The development and Multiple-group Analysis of Factors Influencing on Work Engagement among Teachers Who Did Not Desire to Move out and Who Were Reluctant in the Unrest Areas of Thailand (Pattani, Yala and Narathiwat).

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Abstract
This research aimed to develop and validate Structural Equation Model (SEM) of the Psychological Sufficiency (TRIPAK) which influence on Job Satisfaction (JS), Organizational Commitment (OC), Organizational Citizenship Behavior (OCB) and Work Engagement (WE) among both groups of teachers who desire and undesired to move out of the unrest areas of Thailand. Population is the teachers in the areas. Sample were derived from a multistage random sampling totally 1,266 teachers in Pattani, Yala and Narathiwat provinces. The results found that:

1) SEM modeling of factors influence on work engagement was highly consistent with the empirical data as can be seen from the statistical values: \( \chi^2 = 75.62, p = 0.071, \chi^2 / df = 1.28, GFI = 0.99, AGFI = 0.98, SRMR = 0.018 \) and \( RMSEA = 0.015 \) and were able to explain 68% of work engagement. 2) The multiple group analysis of the Structural Equation Model showed the model was invariant in terms of the model form, and the parameters in factor loading matrix and the matrix of causal effects between endogenous latent variables: \( \chi^2 = 142.83, df = 121, \chi^2 / df = 1.18, p = 0.085, GFI = 0.98 \) and hence, the models of both groups of teachers were congruent with the empirical data (Hypothesis 1). 3) The testing of hypothesis 2 was to test the invariance matrix of the component weight of LX and LY of both groups of teachers with Hypothesis 1. It was not refuted: \( \chi^2 = 149.04, df = 133, \chi^2 / df = 1.12, p = 0.161, GFI = 0.97 \) which meant that the model was congruent with the empirical data and its LX and LY had the invariance. 4) The testing of hypotheses 3-5 were to check the invariance in TD and TE, GA and BE, and PH and PS matrices respectively with Hypothesis 1, with the assumption that those parameters had equal values in both groups. It was found that the hypotheses were refuted. 5) The model that was most congruent with the empirical data was the model of Hypothesis 1 which specified no conditions and the one of Hypothesis 2 which specified the weight of LX and LY with Hypothesis 1. This could be seen from the ratio of \( \chi^2 \) and \( df \) which was the lowest and the p-value was almost 1 compared to models in other hypotheses.

Keywords: Multiple-group Analysis, Psychological Sufficiency, Work Engagement, Teachers in Unrest Areas of Thailand.
การพัฒนาและวิเคราะห์พหุกลุ่ม ปัจจัยที่ส่งผลต่อความทุ่มเทในการทำงานระหว่างครูที่ไม่ประสงค์ย้ายออกจากพื้นที่กับครูที่ประสงค์จะย้ายออกจากพื้นที่ที่ความไม่สงบของประเทศไทย (จังหวัดปัตตานี ยะลา และนราธิวาส)

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บทคัดย่อ
วิจัยครั้งนี้มีวัตถุประสงค์เพื่อพัฒนาและตรวจสอบความตรงของโมเดลสมการโครงสร้างจิตลักษณะแบบพอเพียงที่ส่งผลต่อความพึงพอใจในการทำงาน ความผูกพันองค์การ พฤติกรรมการเป็นสมาชิกที่ดีขององค์การ และความทุ่มเทในการทำงานระหว่างกลุ่มครูที่ตัดสินใจและไม่ตัดสินใจในการย้ายออกจากพื้นที่ที่สถานการณ์ความไม่สงบที่เกิดขึ้นในประเทศไทย ประชากรคือครูในพื้นที่จังหวัดปัตตานี ยะลา และนราธิวาส การได้มาซึ่งกลุ่มตัวอย่างใช้การสุ่มหลายขั้นตอน จำนวน 1,266 คน เมื่อพิจารณาจากตัวตัวแปรข้อมูลที่มี

