Management trust, organizational trust, and organizational performance: Empirical validation of an instrument

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Abstract

The purpose of this study was to empirically validate an instrument with three parts: management trust (MT), organizational trust (OT), and organizational performance (OP). The findings of this study revealed three components that were empirically validated to be reliable and interpretable among their associated factors. Findings and recommendations for further research are discussed.

Keywords: Management trust, organizational trust, organizational performance, instrument validation, factor analysis

Introduction

There are many definitions of trust. Mayer et al. (1995, p. 712) defined trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Rousseau (1998, p. 395) referred to trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another". Das and Tang (1998, p. 494) stated that trust is "the degree to which the trustor holds a positive attitude toward the trustee's goodwill and reliability in a risky exchange situation". Another definition explains trust as "one's expectations, assumptions, or beliefs about the likelihood that another's future actions will be beneficial, favourable, or at least not detrimental to one's interests" (Robinson, 1996, p. 576).

Most define trust as a state, belief or positive expectation. According to Dyer and Chu (2000) "trust is one party's confidence that the other party in the exchange relationship will not exploit its vulnerabilities. A similar definition presented by Six (Six 2007) noted interpersonal trust as a psychological state comprising the intention to accept vulnerability to the actions of another party, based upon the expectation that the other will perform a particular action that is important to you. Cook and Wall (1980) recognize trust as "faith in the trustworthy intentions of others" and "confidence in the ability of others". Lewicki (1998) also underline that trust is usually connected with positive expectations of the other side. Paliszkiewicz (2010) see trust as the belief that another party: a) will not act in a way that is harmful to the trusting firm; b) will act in such a way that it is beneficial to the trusting firm; c) will act reliably; and d) will behave or

respond in a predictable and mutually acceptable manner. Trust can be viewed as a bridge between past experiences and anticipated future.

Organizational trust has been the center of research for many scholars. Long (2002) examined the building of organizational trust. Wech (2002) and Steward (2004) investigated the relationship between leader/worker interactions in relation to organizational performance. The authors concluded that trust is enhanced when quality relationships are present among leaders and workers.

Lester and Brower (2003) and Joseph and Winston (2005) concluded that organizational trust is very important for effective leadership. Conn (2004) studied the relationship between trust and organizational justice, which resulted in high correlation between these two elements. Perry, Mankin (2007) proved that organizational trust is a very important factor in shaping employees engagement. Ferres, Connel, Travaglione (2005) and Chenhall and Smith (2003) described the connection between organizational trust and knowledge sharing.

According to Cook and Wall (1980) organizational trust is a faith in the positive intentions of others. Glibert and Tang (1998) described organizational trust as a belief that employers will follow the rules. Ellonen, Blomqvist and Puumalainen (2008) underline the role of positive expectation connected with competences, reliability, and honesty of the members of the organization. Trust in organizations involves employees' willingness to be vulnerable to their organization's actions. This willingness can be rendered only when an organization clearly communicates its actions to its employees through informal and formal networks. An important source of information is the employee's immediate social environment, which largely comprises coworkers (Tan & Lim 2009). Research conducted by Song (2009) and Glaeser, Libson, Scheinkman, and Soutter (2000) proved that people can trust only others who also are willing to trust them.

Bromiley and Cummings (1996) pointed out that, when there is not enough trust in an organization, an individual will have to spend more time and energy to supervise others' behaviors so as to protect his own interests. When there is a high level of trust among organizational members, an individual can put more of his resources into jobs that will bring forth profits for both himself and his organization. Thus, a lack of interpersonal trust in an organization will give rise to higher supervision cost.

Paliszkiewicz and Koohang (2013) sought to investigate whether there was a positive correlation of organizational trust (OT) on organizational performance (OP). The authors used a two-part instrument that measured the constructs of OT and OP. The present study uses this instrument to modify and/or expand upon the factors of OT and OP constructs adding an additional construct - Measures of Management Trust (MT) - Managers to Subordinates.

Research indicates that trust is related to quality relationships, clear communication, knowledge sharing, and a clear understanding of expectations. Managerial trust and organizational trust

play a significant role in organizational performance (Paliszkiewicz, 2010). Due to the significant role managers play within an organization that relates directly to the trust factor, the authors recognized the importance of expanding upon the previous studies to empirically validate measurements of management trust (MT), organizational trust, and organizational performance (OP).

