

การพัฒนากลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริงเพื่อเสริมสร้างกรอบคิด วัฒนธรรมนวัตกรรมการปฏิบัติงาน

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บทคัดย่อ

วัตถุประสงค์ เพื่อศึกษากรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงาน พัฒนากลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริง ประเมินผลของการใช้กลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริง และ ประเมินความพึงพอใจของกลุ่มตัวอย่าง **วิธีการวิจัย** เป็นแบบผสมวิธี โดยวิธีการเชิงปริมาณ และวิธีการเชิงคุณภาพ ศึกษาจากกลุ่มตัวอย่างผู้บริหารระดับต้น ในอุตสาหกรรมการผลิตชิ้นส่วนยานยนต์ จำนวน 365 คน เครื่องมือที่ใช้ในการวิจัย เป็นแบบวัดกรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงาน และกลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริงค่า IOC ระหว่าง 0.60 – 1.00 และค่า $\alpha = 0.94$ โดยเปรียบเทียบ ก่อนการทดลอง หลังการทดลอง และหลังการติดตามผลและใช้การประเมินความพึงพอใจกลุ่มทดลองด้วยการจัดสนทนากลุ่มเฉพาะ (focus group) ภายหลังจากทดลอง วิเคราะห์ข้อมูลหลักโดยสถิติเชิงเปรียบเทียบ ด้วยการวิเคราะห์ความแปรปรวนของ Friedman ผลการวิจัย หลังการทดลอง และหลังการติดตามผล ผู้บริหารระดับต้นกลุ่มทดลองมีคะแนนกรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงานโดยรวมสูงกว่าก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และภายหลังจากติดตามผลเป็นระยะเวลา 1 เดือน พบว่า กรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงานของผู้บริหารระดับต้นทั้งโดยรวมและรายด้านของกลุ่มทดลองสูงขึ้นอย่างต่อเนื่อง **สรุป** กลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริงเป็นนวัตกรรมสำคัญในการเสริมสร้างกรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงานของผู้บริหารระดับต้น

คำสำคัญ: กลยุทธ์ทางจิตวิทยาแนวภาวะผู้นำที่แท้จริง กรอบคิดวัฒนธรรมนวัตกรรมการปฏิบัติงาน

The Development of Authentic Leadership Psychological Strategies for Enhancing Innovative Culture Mindset on Job Performance

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ABSTRACT

PURPOSES: To study the innovative culture mindset on job performance, to develop authentic leadership psychological strategies for enhancing innovative culture mindset, to evaluate the results of the use of authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers, and to evaluate the satisfaction of the sample group with the developed strategies. **METHODS:** The research design was a mixed methods design using both quantitative and qualitative methods, and studied 365 participants who were first-line managers in the automotive industrial parts manufacturing sector, with the rating scales on the innovative culture mindset on job performance and the psychological strategy for authentic leadership to enhance innovative culture mindset in first-line managers with the IOC from the three experts ranging 0.60-1.00 and $\alpha = 0.94$. The pretest-posttest and follow up design for comparison employed Friedman's ANOVA test, and focus group discussion was used for satisfaction assessments. **RESULTS:** The innovative culture mindset on job performance of first-line managers of the experimental group after the experiment and after the follow-up were significantly higher than before, at the .01 level. **CONCLUSION:** Authentic leadership psychological strategies are an important innovation in strengthening the innovative culture mindset on job performance of first-line managers.

Keywords: Authentic leadership psychological strategies, innovative culture mindset on job performance

Introduction

Innovation refers to thinking, practice, knowledge, management skills, and the application of scientific and technological experiences to invent, create, and develop the products and services production processes, including the new organization management approach. The efficient innovation development of all levels corresponding to rapid change steers the success of the organization and enhances sustainable competitiveness (Office of the National Economic and Social Development Board, 2012). Innovations that are developed simultaneously with the growth of an organization lead to sustainable and continuing development. If the organization could develop until eventually having ideas, beliefs, and understanding of innovation practices, which finally become cultural innovations, the organization would be timely and well-prepared for the adjustment corresponding to rapid changes since the members would be able to continually create and accept the procedural changes. Therefore, the development of personnel, who are the most important resource of an organization, as well as the adaptation of development strategies to suit the period of time, should be considered as crucial to the utmost degree (Malakul Na Ayudhya, 2013).