1) โมเดลสมการโครงสร้างความสัมพันธ์เชิงสาเหตุของปัจจัยที่ส่งผลต่อความพึงพอใจในการทำงาน มีความสอดคล้องสูงกับข้อมูลเชิงประจักษ์ โดยพิจารณาจากค่าสถิติ (χ² = 75.62, p = 0.071, χ²/df = 1.28, GFI = 0.99, AGFI = 0.98, SRMR = 0.018 และ RMSEA = 0.015) และสอดคล้องกับการพยากรณ์ความพึงพอใจในการทำงานได้ร้อยละ 68
2) การวิเคราะห์กลุ่มพหุของโมเดลพบว่าโมเดลไม่มีการเปลี่ยนแปลงในด้านรูปแบบของโมเดล และในด้านค่าพารามิเตอร์ของเมทริกซ์น้ำหนักองค์ประกอบ และเมทริกซ์อิทธิพลเชิงสาเหตุระหว่างตัวแปรภายใน (χ² = 142.83, df = 121, χ²/df = 1.18, p=0.085, GFI= 0.98) ดังนั้นโมเดลทั้งสองของกลุ่มครูจึงมีความสอดคล้องกับข้อมูลเชิงประจักษ์
(สมมติฐานที่ 1) 3) การทดสอบสมมติฐานที่ 2 เพื่อทดสอบความไม่แปรเปลี่ยนของของเมทริกซ์น้ำหนักองค์ประกอบ LX และ LY ของกลุ่มครูทั้งสองกับสมมติฐานที่ 1 ไม่ปฏิเสธสมมติฐาน (χ² = 149.04, df = 133, χ²/df = 1.12, p=0.161, GFI= 0.97) ถ้ากล่าวคือ โมเดลไม่มีความสอดคล้องกับข้อมูลเชิงประจักษ์ และน้ำหนักองค์ประกอบของ LX และ LY มีความไม่แปรเปลี่ยน 4) การทดสอบสมมติฐานที่ 3-5 เพื่อทดสอบความไม่แปรเปลี่ยนของของเมทริกซ์ TD และ TE, GA และ BE และ PH และ PS กับสมมติฐานที่ 1 ตามลำดับ ภายใต้สมมติฐานที่กำหนดให้ค่าพารามิเตอร์ของกลุ่มครูทั้งสองมีค่าเท่ากัน พบว่าปฏิเสธสมมติฐานดังกล่าว 5) โมเดลที่มีความสอดคล้องกับข้อมูลเชิงประจักษ์มีที่สุดคือ โมเดลตามสมมติฐานที่ 1 ซึ่งไม่มีการระบุขอบเขตใดๆ และโมเดลตามสมมติฐานที่ 2 ซึ่งกำหนดค่าน้ำหนักองค์ประกอบของ LX และ LY ตามสมมติฐานที่ 1 โดยพิจารณาจากค่า χ² และค่า df ซึ่งมีค่าต่ำสุด และค่า p-value ซึ่งมีค่าเข้าใกล้ 1 เมื่อเทียบกับโมเดลตามสมมติฐานอื่นๆ

คำสำคัญ : การวิเคราะห์พหุกลุ่ม, จิตลักษณะแบบพอเพียง, ความทุ่มเทในการทำงาน, ครูในสถานการณ์ความไม่สงบของประเทศไทย
1. Introduction

The unrest in the southern border provinces of Thailand during the span of January 2004 to May 2011 has yielded 8,908 cases of shooting, bombing, arson and other forms of disturbance. There were approximately 3,471 deaths and 5,740 injuries. This has prompted an average of 1,342 teachers’ requests for moving out of the areas per year and resulting in the lack of teachers in the three southern border provinces. However, there were also been teachers who were still firmly committed to their work and had no desire to move out of the areas with the ratio of 11:1 (teachers who were still committed to their work and those who wanted to move out). Those reflected the commitment of devoting persons (Bakker & Schaufeli, 2008; Watcharin et al., 2011) which complied with many studies revealing that work engagement were related to organizational citizenship behavior (Salanova et al., 2005; Hakanen et al., 2006) organizational commitment (Leiter & Maslach, 2004; Cho et al., 2006) and job satisfaction (Harter et al., 2002; Richardsen, 2006). Moreover, it depends on the psychological characteristics or personality of the person. (Hurtz and Donovo, 2000; Watcharin et al., 2011).