Purpose of the Study

The purpose of this study was to empirically validate an instrument with three parts: 1) Management Trust (MT), 2) Organizational Trust (OT), and 3) Organizational Performance (OP). Based on the purpose of the study, three questions were constructed:

RQ1: Is the *management trust* component in the model empirically validated to be reliable and interpretable among its nine (9) factors?

RQ2: Is the *organizational trust* component in the model empirically validated to be reliable and interpretable among its nineteen (19) factors?

RQ3: Is the *organizational performance* component in the model empirically validated to be reliable and interpretable among its six (6) factors?

Methodology

Instrument

The instrument consisted of three parts: 1) Management Trust (MT), 2) Organizational Trust (OT), and 3) Organizational Performance (OP).

Part 1: Measures of Management Trust (MT) - Managers to Subordinates

Management trust included nine items. These items were determined by a panel of experts to be adequate as a component that measures management trust among subordinates in organizations. The items chosen were as follows:

- 1. MT1. In dealing with people, one must always be careful.
- 2. MT2. You should not trust other people until you get to know them well.
- 3. MT3. Most people will lie to get what they want.
- 4. MT4. People that wait for the opportunity to gain something for themselves are dishonest.
- 5. MT5. You can only trust yourself.
- 6. MT6. Contacts between the employees are mainly based on struggle and rivalry.
- 7. MT7. Most people in your company keep promises.
- 8. MT8. I have confidence in my subordinates.
- 9. MT9. Subordinates should be allowed to make decisions within defined limits.

The measures of MT included a Likert-type scale. For positively worded statements, the scale denoted strongly agree = 5, agree = 4, neither agree nor disagree = 3, disagree = 2, and strongly disagree = 1. The opposite was used for negatively worded statements.

Part 2: Measures of Organizational Trust (OT)

The original items were proposed by Paliszkiewicz (2010) based on an extensive review of literature. In a further study, Paliszkiewicz and Koohang (2013) used 15 items that were to measure organizational trust among all levels of management. The results of the study yielded 13 valid items (See Paliszkiewicz & Koohang, 2013) that were validated as a component to measure organizational trust among all levels of management. The present study used all the original 15 items and included an additional four items that were determined by a panel of experts to be adequate as a component to measure OT among all levels of management. These items are as follows:

- 1. OT1. There is atmosphere for honest cooperation among employees.
- 2. OT2. Clear expectations connected with results and aims from all employees.
- 3. OT3. Employees are willing to share knowledge.
- 4. OT4. Employees openly admit and take responsibility for their mistakes.
- 5. OT5. Employees avoid participating in gossip and unfair criticism of others.
- 6. OT6. Employees are willing to take part in trainings.
- 7. OT7. Periodic meetings take place between employees and the management.
- 8. OT8. In general the work responsibilities are established and clear.
- 9. OT9. The criteria of promotion are clear in every position.
- 10. OT10. Evaluation of employees is fair.
- 11. OT11. The relationship between employees is good.
- 12. OT12. All employees are treated fairly.
- 13. OT13. The interests of workers are taken care of.
- 14. OT14. Team work is encouraged and preferred.
- 15. OT15. Employees are encouraged to take part in decision-making.
- 16. OT 16 Companies communicate decisions that are made to the employees.
- 17. OT 17. Companies are concerned about improving work conditions for employees.
- 18. OT 18. Development of human resources is considered a measure of success.
- 19. OT19. Operational efficiency, i.e., low cost production, keeping the schedule, etc. is considered a measure of success.

The measures of OT included a Likert-type scale representing strongly agree = 5, agree = 4, neither agree nor disagree = 3, disagree = 2, and strongly disagree = 1.

Part 3: Measures of Organizational Performance (OP)

The original instrument was based on the studies by Deshpande, Jarley, and Webster (1993) and Drew (1997). Paliszkiewicz (2007) modified this measure to include the dimension of innovation. In a further study Paliszkiewicz and Koohang (2013) used this instrument to measure OP among all levels of management. The results of the study yielded five valid items

(See Paliszkiewicz & Koohang, 2013) that were validated as a component to measure OP among all levels of management. The present study used all of the original six items that were determined by a panel of experts to be adequate as a component to measure OP among all levels of management. These items are as follows:

- 1. OP1. In comparison with the competitors this company is more profitable.
- 2. OP2. In comparison with the competitors this company has a larger market share.
- 3. OP3. In comparison with the competitors this company is growing faster.
- 4. OP4. In comparison with the competitors this company is more innovative.
- 5. OP5. In comparison with the competitors this company is more successful.
- 6. OP6. In comparison with the competitors this company has lower costs.

