

Eustress: A Key to Improving Job Satisfaction and Health among Thai Managers Comparing US, Japanese, and Thai Companies Using SEM Analysis

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Abstract

Eustress or positive stress is defined as stress which enables employees to perform better and increase their job satisfaction. This study confirms that eustress is a key factor in motivating employees to achieve high performance and enhanced job satisfaction. Not enough eustress lead to employee boredom and turnover. On the other hand, large amount of negative stress or distress significantly leads to physical and psychological illness. Exclusive stimulation or too much negative stress is likely to cause illness. Both quantitative and qualitative data were collected for this research. Structural equation modeling techniques were used for statistical data analysis together with in-depth interview analysis of Thai managers reporting to US, Japanese, and Thai senior managements.

Keyword: Positive stress (Eustress); Negative stress (Distress); Job Satisfaction; Illness; Management styles

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ความเครียดด้านบวก: ปัจจัยสำคัญในการนำไปสู่การปรับปรุงความ
พึงพอใจในการทำงานและสุขภาพของพนักงาน เป็นการศึกษา^{*}
เปรียบเทียบระหว่างผู้จัดการในบริษัทอเมริกา ญี่ปุ่น และไทย
โดยใช้การวิเคราะห์โมเดลสมการโครงสร้าง

กฤษ จรินโท*

บทคัดย่อ

ความเครียดด้านบวกเป็นสิ่งที่กระตุ้นให้พนักงานภายในองค์กรสามารถปฏิบัติงานได้ดีขึ้นและมีความพึงพอใจในงานของตน. จากการศึกษานี้สามารถยืนยันได้ว่าพนักงานควรมีความเครียดในระดับที่เหมาะสมจึงจะทำให้พนักงานมีแรงจูงใจในการทำงานมากขึ้น ซึ่งเป็นปัจจัยสำคัญในการที่จะทำให้พนักงานมีความท้าทายในงานที่ตนเองรับผิดชอบและลุ้นผลทำให้อัตราการลาออกจากลดลง. ถึงอย่างไรก็ตามการที่ผู้จัดการสร้างแรงกดดันในการทำงานมากจนเกินไปจะลุ้นผลทำให้พนักงานเจ็บป่วยทั้งทางด้านร่างกายและจิตใจ. การศึกษาระบบนี้เป็นการศึกษาโดยใช้เชิงปริมาณและเชิงคุณภาพ การวิเคราะห์โมเดลสมการโครงสร้างพร้อมกับการสัมภาษณ์เชิงลึกเพื่อเป็นการยืนยันผลกับผู้จัดการ คุณไทยที่ปฏิบัติงานอยู่ในองค์กรที่เป็นของอเมริกา ญี่ปุ่น และไทย

คำสำคัญ: ความเครียดด้านบวก ความเครียดด้านลบ ความพึงพอใจในการทำงาน
ความเจ็บป่วยและรูปแบบการบริหารองค์กร

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Introduction

According to a seminar organized by Thailand's Ministry of Health and the World Health Organization or WHO (2003), the number of Thai citizens threatened by stress accounts for over twelve million persons or approximately twenty percent (20%) of Thailand's total population. Job stress has increased in current society to the extent that it has been predicted by Health Ministry Academics that the year 2010 will become the decade of stress.

Due to huge multinational companies investing in Thailand, Japanese firms have sent expatriate managers to oversee their businesses. These expatriate managers are thus important to the success or failure of the businesses. Expatriate managers have to adapt to managing cultural differently and this influences their leadership styles, norms, role expectations, and the relationship among various members of the new society.

The causes of stress in the workplace are different according to each individual case. That is to say, stress in different persons, different jobs, and different careers is normally caused by different reasons (Ministry of Public Health, 2001). A study by Srithanya Hospital found that the career most perilous in terms of stress disease is the high-ranking executive, as it involves decision-makings and accountability for numerous key issues. Currently, it is found that executives suffer from stress amounts at 70% (Department of Mental Health, 1998).

