Learning Organization, its Relationship with Knowledge Performance and Financial Performance

Jeeun Yi

Graduate Student, Industrial / Organizational Psychology, Middle Tennessee State University

Abstract

A learning organization has been addressed as a key organizational culture in the current fast-paced global market. However, despite the attention, there was no commonly accepted single model of the learning organization. In this study, recently discussed two alternative models for learning organization and performance were compared in terms of theoretical as well as statistical approaches. One question from the alternatives was related with the dimensionality of learning organization. General one-factor model and two sub-factor models for learning organization were compared. Another question was about financial and knowledge performance which are functioning as a final endogenous variable or a mediator. In order to examine the questions, variance and covariance matrix dataset (n = 468) from Kim, Watkins, and Lu's (2017) study was used. In general, it was found that neither knowledge performance or financial performance could be a mediator, or both could be outcome variables; however, the fit of each model was the same ($\chi^2 = 108.62, df = 26, GFI = .939, TLI = .941, CFI = .958, RMSEA = .088$). For the dimensionality issue for learning organization, general one-factor model was supported due to the high correlation between two sub-factors ($r = .94$). Bearing in mind the conclusion and the parsimonious rule, a new model was proposed.

Research Questions

In this study, I would examine:

(c) the relationship between financial performance and knowledge performance, as a mediator–outcome variable or two final endogenous variables,

(b) dimensionality issues of learning organization, comparing general one-factor model to two sub-factor models.

Data and Analysis

- Kim, Watkins, and Lu (2017) analyzed DLOQ to survey data to develop a learning organization model. The correlation table from Kim, Watkins, and Lu's (2017) study was used to recalculate each covariance, using means, standard deviations, Cronbach's alpha coefficients, and correlations (n = 468).
- In order to test the fit of learning organization models based on structural equation modeling (SEM), Amos software was employed.
- Overall, six different models were tested and drawn based on the previous studies.

Methods

- The DLOQ mean, standard deviation, and correlation scores from the covariance matrix (Kim, Watkins & Lu, 2017) were used to determine each covariance among the 9 dimensions (7 dimensions of learning organization and 2 dimensions of performance outcome).

Knowledge Performance and Financial Performance

- The first model (Figure 1) was based Kim, Watkins, and Lu's (2017) study, and the relationships of all variables were very similar to the original model; knowledge performance fully mediated the relationship between learning organization and financial performance ($\chi^2 = 108.62, df = 26, GFI = .939, TLI = .941, CFI = .958, RMSEA = .088$).
- The second model (Figure 2) was one of the equivalent models of the original model. This time, financial performance became a full mediator of learning organization and knowledge performance ($\chi^2 = 108.62, df = 26, GFI = .939, TLI = .941, CFI = .958, RMSEA = .088$).
- With the same fit, the third model (Figure 3) explained that learning organization could affect knowledge performance and financial performance, respectively ($\chi^2 = 108.62, df = 26, GFI = .939, TLI = .941, CFI = .958, RMSEA = .088$).

Dimensionality Issues

- The sub-group named as second-factor-1 ($) with continuous learning, knowledge acquisition, and learning, team learning, and empowered people (Figure 4, $r = .47, p < .05$) was less correlated with knowledge performance or financial performance than the other sub-group named as second-factor-2 ($r = .32, p < .05$) with embedded system, system connection, and strategic leadership (Figure 5, $r = .83, p < .05$).
- Thus, the factor 1 leading to factor 2, and then the expected performance outcomes, the fit of model was slightly better than the previous parallel dimension models (Figure 6, $r = .95, p < .05$), GFI = .948, TLI = .948, CFI = .964, RMSEA = .082.
- In the model of combined second-factor-1 factors, however, the correlation between the second-factor-1 and second-factor-2 was .92.
- Thus, the relationship between only the two sub-groups was tested (Figure 7), and the correlation between those factors was .92.

Suggested Model in This Study

- Based on the test of learning organization dimensions and relationships between outcome variables, the final model having the identical fit with the original model was drawn and assessed (Figure 8, $r = .74, p < .05$, GFI = .939, TLI = .941, CFI = .958, RMSEA = .088).

Results

- Two alternative second-order factors were grouped based on the previous researches, and the power of explanation of each grouped factor was estimated.
- As presented in the previous research, the second-order factor 2 (Figure 5) would be more related to performance outcome than the factor 1 (Figure 4).
- Based on this result, the power of explanation of integrated sub-factor model was tested, and the fit was better than the model with seven dimensions arranged in parallel (see Figure 3 and Figure 6). However, the correlation between both factors was high (Figure 7).

Conclusion

- The three models (Figure 3) did not have any mediation effects and learning organization directly, but sufficiently described knowledge performance and financial performance, respectively.

Combining the conclusions from these analyses, I selected the most parsimonious but the best–described model (Figure 8).
- Even though its fit would be the same with other models in the previous study, the suggested model was based on the low of parsimony.
- Therefore, it could be easily fit in the organizational setting, and organizations may refer to this model for their organizational interventions on learning organization and performance outcomes.

Limitation

- Yet, the suggested model was only theoretically tested, and further empirical research should be conducted to support this relationship.

References