The significant factor for the success and effective development of an organization is the executive or the leader who has a growth mindset and is ready to move into the new culture approach. A genuine leader should drive the organization to achieve its set goals (Tripitaka, 2002; Kunponkaew, 2018) and reinforce the innovation culture to become the mutual culture of all

members. The organization where the researcher is employed is a manufacturer of automotive parts with a great increase in business growth ratio and rapid expansion rate, including high business competition. Thus, the organization needs learning adaptation to compete with other manufacturers and readiness for any disruptive changes and competition. The organization has lately implemented new projects and improvement projects as a strategy to propel development, under the responsibility of the first-line manager, who has to manage his/her team members, resources, and time to efficiently respond to the customers' demands for effective performance. Presently, the problems of the project involve the delay in deliveries, lack of efficient budget management, and lack of the creation of innovation practices for the highest-efficiency work (*Autoliv Employee Development System*, 2016).

To obtain more accurate information through empirical data, the present researchers studied various situations related to practicing innovation culture in an organization, in accordance with the four core cultures (*Autoliv Employee Development System*, 2016). The first core culture is knowledge, consisting of the acquisition of learning opportunities and constant research and development. Second, would be the people in terms of responsibility, policies, and acceptance of the organization's goals, courage to be future-oriented, open-mindedness, respect for others' opinions, and care about the impact on others. Third, is the process which includes innovation steering and implementation, continuous process development, and innovation integration. Lastly, is a collaboration

involving teamwork and recognition of the teamwork value, agility, flexibility, preparation for changes, and self-adjustment.

The present researchers used an in-depth interview about innovation culture with 35 executives. The results showed that the management of first-line managers lacked the ideas, beliefs, and understanding of the practice of innovation culture. It can be determined from the project management results that the delivery plan does not meet the customer requirements. Focus solely on the success of the work, with lack of consideration of innovative culture, makes project completion accomplished with the effectiveness of the work and helps create a better quality of life. In addition, the first-line managers still lack ideas, beliefs, and understanding of the relationships and connection of innovative culture, causing the problems leading to underachievement of the organizational goals. This eventually reflected the necessity for innovative culture mindset development in first-line managers, as they are the key mechanism to steer the successful project management. This conclusion happened to concur with the concept of Dweck (2016), who proposed that it is not only the leader and follower who need to work with the team, but also that “the mindset” is a vital factor of success, as mindset includes the ideas and beliefs affecting the behavior. The leader must have the growth mindset based on the notion that everyone has the ability to develop his/her competency from learning, experience, and application (ibid).

It should, therefore, be obviously concluded that the first-line managers of the organizations in the automotive parts industry need to be strengthened in the

practice of the innovative culture mindset, which would lead them to be competent and consistent in thriving, sustainable development. The leader should be able to change the mindset by eliminating the fixed mindset and implanting the growth mindset by focusing on the innovation culture (Denison, 1991; Dweck, 2016). This was also consistent with the concept of Covey (2002), who stated that a change to a new mindset leads to different perspectives. The change of the executive’s perspectives would then enable the change of more diversification through innovation culture (Covey, 2002).

The accumulative study on personnel development indicated that most organizations, including the organization where the present researcher is employed, have mostly implemented a training approach to enhance learning to develop personnel and the executive through knowledge transfer. The method to create the imitated behavior of a successful person was utilized as a shortcut model for the personnel to implement in their work, which did not originate from the change of ideas or beliefs of the individual to affect the real change of behavior. Consequently, the initiated projects encountered unsuccessful performance, as presented by the empirical data, mentioned above. The present researcher, as an executive, foresaw the need for behavioral change, which should begin from the improvement of ideas, beliefs, and understanding of the personnel in the organization, particularly the first-line managers who were the target group, to have the mindset leading to the change of leadership behavior, to mobilize the sustainable practice of innovation culture. Different development strategies



from the traditional training were, therefore, required to make the change to the mindset of the target group.