The Thai Government to establish an education development plan for the special development region in the southern border provinces (2009-2012) specifying the needs to develop the psychological conditions and boosting the morale and encouragement of education personnel in the areas. Watcharin et al. (2011) suggest that more studies in the field of multi-group which involves psychological characteristics of the teachers in the areas in terms of work engagement amidst the unrest should be done using the Analytical Method of Multiple Group Structural Equation Modeling (MG) to study the characteristics of different variables between the teachers committed to their work in the area and those wanting to move out. This will suggest ways to prevent the lack of teachers and provide information for designing measures to support the teachers to do their duties effectively to develop their local youths’ and students’ education. The analytical technique used in analyzing information about the 2 subject groups having different distinctive characteristics together, with the study about the relationship among latent variables of psychological sufficiency, job satisfaction, organizational commitment, organizational citizenship behavior and work engagement will help prove which models are in concordance with the actual situation. The results of the study could be used to suggest ways to develop and support the teachers’ work engagement and improve their psychological condition for involving organizations and also to contribute to the body of knowledge of multiple group theory.

The research aimed to develop and examine the invariance of the linear structural equation model on psychological sufficiency influencing job satisfaction, organizational commitment, organizational citizenship behavior and work engagement of teachers who requested for moving away and those who stand fast in the areas of Pattani, Yala and Narathiwat.

2. Theoretical framework

This study extended on the previous knowledge from Watcharin et al. (2011) which was based on important research results of Bhanthumnavin’s Psychological Sufficiency (1998) a sub-study under Driving the Sufficiency Economy (2004) with the aim to put His Majesty King Bhumibol’s “Philosophy of Sufficiency Economy” concerning the way of life for well being emphasizing sufficiency and not aiming for what
is not needed in life or luxury into practice. The development according to the Philosophy of Sufficiency Economy covers 4 important aspects: economic, social, cultural and psychological. The psychological aspect consists of 3 groups of components: reasoning ability (intellectuality), psychological immunity (personality) and grateful attitude (attitude, morale, value and ethics). The study used the Psychological Sufficiency Test 2 constructed by a group of Thai prominent academics from many fields. They compiled, synthesized and summarized His Majesty’s ideas on Sufficiency Economy to construct a model to measure the psychological attributes of people in the Thai social context who respect and apply his ideas to their everyday life. This will instill true peace and happiness in the society.

The study of work engagement (WE) in the Thai context has been quite rare. Kahn’s study (1990) finds that assigning meaning of work, securities and variety in work are related to the characteristics of a person so that he will or will not engage himself to his role in work and the effects of work. Schaufeli et al. (2002) defines work engagement as the dimension of persistent and pervasive positive feelings and behavior in work. It consists of 3 components: vigor, dedication, absorption. Later the Utrecht Work Engagement Scale: UWES (Shceufeli & Bakker, 2003) was constructed and has been used widely. However, this study concentrated on 5 groups of important variables: psychological sufficiency (TRIPAK), job satisfaction (JS), organizational commitment (OC), organizational citizenship behavior (OCB) and work engagement (WE). Many studies have found that OCB is positively related to work engagement (May et al, 2004; Salanova et al, 2005; Lashinger & Finegan, 2005; Hakanen et al, 2006; Saks & Rotman, 2006). Important indicators for OCB are altruism, sportsmanship, and civic virtue (Organ, 1988).

