MEDIATION ROLE OF INTRINSIC MOTIVATION IN TRANSMITTING THE EFFECT OF SELF-EFFICACY TO PROACTIVE WORK BEHAVIOR OF GENERATION Y OPERATION STAFFS IN THE AUTOMOTIVE INDUSTRY IN RAYONG PROVINCE, THAILAND

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ABSTRACT

The purpose of this research was to study the mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operational staffs in the automotive industry. The sample group was 450 generation Y operational staffs in the automotive industry in Rayong Province, Thailand. The data was analyzed by descriptive and inferential statistics through SPSS program and the structural equation model was analyzed by AMOS program.

The findings revealed that the sample group focused on the three variables at a high level. The results of structural equation model analysis were proved by congruence evaluation criteria including Chi-square probability of 0.055, relative Chi-square of 1.500, index of item objective congruence of 0.983, and root mean square error of approximation of 0.003. The result of research hypothesis test showed that the self-efficacy variables influenced the intrinsic motivation variables at statistical significance level of 0.001 with factor loading = 0.85.

The results of the study showed something interesting. The supervisors must promote, support, and encourage the employees to show their capacity effectively and efficiently by reflecting the outcomes of their work performance. Meanwhile, the supervisors should give their opinions freely on the guidelines for new work performance so that it would be changed for proactive work and better effective team work to create the employees’ proactive work behavior. The most important thing was the supervisors must look for something hidden inside each person as much as possible, such as behavior, ways of work performance, likes, and dislikes to motivate them to work effectively.

Keywords: Self-efficacy, Intrinsic Motivation, Proactive Work Behavior, Automotive Industry.

INTRODUCTION

Thailand 4.0 policy is an economic model driving the economic structure into the economics driven by innovation, technology, and creativity to overcome the middle income trap of the country. When the economic circumstances have been changed, the entrepreneurs, especially in the production and manufacturing sector, have to adapt themselves to make their business strong and sustainable. The Office of Industrial Economics (2020) revealed that the overall Manufacturing Production Index by the end of the last quarter of 2019 settled down 6.89 percent. It reflects that the economic condition of industrial sector have slowed down, especially automotive industry which the growth rate has fallen to 21.36 percent. Although the automotive
industry is considered one of the ten industry-related goals and targets, which is loading the economic system of the country with the problem of economic slowdown to become Thailand 4.0. Meanwhile, the Labour Productivity Index has slowed down 0.85 percent. It is considered that the capabilities of the labour productivity factor must be focused on. Therefore, it is necessary to run a business with competency and good preparation of the workforce.

Today the number of aging workforce has increased, on the one hand, the number of young workforce, especially the generation Y (between 19 and 38 years of age) has decreased gradually instead, it was found that the number decreased, respectively. In 2013, there were 19,711,638 people in this group, in 2014 there were 19,568,028 people and in 2017 there were 19,268,182 people (National Statistical Office, 2019).

These young workers are considered a very important workforce for industry, because Gen Y is a group of people who are currently in the working age. Gen X is a group of people who may be currently an executive (Jauhar et al., 2017). Therefore, the country has to depend upon the young workforce to drive the economic system. The chief executive officers must give them a chance, and motivate them to show their potential effectively. The organizations, however, have some difficulties merely creating motivation for the employees to achieve their goals. The employees themselves must realize their willingness and ability to complete the assignments given. In other words, the employees must be aware of their potential to create some motivations for themselves first (Bande et al., 2016). Meanwhile, if they realize their capacity, they will be happy to collaborate for proactive work (Tran et al., 2016). The employees, however, will be more proactive. If they have some intrinsic motivation so that they can create some manufacturing and working innovations as well. From the results of the Thai industrial economy in Q4/2018 from the Office of Industrial Economics 2019, it was found that the Manufacturing Production Index (MPI) expanded by 2.43 percent, continuing to expand from Q3/2018 to Quarter 4/2018 is the automotive industry. The production increased due to the improved domestic economy. In addition, auto manufacturers are launching new models to stimulate the market continuously. The automotive industry is one of the ten target industries that will lead the country's economy to Thailand 4.0. These are necessarily required by a potential labor force to be readied in various fields.