According to Fatehi (1996), cultural differences are strong determinants of effective leadership behavior in a society. He also argued that what constitutes a good leader in one culture may not constitute a good leader in other cultures. Hence,

possible conflicts between foreign managers and Thai staff might arise partly because of different perceptions of management styles. For instance, management styles that appear effective with Japanese employees may not be so viewed by Thai employees due to differences in their respective cultures. Consequently, this research will explore the differences among US, Japanese, and Thai managers' perceptions and their Thai employees' perceptions of effective management styles. It is designed to discover what factors are effective in reducing negative stress, and increasing positive stress, job satisfaction, and good health among Thai middle managers that work for foreign companies.

Purpose of the study

The purpose of study is: first, to investigate the degree of eustress and distress existing in Thai middle managers reporting to senior manager from United states, Japan, and Thailand; second, to investigate the effects of positive and negative stress on job satisfaction and health among Thai middle managers reporting to US, Japanese, and Thai senior management.

Literature Review

Stress has been defined in many ways Selye (1956), for example, states that "stress occurs naturally that response from demand of situation surrounding, stress effects to psychological and physical patients".

Selye, the father of stress and, a medical doctor (1974), divided stress into two stressors which depend on the outcomes or response to stress, as follows:

1. Distress means the individual experiences negative emotions such as anxiety or worry perhaps upon retiring. Physical effects may follow such as headaches or diarrhea.
2. Eustress pertains to an exciting event stimulating a person to feel glad or happy, like a bride before the marriage ceremony. She is so happy and she cannot sleep.

Eustress vs. Distress

Negative stress is a factor contributing to organizational inefficiency. It often results in a high staff turnover rate and, absenteeism because of sickness, decreased quality of work, and an increase in costs of health care (Peggy & Marcia, 2001). A survey by Northwestern National Life indicated that 40% of American workers perceived that they suffer from their jobs to an extreme extent (U.S. Department of Health and Human Service, 1999). Moreover, the estimated cost of stress-related illness in the U.S. industry was reported in 1995 to be approximately \$13,000 per employee per year (Bruhn, et al., 2008).

Negative stress also causes economic and social losses, especially for businesses. These losses come from ineffective work due to sickness, which decreases both time at work and profit (Bhagat, McQuaid, Lindholm, Segovis, 1985). Furthermore, people that suffer from negative stress often apply ineffective methods to seek release from it such as drinking, smoking, taking drugs, and shopping. Some employees have indulged themselves in gambling, and some have committed suicide (Mehri, 2000).

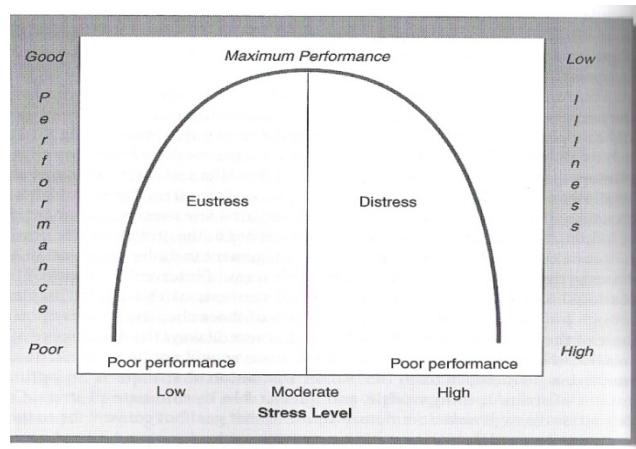
In everyday language, when people speak of stress, they are actually referring to distress. However, an individual's psychological response to a stressor is only labeled distress if the response is interpreted as having negative implications for the individual's well-being.