The studies of Bogler & Somech (2004); Carmeli & Calakoglu (2005); Baker et al., (2006); Snape et al. (2006) indicates that OC has significant positive relationship with OCB. Besides, there are reports on the relationship between OC and WE (Leiter & Maslach, 2004; Cho et al, 2006; Saks & Rotman, 2006; Richardsen et al., 2006; Hallberg et al, 2007). The indicators of OC were affective commitment, continuous commitment and normative commitment (Mayer et al, 1993; Moss, 2007).

Cheng & Stockdale’s (2003) intercultural study reveals that JS of Chinese personnel in 6 international companies is positively related to OC proposed by Allen & Mayer (1990). This is in line with many reports findings that JS is positively related to OC (Schwepker, 2001; Kim et al, 2005; Salanova et al, 2005; Paulin et al, 2006). Furthermore, the relationships between JS and OCB (Yoon & Suh, 2003; Ackfeldt & Coote, 2005; Salanova et al, 2005; Hakanen et al, 2006) and WE (Harter et al, 2002; Salanova et al, 2005; Richardsen, 2006; Hakanen et al, 2006; Saks, 2006) are found with indicators being various. However, the important ones are intrinsic job satisfaction, extrinsic job satisfaction and general job satisfaction.

3. Methodology

This study used the Multiple Group Structural Equation Model to study the attributes among different variables in teachers who requested to move out to other areas and those who stayed. The study was based on the research results of Watcharin et al, (2011). The same subjects were used but different analytical approach was employed to gain information for the research questions.

3.1 Participants

The subjects were teachers teaching in
the 3 southern border provinces in the second semester of 2011 academic year under the Education Service Area Office, Administration Committee Promoting Private School Education Office and Local Education Administration Office. Multi-stage random sampling was used to select 1,500 subjects from those in Watcharin et al, (2011) for this follow up study. Totally 1,266 questionnaires (84.40%) were returned, 982 from those who did not desire to move out and 283 from those who did.

3.2 Instrument

The instruments used in this study were five questionnaires designed to focus on each different latent variables analyzed in this model (See figure 1). They were 1) Psychological sufficiency, Paper 2 (TRIPAK) with the questionnaire reliability of 0.85. The content was divided into three parts: reasoning ability (RASON) with the reliability of 0.83, psychological immunity (IMMU) with the reliability of 0.87, and grateful attitude (GRATE) with the reliability of 0.86. 2) The questionnaire about job satisfaction (JS) with the questionnaire reliability of 0.90 was divided into three aspects: intrinsic job satisfaction (INTRINS) with the reliability of 0.88, extrinsic job satisfaction (EXTRINS) with the reliability of 0.85, and general job satisfaction (GENRL) with the reliability of 0.78. 3) The questionnaire on organizational commitment (OC) with the questionnaire reliability of 0.75 included three aspects: affective commitment (AFFCTV) with the reliability of 0.72, normative commitment (NORMTV) with the reliability of 0.86 and continuous commitment (CONTNS) with the reliability of 0.74. 4) The questionnaire on organizational citizenship behavior (OCB) with the questionnaire reliability of 0.86 consisted of five aspects: altruism (ALTRUISM) with the reliability of 0.79, conscientiousness (CONSCIEN) with the reliability of 0.76, courtesy (COURTESY) with the reliability of 0.67, sportsmanship (SPORTMAN) with the reliability of 0.65 and civic virtue (CIVIC_V) with the reliability of 0.71. 5) The questionnaire about work engagement (WE) with the questionnaire reliability of 0.92 was divided into three aspects: vigor (VIGOR) with the reliability of 0.89, dedication (DEDICATN) with the reliability of 0.80 and absorption (ASORPTN) with the reliability of 0.75. Component analysis was used as a second measure to confirm whether the components of the questionnaires developed based on the theory were in concordance with the empirical data. It was found that the weight of all the components was statistically significant at 0.05.