The measures of OP included a Likert-type scale indicating strongly agree = 5, agree = 4, neither agree nor disagree = 3, disagree = 2, and strongly disagree = 1.

Participants and Procedure

The sample population was selected from 286 managers (142– upper management, 112 middle management, and 32 – lower management) working in companies that were designated by *Forbes Journal in Mazovia Province, Poland* in 2009 as "best enterprises".

Data Analyses

To answer the research questions, factor analyses were conducted using IBM SPSS Statistics 21 software. Kaiser criterion was conducted to determine the number of factors that can be retained with eigenvalues greater than 1 as common factors. Next, the scree test, a graphical representation of the eigenvalues was achieved to identify the break point where the curve flattens. Typically, the data points above the break identify the number of factors that are retained. This followed by Principal Component Analysis with Varimax rotation. This analysis forced three components, with their associated factors, to be retained. Finally, a reliability test (Cronbach alpha) was performed to determine the internal consistency among the factors for each component (Mertler & Vannatta, 2010).

Results

Outlier analysis was conducted to pinpoint and eliminate extreme multivariate cases. Three cases were identified as outliers and were removed before conducting further analyses. This yielded a final sample population of 283 subjects for analysis.

Three separate Cronbach Alpha were conducted for MT, OT, and OP. The overall results were .754, .899, and .843 for MT, OT, and OP respectively. To find out whether the overall Cronbach Alpha of the whole construct can increase, further analysis was conducted for each construct to reveal and remove problematic items. No items were found to be problematic for MT, OT, and OP. Therefore, all items for each construct were accepted and remained in their constructs. This means that the items for each construct were bonded as a measure of the

construct. Kaiser criterion analyses revealed three factors with eigenvalues greater than 1. These factors were retained and included in the factor analysis (Cumulative %: Factor 1 = 26.016, Factor 2 = 34.864, Factor 3 = 42.664). The scree test denoted three factors to be retained.

The Principal Component Analysis with Varimax Rotation forced three components, with their associated factors, to be retained (See Table 1).

Table 1: Rotated Component Matrix - Varimax Rotation

Table 1: Rotated Component Ma	uix - vaiiiiax			
	1	Component		
M (T) (T)	1	2	3	
Management Trust Factors	(= 1	0.12	27.6	
OT1	.651	.043	.376	
OT2	.575	.169	.109	
OT3	.566	009	.314	
OT4	.479	.014	.255	
OT5	.443	.197	.337	
OT6	.465	.205	.072	
OT7	.605	.178	061	
OT8	.651	.157	.148	
OT9	.693	.175	.272	
OT10	.607	.089	.424	
OT11	.584	.083	.032	
OT12	.707	.132	.131	
OT13	.628	.147	.028	
OT14	.535	039	005	
OT15	.458	037	112	
OT16	.505	.068	.036	
OT17	.603	.276	020	
OT18	.494	.274	019	
OT19	.428	.160	085	
OT20 (originally OM item loaded on OT)	.521	.052	.487	
Organizational Performance Factors	<u>.</u>			
OP1	.027	.797	.145	
OP2	.116	.756	.005	
OP3	.214	.800	008	
OP4	.203	.735	.041	
OP5	.159	.860	.107	
OP6	.112	.410	.071	
Organizational Trust Factors	l .	l		
MT1	159	052	.543	
MT2	151	.044	.635	
MT3	193	.101	.609	
MT4	.279	.054	.697	
MT5	.221	.093	.624	
MT6	.247	074	.527	
MT7	.368	.146	.401	
MT8	.147	.136	.559	
171 1 ()	.14/	.130	.337	

RQ1: Is the management trust component empirically validated to be reliable and interpretable among its nine (9) factors? Results for RQ1 indicated that the Items 1-8 of MT component were empirically validated to be reliable and interpretable among all the eight factors. Item 9 of MT construct loaded on the OT component. Therefore, it was included in the OT construct. As a result, the MT construct includes eight items deemed to measure the management trust among subordinates. Below is the list of final items that were validated for the OM construct.