The literature review concerning the creation of innovation culture mindset began with the leader or implanting leadership to the members (Dweck, 2016). The accumulative study on the characteristics of authentic leadership revealed that an authentic leader had stability in word, actions, positive self-value, self-consciousness, transparent and sustainable relationships, and determination to achieve the goal. The synthesis of practical authentic leadership strategies to promote the practice of innovation culture in first-line managers eventually was comprised of six strategies: self-awareness; internalized moral and ethical perspective; establishing a positive, transparent, and lasting relationship; humbleness and being a good role model; commitment and resilience to overcome obstacles; and leaving a cultural legacy. The development guidelines required learning psychological concepts and approaches, which played a significant role in developing the practitioner to be knowledgeable and more capable to change his/her behavior sustainably (Dweck, 2016).

The concepts and approaches of the psychology of learning practices for self-development to become an authentic leader appear to highlight self-experience, a positive perspective on experiences, and self-action. Experiential learning was the learner-centered approach used to make the practitioners learn from direct experience, to analyze, and to summarize it as the core concept to apply to future practice. This was the integration to new learning (Kolb, 2015). Positive psychology capital, or PsyCap,

was the state of positive psychology of individual development that was expressed through having confidence in work, attempting a challenging mission, and the determination to overcome problems and obstacles to achieve success (Seligman, 1998). Modeling was the learning process from direct self-experience and observation of others' behavior, the understanding of differences and influences causing diverse morals, ethics, and values of the individual, as well as comprehension of the psychological and ethical principles (Bandura, 1986). Participative action learning was learning from group action, based on the learner's experiences to reflect the group's conceptual performance, leading to continual new knowledge, new different solutions, knowledge exchange among members, and knowledge to try out in the actual situation (Marquardt, 1999).

The above analysis, conclusion, and synthesis of the authentic leadership psychological strategies indicated a distinct innovation from conventional training strategies and other traditional development approaches. Furthermore, this would be beneficial in conducting an empirical study to evaluate the use of these newly-created strategies for enhancing innovative culture mindset on job performance of first-line managers in the automotive parts industry.

Research Objectives

1. To study the innovative culture mindset on job performance of first-line managers in the automotive parts industry.
2. To develop the authentic leadership psychological strategies for enhancing innovative culture mindset in

first-line managers in the automotive parts industry.

3. To evaluate the implementation of the psychological strategies for authentic leadership to strengthen the innovative culture mindset in first-line managers in the automotive parts industry, comparing with the practice of the innovation culture of the experimental group, before and after the experiment and after the follow-up.

4. To evaluate the satisfaction of first-line managers toward the developed psychological strategies after the experiment through focus group discussion.

Hypothesis

The level of the innovation culture mindset strengthened by the developed psychological strategies for the authentic leadership in first-line managers after the experiment and after the follow-up would be higher than before the experiment.

Research Methods

1. Research design

A mixed methods design implemented a quantitative method, which included the measurement of the practice of the innovative culture mindset of first-line managers and the evaluation of the psychological strategies for authentic leadership, through pretest, post-test, and follow-up design that were utilized with the qualitative method, involving an interview with the executive to examine problems and obtain the empirical data from the sample group to create the definitions, measurement, and research instrument, as well as conduct the focus group discussion of the experimental group, after implementing the psychological strategies for authentic leadership.

2. Population and sample group

The population was 2,250 first-line managers in the automotive parts industry at the Amata City Industrial Estate, Choburi Province, Thailand. The sample group consisted of two sub-groups.