4. Data Analysis

The construct validity of all the 5 questionnaires was analyzed by using a statistical program for means, standard deviation, KMO value, Value of Bartlett’s Test of Sphericity, and Pearson’s correlation observable values of the variables. Then the correlation matrixes was constructed for secondary confirmation whether the components of the questionnaires developed according to the theory were congruent with the empirical data. After that, analyzing the data to find variables influencing work engagement and using them as a basis for all the models.

5. Results

The results of general information about the 1,266 subjects revealed that there were more females (75.50%) than males. Most of them were in the age range of 26-30 years (32.23%). Most were Muslims (55.13%). 87.60% were bachelor’s degree holders and most (87.60%) were married. 63.11% had their hometown in the three southern border provinces and 81.6%
had experience in working in the areas for more than 10 years. 31.15% had an average income of 10,000-15,000 baht/month. 40.68% worked in Narathiwat, followed by 37.12% in Pattani and 22.20% in Yala. 72.25% worked under the Educational Service Area Office, 19.84% under Private School Education Office, and 7.41% under Local Administrative Organization.

The results of the analysis of the linear structural equation models of factors influencing work engagement of teachers in the 3 southern border provinces showed that the model had high validity as can be seen from the statistical values: \( \chi^2 = 75.62, p = 0.071, \chi^2/df = 1.28, \text{GFI} = 0.99, \text{AGFI} = 0.98, \text{SRMR} = 0.018 \) and \( \text{RMSEA} = 0.015 \). Hence, it could be concluded that the model was congruent with the empirical data.

Figure 1 The SEM model of factors influencing work engagement of teachers working in the areas.

From Table 3, it was found that the \( R^2 \) values of WE, OCB, OC and JS were .68, .48, .50 and .09 respectively, most of which were high values. The variables in the model together could predict WE at 68%. The variables with total positive influence on WE were OCB (\( R^2 = 0.27, \text{SE} = 0.05, t = 5.60 \)), JS (\( R^2 = 0.13, \text{SE} = 0.09, t = 12.56 \)), TRIPAK (\( R^2 = 0.10, \text{SE} = 0.01, t = 6.93 \)) and OC (\( R^2 = 0.07 \text{SE} = 0.06, t = 1.02 \)).

The results of the test of the invariance of the causative model of factors influencing work engagement of teachers who desired to move out of the areas and those who did not (Hypothesis 1) showed that the invariance of the model existed (\( \chi^2 = 142.83, \text{df} = 121, \chi^2/df = 1.18, p = 0.085, \text{GFI} = 0.98 \)) and hence, the models of both groups of teachers were congruent with the empirical data as shown in Table 3.

Hypothesis 2 testing was to test the invariance of the component weight of LX and LY of both groups of teachers with Hypothesis 1. It was found that the hypothesis was not refuted (\( \chi^2 = 149.04, \text{df} = 133, \chi^2/df = 1.12, p = 0.161, \text{GFI} = 0.97 \)) which meant that the model was congruent with the empirical data and its LX and LY had the invariance.

The Hypotheses 3-5 testing was to check the invariance in TD and TE, GA and BE, and PH and PS matrixes respectively with Hypothesis 1, with the assumption that those parameters had
equal values in both groups. It was found that the hypotheses were refuted: TD and TE matrix ($\chi^2 = 266.40$, df= 195 $p=0.00$ GFI= 0.94), GA and BE matrix ($\chi^2 = 278.07$, df=205 $p=0.00$ GFI=0.93) and PH and PS matrix ($\chi^2 = 293.00$, df=209 $p=0.00$ GFI= 0.93). The chi-square values confirmed that all models were different but not statistically significant ($\chi^2=117.36$, 11.67 and 14.93; df= 62, 10 and 4; $\chi^2 = 79.08$, 18.31, 9.49 respectively).

The model that was most congruent with the empirical data was the model of Hypothesis 1 which specified no conditions and the one of Hypothesis 2 which specified the weight of LX and LY with Hypothesis 1. This could be seen from the ratio of $\chi^2$ and df which was the lowest and the p-value was almost 1 compared to models in other hypotheses.