- 1. MT1. In dealing with people, one must always be careful.
- 2. MT2. You should not trust other people until you get to know them well.
- 3. MT3. Most people will lie to get what they want.
- 4. MT4. People that wait for the opportunity to gain something for themselves are dishonest.
- 5. MT5. You can only trust yourself.
- 6. MT6. Contacts between the employees are mainly based on struggle and rivalry.
- 7. MT7. Most people in your company keeps promises.
- 8. MT8. I have confidence in my subordinates.

RQ2: Is the organizational trust component in the model empirically validated to be reliable and interpretable among its nineteen (19) factors? Results for RQ2 showed that all 19 items of OT component strongly loaded on the OT construct. In addition item 9 of OM construct loaded on the OT component. This yielded a 20-item OT construct that empirically validated to be reliable and interpretable among all the 20 factors. The 20-item OT construct deemed to measure the organizational trust (OT) among all levels of management. The items of the final validated construct for OT are as follows:

- 1. OT1. There is atmosphere for honest cooperation among employees.
- 2. OT2. Clear expectations connected with results and aims from all employees.
- 3. OT3. Employees are willing to share knowledge.
- 4. OT4. Employees openly admit and take responsibility for their mistakes.
- 5. OT5. Employees avoid participating in gossip and unfair criticism of others.
- 6. OT6. Employees are willing to take part in trainings.
- 7. OT7. Periodic meetings take place between employees and the management.
- 8. OT8. In general the work responsibilities are established and clear.
- 9. OT9. The criteria of promotion are clear in every position.
- 10. OT10. Evaluation of employees is fair.
- 11. OT11. The relationship between employees is good.
- 12. OT12. All employees are treated fairly.
- 13. OT13. The interests of workers are taken care of.
- 14. OT14. Team work is encouraged and preferred.
- 15. OT15. Employees are encouraged to take part in decision-making.
- 16. OT 16. Companies communicate decisions that are made to the employees.
- 17. OT 17. Companies are concerned with improving work conditions for employees.
- 18. OT 18.Development of human resources is considered a measure of success.

- 19. OT19. Operational efficiency, i.e., low cost production, keeping the schedule, etc., is considered a measure of success.
- 20. OT20. Subordinates should be allowed to make decisions within defined limits.

RQ3: Is the organizational performance component in the model empirically validated to be reliable and interpretable among its six (6) factors? Results for RQ3 showed that all 6 items of OP component strongly loaded on the OP construct. The OP construct was empirically validated to be reliable and interpretable among all the 6 factors. The items of the validated construct for OT are listed below.

- 1. OP1. In comparison with the competitors this company is more profitable.
- 2. OP2. In comparison with the competitors this company has a larger market share.
- 3. OP3. In comparison with the competitors this company is growing faster.
- 4. OP4. In comparison with the competitors this company is more innovative.
- 5. OP5. In comparison with the competitors this company is more successful.
- 6. OP6. In comparison with the competitors this company has lower costs.

Conclusions and Discussion

This study was undertaken to empirically validate an instrument with three parts - management trust (MT), organizational trust (OT), and organizational performance (OP). Three factors were retained with % of variance 26.016, 8.848, and 7.800. Three separate Cronbach Alpha were conducted for MT, OT, and OP. The overall were .754, .899, and .843 for MT, OT, and OP respectively indicating reasonable reliability results for all three components.

Of the original nine MT items, eight were loaded on the MT construct indicating that the MT component was empirically validated to be reliable and interpretable among all its eight factors. These factors are implied to be strongly bonded and can be used as a measure of MT in organizations.

All 19 items of OT construct strongly loaded on the OT component. In addition item 9 of MT construct loaded on the OT component. This yielded a 20-item OT construct that empirically validated to be reliable and interpretable among all the 20 factors. This result includes all the original 15 items advanced in the Paliszkiewicz and Koohang (2013) study. The 20-item OT construct resulted from the present study are implied to be strongly bonded and can be used as measure of OT in organizations.

The six items of OP construct loaded on the OP component indicating that OP construct was empirically validated to be reliable and interpretable among all the six factors. This result includes all the original six items advanced in the Paliszkiewicz and Koohang (2013) study. The six-item OP construct resulted in the present study are implied to be strongly bonded and can be used to measure the OP in organizations.

Trust, both managerial and organizational, plays a significant role in organizational performance. Reliable data and extensive statistical analyses from this study have resulted in evidence which executives within organizations must use strategically to gain competitive advantage. To enhance the generalizability of the results, it is recommended that future studies include a random sampling of diverse groups of managers from various regions of the country and/or world.

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Biographies

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