Stress has a positive side, called eustress, that is less well-known and less frequently used in colloquial language. Eustress or "good stress" refers to a psychological response to a stressor that is interpreted as having positive implications for well-being, according to Selye (1983). These positive implications include positive psychological and physical states (Lazarus, 1993). Distress and eustress represent distinct constructs and are not at opposite ends of a continuum (i.e., the lack of distress does not indicate the presence of eustress (Quick, 1997).

According to Simmons (2000), positive stress and negative stress cannot be definitely separated. They are mixed together like water in a bathtub. Positive stress is like cold water whereas negative stress is like hot water. When hot and cold water are filled into a bathtub they will be combined and the water temperature will be determined by the quantity of hot and cold water.

Additional theoretical support for the conceptual distinction between eustress and distress was found by Lazarus and Folkman (1984). They state that distress reflects the appraisal of a threat results, whereas positive stress reflect a challenge or opportunity results also.

Figure 1: An Expanded Yerkes-Dodson Curve Law



Source: adapted from Quick et al., 1997

Yerkes-Dodson suggests that eustress results from the intensity and frequency of the stress response. The expanded version of Yerkes-Dodson law represents enstress as the optimum level of exposure to a stressor (stimulator) for an individual (See Figure 1). According to the law, maximum performance results when individuals are stressed to this optimum level.

The high performance of employees is critical to the success of organizations. Too often managers rely on punishment to manage poor performance and to correct mistakes because it produces a relatively immediate response from employees. This management approach of using punishment tends to result in negative stress caused by fear of further punishment for future mistakes. Worker dissatisfaction is a result (Swierczed & Onishi, 2003) Thus can be defined as "a superior's application of a negative consequence or the removal of a positive consequence following an employee's undesirable behavior with the intention of decreasing the frequency of that behavior" (Butterfield, Trevino & Ball, 1996); (Hopen,

2004). The use of punishment often creates conflicts within the organization, which then leads to loss of trust and loyalty, loss of productivity, dissatisfaction, and an increase in stress levels (Challagalla & Shervani, 1996); (Doby & Caplan, 1995).

Punishment not only creates negative stress in recipients, but also its negative effects spread to other employees who observe the punishment contribution to reinforcement theory.

A qualitative study demonstrated that both recipients and observers of punishment lost respect for the punishers and developed negative attitudes toward the organizations. In observing the punishing to be unfair, the observers felt stressed and worried they would be punished also in the future.

Positive reinforcement is the application of something pleasant following a good or improved performance of a particular task (Robbins, 2003). Multiple fields and laboratory experiments have shown that the use of positive reinforcement is a most effective behavior modifier (Challagalla & Shervani, 1996). Moreover, the positive and negative stresses are directed affect to health in all type of organization significantly (Little, Simmons, and Nelson, 2007).

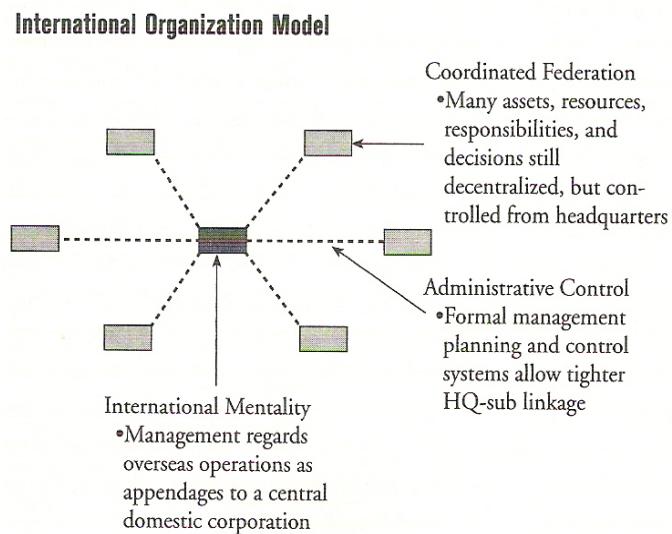
US Management Style

US managers are learning to practice positive reinforcement to shape employee behavior in an effort to improve performance, remove stress, and increase job satisfaction. Positive reinforcement is the application of something pleasant following a good or improved performance of a particular task (Gibson, Ivancevich, Donnelly, Konopaske, 2003, p.157). Fewer US firms use punishment such as threatened dismissal or prosecution. Instead, they use rewards to encourage honest behavior, which has proven to be quite effective (Challagalla & Shervani, 1996).