2.1 Firstly, the sample group for studying the practice of the innovative culture mindset was comprised of males and females from the population group, multi-stage sampled from the population to obtain 345 samples (Kanjawasi et al., 2017).

2.2 Secondly, the sample group for evaluating the use of the psychological strategies for authentic leadership consisted of 20 persons, purposively selected from the first group, with the moderate score level for the innovative culture mindset and voluntarily participated in the project.

3. Research instruments

3.1 The rating scale of the innovative culture mindset on job performance of first-line managers in the automotive parts industry consisted of four aspects of the innovative culture mindset, with the Index of Item Objective Congruency (IOC) ranging between 0.60-1.00, the item discrimination between 0.486-0.782, and the reliability coefficient (alpha) of 0.94.

3.2 The psychological strategies for authentic leadership of the innovative culture mindset in first-line managers with the IOC from the three experts ranged from 0.60-1.00.

3.3 The focus group discussion among the experimental group was conducted after implementing the authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers.

Data Collection and Analysis

1. The qualitative data concerning the practice of the innovative culture mindset on job performance of first-line managers were collected by interviewing 35 executives, and the results of the four aspects were concluded to create the operational definitions and rating scale of the innovative culture mindset on job performance of first-line managers in the automotive parts industry.

2. The rating scale of the innovative culture mindset on job performance of first-line managers was validated by using the IOC from three experts. The research scale was then applied to the 345 samples to obtain the item discrimination and reliability.

3. The innovative culture mindset on job performance of first-line managers was determined by collecting data from the sample group of 345 participants and analyzing statistical data by using the statistical program.

4. The data were collected by using authentic leadership psychological strategies with the experimental group of 20 participants, according to the operation plan of eight times of three hours each and collecting data after a one-month follow-up. The statistical data were analyzed according to the research objectives, such as the mean and standard deviation, examining the score distribution of the innovative culture mindset of the experimental group, and applying non-parametric statistics to compare the score level of the innovative culture mindset of the experimental group.

5. The qualitative data were collected to evaluate the satisfaction of the executives toward the psychological strategies for authentic leadership, using the focus group discussion after the

experiment, and analyzing the qualitative data using analytic induction.

Research Results

1. The research results of the innovative culture mindset on job performance of 345 first-line managers indicated that the overall mean score and scores of each aspect, including knowledge, people, and process were at a high level ($\bar{X} = 3.88, 4.16, \text{ and } 3.99$, respectively) while collaboration was found to be at the highest level ($\bar{X} = 4.22$).

2. The study and development results of the authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers were comprised of six strategies: self-awareness; internalized moral and ethical perspective; establishing a positive, transparent, and lasting relationship; humbleness and being a good role model; commitment and resilience to overcome obstacles; and leaving a cultural legacy. The four mobilized psychological concepts, in terms of experiential learning, positive psychology capital (PsyCap), social learning from modeling, and participative action learning were applied to steer the six strategies.

3. The evaluation results of implementing authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers revealed that the average overall score of first-line managers in the experimental group before the experiment was at a high level ($\bar{X} = 3.80, SD = 0.23$) while after the experiment and after follow-up was at the highest level ($\bar{X} = 4.33, SD = 0.29$ and $\bar{X} = 4.44, SD = 0.39$, respectively). Refer to Table 1.

Table 1 The means of the innovative culture mindset on job performance of first-line managers of the experimental group, before and after the experiment and after the follow-up in each aspect and overall (n=20)

Innovative culture mindset on job performance of first-line Managers	Experimental group (n=20)								
	Pre-test			Post-test			After the follow-up		
	\bar{X}	SD	Inter preta tion	\bar{X}	SD	Inter preta tion	\bar{X}	SD	Inter preta tion
Knowledge	3.55	0.39	High	4.19	0.41	High	4.36	0.49	Highest
People	4.05	0.27	High	4.41	0.31	Highest	4.52	0.40	Highest
Process	3.59	0.39	High	4.28	0.40	Highest	4.38	0.48	Highest
Collaboration	4.02	0.56	High	4.44	0.38	Highest	4.51	0.48	Highest
Average	3.80	0.23	High	4.33	0.29	Highest	4.44	0.39	Highest