Table 1 Primary statistical values of exogenous variables in the teachers’ work engagement model classified by their desire to and not to move out of the areas

<table>
<thead>
<tr>
<th>Teachers who do not desire to move out of the areas</th>
<th>Teachers who desire to move out of the areas</th>
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<td>Variables</td>
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<td>ASQRTN</td>
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Table 2 Results of regression analysis in the linear structural equation model

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<th>Latent variables</th>
<th>$R^2$</th>
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<td>TE .09**</td>
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<td>OC</td>
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<td>.98**</td>
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<td>TE .10**</td>
<td>.98**</td>
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<tr>
<td>OCB</td>
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<td>.58**</td>
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<td></td>
</tr>
<tr>
<td>WE</td>
<td>.68</td>
<td>DE -.02</td>
<td>.92**</td>
<td>-.02</td>
<td>.27**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IE .12**</td>
<td>.22**</td>
<td>.09**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TE .10**</td>
<td>.13**</td>
<td>.07</td>
<td>.27**</td>
<td></td>
</tr>
</tbody>
</table>

DE = Direct Effect, IE = Indirect Effect, TE = Total Effect, * p < .05, ** p< .01

The Hypotheses 3-5 testing was to check the invariance in TD and TE, GA and BE, and PH and PS matrixes respectively with Hypothesis 1, with the assumption that those parameters had equal values in both groups. It was found that the hypotheses were refuted: TD and TE matrix ($\chi^2=266.40$, df=195 p=0.00 GFI=0.94), GA and BE matrix ($\chi^2=278.07$, df=205 p=0.00 GFI=0.93) and PH and PS matrix ($\chi^2=293.00$, df=209 p=0.00 GFI=0.93). The chi-square values confirmed that all models were different but not statistically significant ($\chi^2=117.36$, 11.67 and 14.93; df=62, 10 and 4; $\chi^2=79.08$, 18.31, 9.49 respectively).

The model that was most congruent with the empirical data was the model of Hypothesis 1 which specified no conditions and the one of Hypothesis 2 which specified the weight of LX and LY with Hypothesis 1. This could be seen from the ratio of $\chi^2$ and df which was the lowest and the p-value was almost 1 compared to models in other hypotheses.

Table 3 Test results of the hypothesis on model and parameters invariance

<table>
<thead>
<tr>
<th>H</th>
<th>Model according to the hypothesis</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>p</th>
<th>GFI</th>
<th>$\Delta\chi^2$</th>
<th>$\Delta$df</th>
<th>$\chi^2$ Values from the table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Invariant model</td>
<td>142.83</td>
<td>121</td>
<td>1.18</td>
<td>0.085</td>
<td>0.98</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>LX LY invariant with $H_1$</td>
<td>149.04</td>
<td>133</td>
<td>1.12</td>
<td>0.161</td>
<td>0.97</td>
<td>6.21</td>
<td>12</td>
<td>21.03  26.22</td>
</tr>
<tr>
<td>3</td>
<td>TD TE invariant with $H_2$</td>
<td>266.40</td>
<td>195</td>
<td>1.36</td>
<td>0.000</td>
<td>0.94</td>
<td>117.36</td>
<td>62</td>
<td>79.08  88.38</td>
</tr>
<tr>
<td>4</td>
<td>GA BE invariant with $H_3$</td>
<td>278.07</td>
<td>205</td>
<td>1.35</td>
<td>0.000</td>
<td>0.93</td>
<td>11.67</td>
<td>10</td>
<td>18.31  23.21</td>
</tr>
<tr>
<td>5</td>
<td>PH PS invariant with $H_4$</td>
<td>293.00</td>
<td>209</td>
<td>1.40</td>
<td>0.000</td>
<td>0.93</td>
<td>14.93</td>
<td>4</td>
<td>9.49   13.28</td>
</tr>
</tbody>
</table>
Figure 2 The comparison of invariant model between two groups (H₁: Invariant model and H₂: LX LY invariant with H₁)
Discussion