US management style has been called the International Organization Model. The key objective is to transfer knowledge and expertise to subsidiaries adapted to the cultural environments. The subsidiaries are usually less advanced in technology or market development. While the headquarters provides strategic plans to subsidiaries to coordinate and follow, these plans need to be in alignment with the culture within which subsidiaries exist. For this to happen, it is necessary for the corporate headquarters to learn about the organizational culture from employees in the subsidiaries (Christopher, B., Sumantra, G., 2003).

According to Bartlett, the US management style provides channels for a flow of information between subsidiaries and corporate officers. On the other hand, headquarters also provides opportunities for subsidiaries to create new products and strategies for themselves (See Figure 2).

Figure 2: International Organization Model



Source: Christopher, B., Sumantra, G. "Managing across borders"., 2003

Japanese Management Style

Stress is seemed to be a part of Japanese organization. Most Japanese employees work harder and longer, Karoshi, or Death from overwork phenomenon gains attention from the Japanese ministry of labor (Coffin, 2005). While Japanese organization continue to create new form of strategies: alliances and cooperate between partners, no life-time employees, relaxation of centralizations, chief executive officers might be awareness the importance of stress (Stewart, C, Toyohiro, K, 2002).

The literature on business ethics shows extensive proof of the influence of nationality in determining what is considered right or wrong. For example, Nakano & Chinaki (1997) found that Japanese and US managers differed strongly in their orientation. Baker and Veit (1998) compared North America and Pacific Rim (i.e., Hong Kong, Japan, Singapore and Thailand) nations and found difference in the principles of management styles. In the manufacturing industry, employees working in groups or teams are a key to success.

The classic Japanese management style has been called the Global Organization Model. Its global strategies are based on the centralization of assets, resources, and responsibilities in order to achieve an economics of scale. The role of subsidiaries is to produce, assemble, and sell, but headquarters determines the goals, roles, policies, and procedures with little adaptation from the subsidiaries (Christopher, B., Sumantra, G., 2003).

Christopher concludes that overseas subsidiaries depend on the corporate office for resources and directions with tight control. So, Japanese subsidiaries have little independence. (See Figure 3)

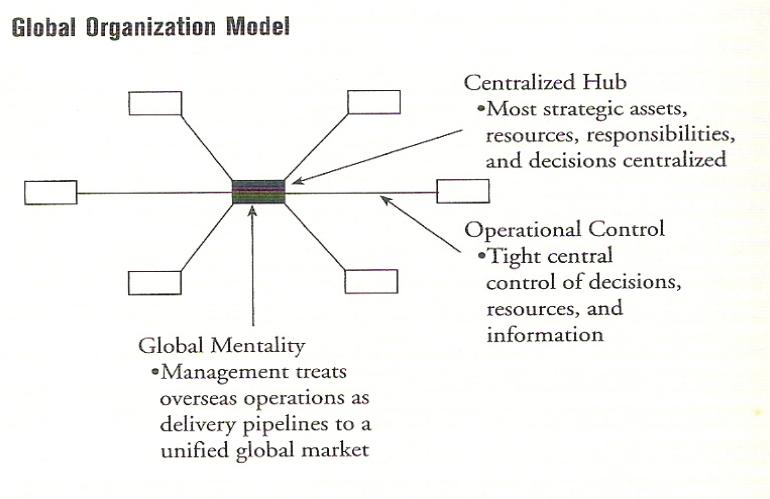


Figure 3: Global Organization Model

Source: Christopher, B., Sumantra, G. "Managing across borders.", 2003

Thai Management Style

In the Thai organization, position, title, rank, and status are very important because Thai employees accept the power of superiors or the paternalistic management style (Komin, 1990). These high power distance creates the Thai context structure which is influenced by values and perceptions (Thanasakit, 1999).

