quantitative portion of the study utilized a survey-based model to ensure its validity. The sample size, determined by Morgan's table, consisted of 60 academic experts and 377 employees from various levels (small-scale, medium-level, and managerial) in medium and large companies located in Aran and Bidgol Industrial Town. After data collection and analysis, SPSS software and descriptive statistics such as frequency, percentage, and mean were used to describe the data. The research model was evaluated using structural equation modeling (SEM) with AMOS. The sampling process for the quantitative part of the study was a stratified random sampling. The validity of the research instrument was established through face validity (expert agreement on the indicators) and convergent validity, which confirmed the convergence of the different components of the human resource agility model.

Results and Findings

After completing the qualitative data collection process, the audio recordings of interviews with academic and non-academic experts (managers, deputy managers, and employees of industrial companies) were transcribed into a 124-page document (34,000 words). In this stage, two qualitative coders sequentially conducted open, axial, and selective coding to analyze both explicit and implicit themes in the interviews. After coding and categorizing the concepts, categories, and themes from the interviews using the MAXQDA qualitative data analysis software, an initial 443 open codes were extracted. These codes were then axially coded into 154 concepts and 40 main categories. The connections between the main categories and the known components of the grounded theory paradigmatic model are shown in Figure 1.



Based on the descriptive findings from the analysis of the components and indicators related to the causal conditions for human resource agility in small and medium-sized enterprises in Aran and Bidgol Industrial Town, the index of 'providing human resources with access to job knowledge and information within the organizational access component was found to be unreliable according to the respondents' answers and had a mean score of 2.64, which was below the average of 3. Based on these findings, the index related to the causal conditions for creating human resource agility was excluded. Other indices related to contextual conditions, intervening variables, core phenomenon components, action strategies, and organizational agility outcomes had a higher average score than the theoretical mean of 3. To determine the status of the core phenomenon, causal conditions, contextual conditions, intervening variables, action strategies, and outcomes of human resource agility, a one-sample t-test was used given the normal distribution of the variables. Based on this test, all elements of the human resource agility paradigm model were found to be sufficiently desirable for creating human resource agility. To validate the factors identified using grounded theory regarding the various components of the human resource agility paradigm, structural equation modeling and confirmatory factor analysis were employed. The results from the independent analysis of each component of the human resource agility model as well as the overall model, in small and medium-sized enterprises in Aran and Bidgol Industrial Town, showed that the factor loadings of all considered factors and components exceeded the acceptable threshold of 0.4. This indicated that the factors and sub-indices of the human resource agility model in the industrial companies of Aran and Bidgol had a satisfactory fit and validity.

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Conclusion

The results of this research demonstrated that agile human resources were equipped with resources and elements such as knowledge and learning, intelligence and competency, innovation and creativity, speed, adaptability, responsiveness, flexibility, resilience, foresight, and change orientation. In shaping these elements, the continuity and consistency of training for new organizational duties and responsibilities, providing comprehensive and universal training opportunities in human resources, diversifying training topics, and operationalizing the learning organization concept through multidisciplinary training (causal factors) have played a significant role. These factors, along with structural conditions such as flexible working hours, developing a trust-based environment, selecting multi-skilled and full-time employees with knowledge capabilities in a dynamic and professionally governed environment (contextual conditions), have had a significant impact. These conditions, in turn, have been mediated by improving welfare indicators, simplicity, diversity, and job redesign, tailoring performance management, organizing knowledge-based compensation systems in a proactive manner and by ensuring cohesive and integrated performance and group activities that ultimately lead to agility.

Keywords: agility, human resource agility, Aran and Bidgol industrial town, structural equation modeling, grounded theory.