Before the experiment, the experimental group of first-line managers had a high average score of the overall innovative culture mindset whereas it was at the highest level after the experiment and follow-up. When considering each aspect, including knowledge, people, process, and collaboration, before the experiment, they were at a high level; knowledge after the experiment was at a high level while people, process, and collaboration were at the highest level. Moreover, after the follow-up, knowledge, people, process, and collaboration were at the highest level.

The normality test showed that the average of the innovation culture mindset after the experiment and follow-up had an irregular curve of distribution, which

was considered to be the significance of $< .05$. Therefore, the present researchers had to use non-parametric statistics to compare the data before and after the experiment and after the follow-up. It was found that the overall average scores of the experimental group, before and after the experiment and after the follow-up, were different, with a statistical significance of .01 ($X^2=29.792$). When comparing each aspect, knowledge, people, and process were different, with a statistical significance of .01 while collaboration was different, with a statistical significance of .05. To test the average score of the practice of the innovative culture mindset, overall and by each aspect, at a specific period of time, a paired comparison was conducted. Refer to Table 2.

Table 2 Comparison of the results of the overall scores and by each aspect of the innovative culture mindset of the experimental group, before and after the experiment and after the follow-up in the pair, by using Wilcoxon matched pairs signed ranks test (n =20)

Innovative culture mindset on job performance of first-line managers	Pre-test		Post-test		Post Follow-up		Comparison	Z
	Med	IQR	Med	IQR	Med	IQR		
Knowledge	21.00	3.75	24.50	3.75	25.50	6.00	Pre-test and Post-test	-3.674**
							Pre-test and Post-test	-3.833**
							Pre-test and Post-test	-.986
People	20.00	2.00	24.50	3.75	23.00	3.75	Pre-test and Post-test	-2.745**
							Pre-test and Post-test	-3.253**
							Pre-test and Post-test	-.834
Process	14.00	2.75	17.00	2.75	16.50	4.00	Pre-test and Post-test	-3.714**
							Pre-test and Post-test	-3.630**
							Pre-test and Post-test	-.695
Collaboration	16.00	2.75	18.00	2.75	19.00	4.00	Pre-test and Post-test	-2.359**
							Pre-test and Post-test	-2.589**
							Pre-test and Post-test	-.548
Overall	71.51	6.50	83.00	12.25	86.00	14.50	Pre-test and Post-test	-3.809**
							Pre-test and Post-test	-3.920**
							Pre-test and Post-test	-1.045

** Statistical significance of .01

An analysis of the results indicates that the average score of the practice of the innovative culture mindset, overall and by each aspect, of first-line managers in the experimental group, after the experiment and follow-up, was higher than before the experiment, with a statistical significance of .01. The score after the experiment and follow-up was similar. This reflected that the test result of the authentic leadership psychological strategies was retained during the follow-up period.

4. An analysis of the results of the quality data obtained from the focus group discussion, evaluating the satisfaction toward the authentic leadership psychological strategies for enhancing innovative culture mindset of the experimental group, using analytic

induction, showed that the satisfaction was at a high level.

Conclusions

1. The total mean score of innovative culture mindset of first-line managers was high; each dimension of knowledge, people, and process was high while the dimension of collaboration was at the highest level.

2. Authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers included six qualities, comprised of: 1) self-awareness; 2) internalized moral and ethical perspective; 3) establishing a positive, transparent, and lasting relationship; 4) humbleness and being a good role model; 5) commitment and resilience to overcome obstacles; and 6) leaving a culture legacy. They were

enhanced from psychological concepts comprised of experiential learning, positive psychology capital (PsyCap), modeling, and participative action learning.