This point is a crucial personal motive of the researcher to study the mediation role of intrinsic motivation of transmitting the effect of self-efficacy to productive work behavior of generation Y operational staffs in the automotive industry in Rayong Province, Thailand in order that the outcomes of the study will be applied for supporting the employees’ potential and the strength of Auto Industrial Group in Thailand.

LITERATURE REVIEW

The Concept of Self-efficacy

The concept of self-efficacy basically describes the personal behavior and capabilities according to the interaction between personality and workplace environment (Aldholay et al., 2018). The self-efficacy is also a person’s belief in their ability with motivation to do things (Carter et al., 2016). And it is a personal judgment of potential on self-management or duty according to the organization guidelines provided (Attiq et al., 2017; Song et al., 2018a; Wang et al., 2020), and any task will be completed because all of the personal skills are fully used (Sardegna et al., 2018). It is a personal power of skills, intelligence, and necessary regulations to meet the needs in each situation (Hsu et al., 2017). If the tasks are successful, the person will
have more commitment and try to learn more challenging tasks (Lunenburg, 2011). The self-efficacy is an important predictor to make the person happy with their job (Abdul Ghani et al., 2019). One with low self-efficacy often gives up easily (Martínez-Martí & Ruch, 2017), on the other hand, one with high self-efficacy will be highly responsible, and creative to overcome the problems and obstacles to success (Pajares, 2003; Charkhabi et al., 2013), and help his/her colleagues to solve any problems related to the tasks or plan some proactive work very well (Ingusci et al., 2019).

**The Concept of Intrinsic Motivation**

The intrinsic motivation is derived from one’s inspiration or personality with the basis of self-confidence (Gheitani et al., 2019), and the self-efficacy can also affect any behavior (Song et al., 2018b). Moreover, the intrinsic motivation is also derived from satisfaction, pride, effort, commitment, and enthusiasm for the tasks more than ordinary people (Koen et al., 2019) or it can be one’s behavior driven by feelings or requirements that one can determine (Bande et al., 2016), and one believes in his/her ability, and it is derived from the preference of participating the tasks (Ryan & Deci, 2017; Su et al., 2020), as well as participating his/her interesting activities because of the requirements of learning, improving, and enhancing one’s capacity (Goldman et al., 2017), and one is happy to do more than to expect any return (Kroon et al., 2017; Shim et al., 2017; Fisher et al., 2019). The employees will get a successful performance at work because of the new successive behaviors and it is beneficial for themselves and overall organizations (Devloo et al., 2015). The intrinsic motivation is the most important factor which determines the employees’ effort (Ganjali & Rezaee, 2016). The employees with high intrinsic motivation usually work well and complete the tasks better than those with low intrinsic motivation (Klehe & Anderson, 2007; Koen et al., 2019). They usually concentrate on the tasks; find some new effective ways to work, and the solutions of problems (Su et al., 2020). Thus, the employees with high self-efficacy are a main key to lead their organization to success (Yasrebi et al., 2014).

**The Concept of Proactive Work Behavior**

It is concerned with one’s behavior showing enthusiasm or proactive personality that means positive aptitudes influencing the other people and it is a crucial indicator of one’s proactive effort (Yang & Chau, 2016). At present, the scholars consider that the employees’ enthusiasm affects the capabilities of proactive work for the positive change (Usmani & Siddiqui, 2016), and it is a positive behavior focusing on an individual’s future life (Lan et al., 2020) Bos-Nehles et al. (2017) explained that one’s behavior affects the performance and the effort of presenting some new ideas which are beneficial for employees’ team work or organizations. Moreover, it is not only presenting the ideas but also applying the concrete ideas and presenting necessary resources for work performance (Mutonyi et al., 2020). The proactive work behavior is the outcomes of innate motivation assumed that it is derived from the pride of the tasks provided (Brosi et al., 2018). This is in accordance with the research of Jawahar & Liu (2016) and Gulyani & Bhatnagar (2017) who claimed that one who has a proactive work behavior will have a chance to show more his/her capabilities, creativity, commitment, opportunity of learning things, carrier advancement and achievement than the others, and the important thing of a person’s proactive work behavior begins with changing oneself rather than adapting oneself to changing circumstances (Ling et al., 2017).
Objective

The objective of this research was to study the mediation role of intrinsic motivation of transmitting the effect of self-efficacy to productive work behavior of generation Y operational staffs in the automotive industry in Rayong province, Thailand.