The linear structural equation model of work engagement of teachers in the areas was found able to explain the variance of work engagement at 68% and was reliable and acceptable. The four variables influencing work engagement of teachers in the areas were arranged respectively as follows:

1) Latent variable in terms of job satisfaction was direct and indirect influence as well as positive overall influence on work engagement. This is in concordance with the results of Hakenen et al.’s study (2006) which finds that work engagement are related to job satisfaction. That is, when a person is satisfied with his work, he would dedicate and devote himself to achieve the goals set for the work. The studies of Newstrom & Davis,1993; Schultz & Schultz; 1998 also indicate that job satisfaction results from work and other related factors as seen by each individual, for example, likes and dislikes. If a person likes and is interested in the work, he presumably has high level of satisfaction with that job to start off with.

The researcher noted that the negative social environment such as violence which happened everyday would lead to decreased job satisfaction because satisfaction was related to a person’s affective components on the work he did. Lock (1976) suggest that job satisfaction depends upon many factors, both work-related and environmental-related. If one considers the size of the influence in the model, it can be seen that job satisfaction was influenced by psychological characteristics of each individual, for example, reasoning ability, positive thinking, perception of existing problems and being able to stay put amidst all the problems. All these reflect the cognitive domain and affective domain of each individual that affect their job satisfaction and eventually develop into organizational commitment (Newstrom & Davis, 1993). The above-mentioned components also lead to acceptance of organizational goals (Schwepker, 2001; Jarmilo et al., 2005) and then to OCB. (Yoon & Suh, 2003; Kamdar et al, 2006; Foote & Tang, 2008; Van Dick, 2008). If such behavior continues, it will lead to higher level of work engagement (Daehlen, 2008; Watcharin et al, 2011).

2) OCB was direct influence and positive overall size of influence on work engagement which could be measured by 5 variables: altruism, courtesy, sportsmanship, civic virtue and conscientiousness. This is in concordance with Katz’s study (1964, cited in Bolon, 1997: 221-242) which finds that OCB are related to in-role behavior and extra-role behavior. Both result in work engagement (Lashinger & Finegan, 2005). Likewise, the studies of Macey & Schneider (2008); Kahn, (1990); May et al, (2004); Salanova et al, (2005); Hakanen et al, (2006); and Saks & Rotman, (2006) conclude that work engagement is not only about psychological condition but also roles and positive behavior that a person specifies for himself in doing his work. This was also congruent with the findings of many researches indicating the relationship between OCB and work engagement.

3) Psychological sufficiency which could be measured by 3 observable variables, namely, reasoning ability (RESON), psychological immunity (IMMU), and grateful attitude (GRATE), were significantly negative direct influence on work engagement (WE). Considering the component weight of the observable variables used in measuring psychological sufficiency (TRIPAK), it was found that psychological immunity had the highest component weight, followed by reasoning ability and grateful attitude. It could be explained that psychological immunity led to careful
decision-making which considered all factors involved and expected results, and appropriate risk-taking of teachers who did not desire to move out of the areas and those who did with respective means of 5.058 and 4.818. (See Table 1). Hence, it was undeniable that the long-lasting unrest had affected the psychological condition of the teachers, causing them to live their life with apprehension. The unsafe environment affected their psychological condition and hence bore negative influence on their work engagement. Their present psychological condition was like a filter blocking the attempt to engage in work of each individual (Khan, 1992). This was in concordance with the work of Harter & Schmidt (2006) which indicates that work engagement has negative relationship with threat in work. Likewise, Macey & Schneider (2008) pinpointed that the negative psychological condition in terms of safety would negatively affect the attempt to engage in work.

