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Orginal Article

Standardization of Measurement Scale of Agile Learning as a Leadership Competency in the Workplace

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Abstract

The present research aims to study agile learning as a leadership competency in the workplace and to standardize its measurement scale. The literature review revealed that according to the theory of Lombardo and Echenberg (2000), agile learning could be identified in the four elements of mental agility, change agility, people agility, and results agility. Other components related to agile learning can be placed within these four main elements. To collect our data, 217 full-time employees with managerial experience in a governmental company in Tehran were selected using stratified sampling method. Hence, first, Kraut and Caldwell's (2016) agile learning questionnaire which included 25 items, was translated by the researchers. Then, its face and content validity were confirmed by the experts. Finally, it was completed by the participants in the research. The results of the survey analysis showed that the construct validity of the mentioned scale, using the first and second-order factor analysis, in all the items except for seven items (9, 20, 7, 3, 10, 2, and 23), have an acceptable factor load with its related element and are confirmed. Also, all elements of the translated scale have significant correlation coefficients and have an acceptable factor load with agile learning ($t \geq 1.96$). In addition, elements of people agility and agility of results have the highest correlation coefficient, and elements of agility of change and agility of results have the lowest correlation coefficient with together. Also, the results of Cronbach's alpha coefficient showed that the agile learning scale and all its elements have acceptable reliability. According to the theory of Lombardo and Echenberg (2000), Kraut and Caldwell (2016) developed the learning agility scale, which includes four components of mental agility, change agility, and agility and has 25 items. At the end of our standardization process, 18 items had an acceptable factor load with their related factor. Also, all dimensions had an acceptable factor load with agile learning. Therefore, this scale can be used as a valid one to measure learning agility in the

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field of recruitment, succession, identification of high-potential people, and potential leaders, as well as leadership development.

Keywords: Agile learning, scale standardization, leadership competence

Extended Abstract

Introduction

Agile learning is a concept that emerged in response to the need of organizations to act quickly and effectively in response to rapid changes, considering one of the most important skills of the 21st century for various jobs (Anseel, 2017; Milani et al, 2022). In the business world, this concept has also been considered one of the most common assessment tools and professional competency criteria in the past 10 years to identify and predict the talent and potential of current and future leaders in the organizations (Milani et al, 2022; Church & Seaton, 2022; De Meuse & Harvey, 2022; Bouland-van Dam et al., 2022). Agile learning refers to the ability to learn quickly, the willingness and flexibility to apply what has been learned to achieve optimal performance in new and challenging leadership roles (De Mesue & Harvey, 2022). The literature review revealed that according to the theory of Lombardo and Echenberg (2000), agile learning includes four elements of mental agility, change agility, people agility, and results agility. Other components related to agile learning can be placed within these four main elements. To apply this concept in identifying high-potential leaders, we need a valid tool to measure agile learning. In the present study, based on the reviewed literature, the theory of Eichinger and Lombardo (2000) and questionnaire developed by Kraut and Caldwell's (2016) were identified. However, due to the cultural and organizational diversity, the questionnaire needs to be specifically adapted and standardized for local conditions and needs so that it can be used effectively and reliably in assessing and improving learning processes in the organizational training. Accordingly, the present study aims to study agile learning as a leadership competency in the workplaces of Iranian organizations and to standardize its measurement scale.

Method

To collect our data, 217 full-time employees with managerial experience in a governmental company in Tehran, Iran, were selected using a stratified

sampling method. First, Kraut and Caldwell's (2016) agile learning questionnaire, which included 25 items, was translated by the researchers. Then, its face and content validity were confirmed by the experts. Finally, it was completed by the participants in the research. Participants were informed about their volunteer participation and their right to refuse from the study at any time they want. To analyze the gathered data, we used structural equation modeling and confirmatory factor analysis techniques. The reliability of the scale was calculated 0.925 based on Cronbach's Alpha in this study.

Results

The results of the survey analysis showed that the construct validity of the mentioned scale, using the first and second-order factor analysis, in all the items except for seven items (9, 20, 7, 3, 10, 2, and 23), has an acceptable factor load with its related element and is confirmed. Also, all elements of the translated scale have significant correlation coefficients and have an acceptable factor load with agile learning ($t \geq 1.96$). In addition, elements of people agility and agility of results have the highest correlation coefficient, and elements of agility of change and agility of results have the lowest correlation coefficient together. Also, the results of Cronbach's alpha coefficient showed that the agile learning scale and all its elements have acceptable reliability.

Discussion

Agile learning has been increasingly recognized as a key competency in today's valid organizations. However, studies conducted in Iran indicate that this concept has not yet been fully considered, and there is a need for a valid and appropriate measurement scale. Accordingly, the present research was conducted to study agile learning as a leadership competency in the workplaces of Iranian organizations and then to standardize its measurement scale. based on our standardization process, 18 items had an acceptable factor load with their related factors. Also, all dimensions had an acceptable factor load with agile learning. Therefore, this scale can be used as a valid questionnaire to measure learning agility in the field of recruitment, succession, identification of high-potential people, and potential leaders, as well as leadership development in Iranian organizations.

Authors' Contribution: In the present study, the first author was responsible for developing the research design, the process of collecting and analyzing the qualitative part of the data, and writing the text of the article. The second author, as the corresponding author, supervised and guided the overall research process and its methodology, and compiled and finalized the article revisions. Also, the

third author conducted the quantitative analysis of the research data. Finally, the conclusions from the findings and their expansion and interpretation were made jointly and through discussion and exchange of opinions among all colleagues.

Conflict of interest: The authors acknowledge that there are no conflicts of interest in this article.

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