Hypothesis

There are three hypotheses in this study.

\( H_1 \) The self-efficacy variable directly influences intrinsic motivation variable

Those with self-efficacy will be confident and happy with their work performance. Self-efficacy is inside each individual and it creates some energy and intrinsic motivation to complete his/her tasks effectively in accordance with the research of Bande et al. (2016) which claimed that self-efficacy creates self-confidence and intrinsic motivation to complete the tasks. This is also in accordance with the research by Consiglio et al. (2016) stating that several studies indicate that self-efficacy affects one’s effort with intrinsic motivation for a successful performance at work, and in accordance with the research of Tannady et al. (2019) specifying that the high self-efficacy affects one’s mind and inner feelings to motivate the employees to work effectively and efficiently.

\( H_2 \) The self-efficacy variable directly influences the proactive work behavior variable.

Self-efficacy is based on an individual’s belief in their own preferences, aptitude, skills or capacity to achieve their goals. If someone realizes their capacity, they can complete a task effectively and efficiently in accordance with the research of Lunenburg (2011) which claimed that self-efficacy affects the employees’ level of effort and persistence when learning different tasks, especially challenging and proactive ones; and in accordance with the research of Chen et al. (2013) stating that intrinsic motivation really affects the employees’ proactive work. This is also in accordance with the research of Charkhabi et al. (2013) stating that the employees with high self-efficacy will not give up and try to solve the problems to achieve their goals, and Mikami (2017) noticing the person’s self-efficacy influences the proactive work behavior from the starting point until the tasks have been completed. If the employees have high self-efficacy, they will have a good proactive work behavior as well (Bande et al., 2016; Ingusci et al., 2019).

\( H_3 \) Intrinsic motivation variable influences the proactive work behavior variable.

Whenever one has an intrinsic motivation, he/she can work effectively even though it’s difficult to complete the tasks. This is in accordance with the research of Amabile & Pratt (2016) which explained that the intrinsic motivation encourages the employees to work proactively and effectively. This is also in accordance with the research of Bande et al. (2016) which specified that the intrinsic motivation is related to the positively proactive work of the employees in order to present the creativity of work. The more intrinsic motivation they have, the more creativity they get. Meanwhile, there is evidence showing that the intrinsic motivation leads to the employees’ creativity. And this is also in accordance with the research by Minh-Duc & Huu-Lam (2019) stating that the intrinsic motivation has a crucial role for organizations to survive and create competitive advantages. This is also in accordance with the research by Su et al.,
(2020) which claimed that the intrinsic motivation of the employees is a main factor influencing the proactive work to present some new guidelines.

**METHODOLOGY**

This is a qualitative research. The population was the generation Y operational staffs in automotive industry, Rayong province, Thailand. Thinking about the appropriateness of the sample group, the researcher considered an appropriate sample group for the data analyzed by AMOS program with the techniques of analyzing the structural equation model: SEM. The researcher determined the sample size based on the study of Hair (2010) which suggested that the optimal sample size is 200-300 samples. And Comrey (1992); Hair (2010) suggested that the sample size used for research should be 10-20 times of the observed variables. There were 30 observed variables in this research. Therefore, the appropriate and sufficient sample size should be at least 10 X 30 (observed variables) =300 samples up to 20 X 30 (observed variables) =600 samples. The results of calculation were the lowest sample size that could be used to analyze the structural equation model. Therefore, 450 samples in this research which came from in the between 300-600 samples as above mentioned were sufficient and more than the lowest sample size that could be used to analyze the structural equation model and other statistics. The instrument used was a questionnaire with checklist and 5 points Likert scale. The descriptive and inferential statistics were used to analyze the data through statistical program. The multiple linear regression and structural equation modeling statistics were analyzed by AMOS program. The four congruence evaluation criteria for evaluating the data-model fit were (1) Chi-square probability of >0.05, (2) Relative Chi-square of < 2, (3) index of item objective congruence of > 0.90 and (4) root-mean square error of approximation of < 0.08.