4) Organizational commitment which could be measured by 3 observable variables: affective commitment, normative commitment and continuous commitment were significantly negative direct influence on work engagement. The theoretical definition defines affective commitment as emotionally wanting to be a member of the organization, to be bound by work and united to the organization; and perceiving oneself as part of the organization. Continuous commitment, on the other hand, was built on what to be given in return or the benefit of what was given such as pay, welfare, benefits or other work conditions. Normative commitment was the commitment based on the realization or perception that it was the responsibility of a person to continue working with the organization (Mayer et al, 1993). Hence, organizational commitment reflects the level of perception of the relationship between a person and the organization he belongs to. Such perception is a positive feeling that a person has towards the organization and binds his identity to it in terms of strong relationship expressed by the unity of all members (Steers, 1977) and the desire to continue being so (Porter et al, 1974). However, the teachers working amidst the unrest which was likely to be even more violent and the 1,342 requests to move out of the areas or to work without position in other provinces all resulted because of the combination of the situation and the teachers’ organizational commitment. The prolonged unrest certainly affected people’s feeling because the variables from the unrest involving the social system led to worries which were called by Kahn (1992) as “individual distractions” which eventually affected the psychological safety. The accumulation of that feeling would lead to the sense of being that they have at present and turn it into the desire for “withdrawal” from the situation and erosion of work engagement. Hence, it was possible that the unrest had caused pressure, insecurities and lack of peace of mind to people in the areas. If unable to withstand that pressure, some might withdraw from the situation while some might not.

5) The results of the analysis of multi-group with Lisrel Program to test the invariance of the model of work engagement of the two groups confirmed that the correlation matrix between the variables of the two groups had the model invariance but with the variance of parameter values. As a result, it was possible to use the model of work engagement with both groups of the teachers. If considering the influence weight of each latent variable, psychological sufficiency was found to have direct influence on organizational citizenship behavior as could be seen that the weight was not different between
teachers who did not want to move out and those who did. The finding showed that their psychological basis of being a teacher and their work behavior in the teaching profession were not different. This might have been the results of the incubation period of teacher training and the work in real situation which made them absorb the “teacher-ness” both by profession and by “heart”. This was like the positive psychology which explains the work behavior of teachers in the Thai context in which moral and ethical standards in the teaching profession are specified with the aim for the effectiveness in instilling all benefits for the learners (Bhanthumnavin, 1998). The data analysis in this study indicated that the putting together of variables in analyzing factors affecting work engagement had different conditions in putting the variables from both groups of the teachers together. This finding could be applied in policy making that if work engagement is to be developed, causal variables with high level of influence and those with negative influence should be dealt with urgently.

As for the goodness of fits in the measurement to test the invariance of the parameters in matrices, TD TE GA BE PH and PS were different in both groups since the data collected from each group were different in number. The principle of the analysis of the components of the goodness of fits term of the variables in the model instead of the specific variance was different according to the desire of the teacher to stay or to move out of the situation.

**Recommendation**

1) The education institutions involved in the production of graduates in the teaching profession should include in their curriculum the content aimed to encourage and develop the graduates’ attributes to be psychologically sufficient and concerns about work engagement in their profession. Also the focus should be on developing the graduates to work in the profession and at the same time developing other organizations involved.

2) Competencies in work engagement and psychological sufficiency should be specified as indicators of the teaching profession standards and it could be used firstly with schools that are ready before extended to other schools in the network afterward.

3) The executives related to the determination of educational policies should support work engagement to teachers, by determining the strategies which emphasize psychological sufficiency, OCB, job satisfaction and organizational commitment in accordance with the discovery from the research, especially in terms of psychological sufficiency, concordant with community’s way of life in each area, as well as co-determining the methods to lead into practical plan, in order to embed psychological sufficiency, to become the morale of mind which teachers have to uphold. These policies can take affect to the performance in accordance with the way of system development of governmental officials, which concentrate to the highest benefits to the educational system, society and nation in the future.
References