3. The innovative culture mindset on job performance of first-line managers of the experimental group, after the experiment and after the follow-up, was significantly higher than before the experiment, at a .01 level.

4. A focus group report of the experimental group showed that the satisfaction was at the highest level with the authentic leadership psychological strategies for enhancing innovative culture mindset on job performance.

Discussion

The research results were discussed according to the objectives and hypothesis, as follows:

1. The research results of the innovative culture mindset on job performance of first-line managers in the automotive parts industry with 345 samples indicated that the total mean score of innovative culture mindset of first-line managers was high; each dimension of knowledge, people, and process was high while the dimension of collaboration was at the highest level. However, the empirical data and the results of the interview with the executive indicated that the new projects and development projects still had problems obstructing the expected achievement, caused by the weakness of the authentic leadership of first-line managers, who were considered to be the key factor to steer the innovation culture of the organization (*Autoliv Employee Development System*, 2016).

2. As for the authentic leadership psychological strategies for enhancing the innovative culture mindset on job

performance of first-line managers, the present researchers developed the psychological strategies comprised of: self-awareness; internalized moral and ethical perspective; establishing a positive, transparent, and lasting relationship; humbleness and being a good role model; commitment and resilience to overcome obstacles; and leaving a culture legacy. Four psychological learning concepts and procedures were utilized to steer psychological strategies through experiential learning, positive psychology capital (PsyCap), modeling, and participative action learning. The created strategies appeared to concur with the body of knowledge and research in the development of authentic leadership from both the Western and Eastern perspectives (Gardner, 2005; Luthans et al., 2007; George & Sims, 2007). Eventually, the acquired learning experiences allowed the first-line managers to be well-prepared and competent for problem-solving in the changing situations. An analysis of the results indicated that the average score of the practice of the innovative culture mindset, overall and by each aspect, of first-line managers in the experimental group, after the experiment and follow-up, was higher than before the experiment, with a statistical significance of .01 because learning from experience had occurred, creating a positive perspective. There is a learning process that takes place both from real practice and learning that arises from social learning by learning from models. The experience of learning will enable the first-line managers to use the experience to solve problems when facing similar situations.



3. The evaluation results of implementing authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers showed that the overall mean score of the innovative culture mindset and each aspect was higher than before the experiment, with statistical significance and consistent with the research hypothesis. This was because the use of the authentic leadership psychological strategies could stimulate the participants to pursue knowledge and to learn by continually searching for new concepts and innovations, and to take part in new tasks by quickly learning from their failures and successes. Additionally, this concurred with the study of Yungsuksathaporn (2016), who discovered that innovative culture occurred because the organization's members shared their engaged sense and goals, were aware of the necessity to create innovations, developed teamwork to enhance innovations, and implemented ideas leading to action in work performance. Moreover, this coincided with the research of Surapitchpong (2017), which indicated that learning by doing maximizes the understanding of the sample. The findings from the present research also revealed that the participation in planning encouraged the first-line managers' determination to accomplish the goals together, with increasing self-awareness, adjustment, future-oriented courage, and self-pride. The authentic leadership psychological strategies could, therefore, be considered

a new approach for enhancing innovative culture mindset on job performance of the sample group.

Recommendations

1. Recommendations for application

The research findings demonstrated that first-line managers had improved the innovative culture mindset after participating in the developed strategies, both after the experiment and follow-up. Thus, first-line managers who had not learned about the authentic leadership psychological strategies for enhancing innovative culture mindset on job performance of first-line managers should be educated and trained. The authentic leadership strategies should then be included in the curriculum for developing both the first-line managers and the organization's personnel, as a whole.

2. Recommendations for further research

2.1 Development of research instruments should be conducted to have more variety of tools and content.

2.2 The follow-up period should be extended with an interval for evaluation, such as three months, six months, or one year, in order to acquire more empirical data about the sustainability of the practice of the innovative culture mindset.

2.3 More variety of designs of qualitative research should be conducted to examine in-depth empirical data for this line of research.

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