**RESULTS**

The results of analyzing the mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operational staffs in automotive industry in Rayong Province, Thailand were described as follows Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>S.D.</th>
<th>Important level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Self-efficacy</td>
<td>4.18</td>
<td>0.54</td>
</tr>
<tr>
<td>2 Intrinsic motivation</td>
<td>4.09</td>
<td>0.56</td>
</tr>
<tr>
<td>3 Proactive work behavior</td>
<td>4.15</td>
<td>0.65</td>
</tr>
</tbody>
</table>

1. Generation Y operational staffs in the automotive industry in Rayong Province of Thailand weighed all factors at a very high level including self-efficacy, proactive work behavior and intrinsic motivation with the means of 4.18, 4.15 and 4.09, respectively.
2. The evaluation of the model fit of the mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operational staffs in automotive industry in Rayong province of Thailand showed that the Chi-square probability was 0.000, the relative Chi-square of was 4.422, fit index was 0.770, and root mean square error of approximation was 0.088 which did not pass the criteria of the SEM.
FIGURE 1
THE MEDIATION ROLE OF INTRINSIC MOTIVATION IN TRANSMITTING THE EFFECT OF SELF-EFFICACY TO PROACTIVE WORK BEHAVIOR OF GENERATION Y OPERATIONAL STAFFS IN AUTOMOTIVE INDUSTRY IN RAYONG PROVINCE, THAILAND IN STANDARDIZED ESTIMATE MODE

Table 2
STATISTICAL RESULTS OF THE CORRELATION ANALYSIS OF STRUCTURAL EQUATION MODEL AFTER THE MODEL ADJUSTED

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate Regression Weight</th>
<th>Square Multiple Correlation ($R^2$)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinic Motivation</td>
<td>0.85</td>
<td>0.72</td>
<td>***</td>
</tr>
<tr>
<td>Proactive Work Behavior</td>
<td>0.63</td>
<td>0.99</td>
<td>***</td>
</tr>
<tr>
<td>Intrinic Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Work Behavior</td>
<td>0.41</td>
<td>0.99</td>
<td>***</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE4</td>
<td>0.62</td>
<td>0.38</td>
<td>***</td>
</tr>
<tr>
<td>SE5</td>
<td>0.74</td>
<td>0.54</td>
<td>***</td>
</tr>
<tr>
<td>SE6</td>
<td>0.82</td>
<td>0.67</td>
<td>***</td>
</tr>
<tr>
<td>Intrinic Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INT2</td>
<td>0.58</td>
<td>0.34</td>
<td>***</td>
</tr>
<tr>
<td>INT7</td>
<td>0.82</td>
<td>0.68</td>
<td>***</td>
</tr>
<tr>
<td>INT13</td>
<td>0.74</td>
<td>0.55</td>
<td>***</td>
</tr>
<tr>
<td>Proactive Work Behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWB1</td>
<td>0.84</td>
<td>0.70</td>
<td>***</td>
</tr>
<tr>
<td>PWB2</td>
<td>0.73</td>
<td>0.54</td>
<td>***</td>
</tr>
<tr>
<td>PWB9</td>
<td>0.80</td>
<td>0.64</td>
<td>***</td>
</tr>
</tbody>
</table>

Note: ***Significant level at 0.001

Therefore, the researcher adjusted and improved the model based on the suggestions of Arbuckle (2011) by considering the results derived from the software with academic theory to
delete the inappropriate observed variables one-by-one, and then recalculated the evaluation. The results after adjusting the model showed that the Chi-square probability was 0.055, the relative Chi-square was 1.500, the fit index was 0.983, and the root mean square error of approximation was 0.033 that passed the criteria of the model fit with the empirical data as shown in Figure 1.

From Figure 1, the results of model analysis after adjusting the model to analyze the causal effects among the latent variables in the model, it was found that the hypothesis 1(H1) the self-efficacy variable directly influenced the intrinsic motivation variable at the statistically significant level of 0.001 with the weight of 0.85. The hypothesis 2(H2) the self-efficacy variable directly influenced the proactive work behavioral variable at the statistically significant level of 0.001 with the weight of 0.63, and the hypothesis 3(H3) the intrinsic motivation variable directly influenced the proactive work behavioral variable at the statistically significant level of 0.001 with the weight of 0.41. The statistical results of the SEM after adjusting the model were shown in Figure 1 and described in Table 2.

Table 2 showed statistical results of the correlation analysis of structural equation model after the model adjusted as follows. The self-efficacy variable consisted of three observed variables: 1) the variable of showing knowledge and skills to complete the tasks provided effectively (SE4) with weight of 0.62; 2) the variable of self-control when facing the difficulties at work (SE5) with the weight of 0.74; and 3) the variable of finding ways of the problem solutions (SE6) with the weight of 0.82.

The intrinsic motivation variable consisted of three observed variables as follows: 1) the variable of preference to difficult and challenging tasks (INT2) with the weight of 0.58; 2) the variable of curiosity which was the crucial motive behind the success of work (INT7) with the weight of 0.82; and 3) the most important variable of work performance which was being happy with the tasks provided (INT13) with the weight of 0.74.

The proactive work behavior variable consisted of three observed variables as follows: 1) the variable of creativity to find some new ways to apply the tasks provided (PWB1) with the weight of 0.84; 2) the variable of undertaking new ideas to improve the ways of work performance (PWB2) with the weight of 0.73; and 3) the variable of presenting the ways of enhancing the efficiency of the organization whenever having a chance (PWB9) with the weight of 0.80.

**DISCUSSION**

The results of analyzing the levels of significance for the mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operational staffs in automotive industry in Rayong, Thailand highly weighed the self-efficacy at the highest level with the mean of 4.18. It was clear that the generation Y staffs had high self-confidence, commitment and effort to work effectively. They always realized their self-efficacy. This is in accordance with the research of Jauhar et al. (2017) which explained that generation Y employees are confident in their actions, optimistic and willing for their future life goals. Moreover, they want to be accepted and admired for their effort at work. And, the research of Tannady et al. (2019) found that the self-efficacy is more concerned with a personal confidence than his/her ability in work performance or problem solutions.

For the relationship between variables of the structural equation model, the closest pair of relationship was between the variable of finding ways of the problem solutions (SE6) and the variable of creativity to find some new ways to apply the tasks provided (PWB1) at the statistically significant level of 0.001 with the relative Ch-square of 0.671. This was because of the
generation Y employees had enthusiasm, commitment and effort to accomplish the tasks assigned through their knowledge and capacities and also had the creativity to find new ways for the achievement of work performance through online social media. This is in accordance with the research Durucan et al. (2018) which found that generation Y employees are different from the other generation ones in terms of commitment to work performance, creative, and interested in online social media. Besides, Akhavan Sarraf et al. (2017) also found that generation Y employees have the preference to challenging tasks, set up the work outcomes and learn the mistakes from experience of activities they participated.

The self-efficacy variable influenced the intrinsic motivation variable with the highest weight of 0.85 at the statistically significant level of 0.001. This was because when the person realized a certain self-efficacy; they would have a certain intrinsic motivation for work performance. If the person realized that he/she did not have a certain self-efficacy, they would have a low intrinsic motivation for work performance. This is also in accordance with the research of Consiglio et al. (2016) stating that several studies indicate that self-efficacy affects one’s effort with intrinsic motivation for a successful performance at work, and in accordance with the research of Tannady et al. (2019) specifying that the high self-efficacy affects one’s mind and inner feelings to motivate the employees to work effectively and efficiently.

**CONCLUSION**

The mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operational staffs in automotive industry in Rayong Province, Thailand included three main variables which were described by its importance as follows.

For self-efficacy variable, the supervisors must promote and support the employees to have the tasks they are good at, and also encourage them to show their full skills. The supervisors could show the work outcomes of each employee and find some new ways to enhance the employee’s capacity.

For proactive work behavior variable, the supervisors should provide the employees a chance to express their ideas and present some new guidelines for work performance or the employees’ brainstorming of all departments may be held to change the ways of proactive work, improve some new ways of work performance to enhance the team work’s efficiency and share their suggestions to improve the overall organization’s efficiency.

For intrinsic motivation variable, the intrinsic motivation is something hidden inside an individual and difficult to see. Therefore, the supervisors must study the behavior, attitudes, values, and work performance ways of each person’s preference because if the employees like something, they will be willing to do that and encouraged to accomplish the tasks. And if they have any problem, they can find some solutions by themselves.

**Suggestions for Further Study**

1. More intrinsic motivation variables should be studied to know which factor encourages the employees to have a higher intrinsic motivation.
2. The population groups of different generations should be studied to compare the ways of proactive work behavior so that the executives will find the guidelines for more effective organization management.
3. Other variables should be studied more so that the executives will find the variables affecting the proactive work behavior.
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