Klausner (1981), Komin (1990), and Holmes & Tangtongtavy (1995), found that the Thai management style comes from four values:

1. *Pu Yai* (high position or authority-power) he or she involves in decision making in organization and the other trusted in knowledge, experience, and responsibility.
2. *Kreng Jai* (considerate) subordinate employees try not to bother a person who is of higher rank in the sense of psychological respect.

3. *Face Saving (criticism avoidance)* Face means “ego.” Face saving plays a very dominant role in Thai culture. Thais avoid criticizing or insulting seniors in front of a third party.

4. *Bun Khun (indebted goodness)* Mutual bond or reciprocal relationship between the given and the received should be returned no matter of time and distance.

Job Satisfaction

Job satisfaction is one of the most popular and widespread topic (Lawler et al., 1971) in academic economics, sociology, and psychology (Fred, Peng, John, & Kan, 2004). Job satisfaction is the “feeling or affective response to job in many situations” (Smith, Scott, & Hulin, 1977). One famous research was conducted by Smith, Roberts, and Hulin in 1976 (sample of over 98,000 blue and white collars for ten years) who discovered a concrete and stable instrument (questionnaire) to evaluate job satisfaction. Many years later, the employee satisfaction inventory (ESI) was found to be an effective tool to measure job satisfaction and employees’ physical and mental health (Koustelios and Bagiatis, 1997).

The classic theory, psychologist and management consultant, Frederick Herzberg developed two factor theory of motivation. The two factors are hygiene and motivator factors. Herzberg’s study comes from a group of 200 accountants and engineers. Herzberg

Research Design

Multistage sampling was applied to this study. Stage one: manufacturing companies were selected by purposive sampling method. Stage two: all of the participants of the study are at the middle level in the organization, and the questionnaires were distributed as proportion sampling in every departments and these employees have been employed for at least one year.

This research used qualitative analysis, applying in-depth interviews together with quantitative analysis applying questionnaires. The objective in using both analysis methods and hybrid experimental analysis was to obtain results with higher reliability and validity values. Thus, the results of the quantitative analysis were used as a guideline for the interview. The interviewees were comprised of six middle managers working in different industries, two of which were reporting to US senior management, two of Japanese senior management, and the other two managers reporting Thai senior management. All middle managers had worked in multinational corporations for more than 5 years on average, and these six managers expressed very similar ideas. Each interview took about one and a half hours to two hours then analysis and coding to network with Atlas ti program for qualitative analysis approach.

Sample size

In the general process of Structure Equation Modeling (SEM), the minimum size depends on the number of observed variables in the study. The size could be five to twenty times as many observations to be analyzed, and the more acceptable size would be ten times (Joreskog & Sorbom, 1996, 1982). This study uses 16 observed variables with a total of 81 indicators. Thus, the study should collected a minimum of 160 valid samples for each group.

Validity and Reliability

Because the positive, and negative stress and job satisfaction questionnaire were developed in western countries, they were translated into Thai by professional translator, the questionnaire maybe not appropriate for Thai participants indeed the Thai version must be considered adaptability and utility for Thai culture. The accuracy, clarity, and understandability of the translation were examined by 5 specialists who are experts in this area. The Index of Item Objective Congruence (IOC) was applied in this study. In addition, a pretest reliability check performed. The questionnaires were filled out anonymously and returned directly to the researcher. A pilot test (30 samples) was administrated in order to test Cronbach Alpha reliability before the actual collecting of the data. (See table 1 below)

Table 1: Summary of Pretest Reliabilities

Scale	Number of items	Alpha
Positive Affect	10	0.91
Meaningfulness	4	0.97
Manageability	5	0.78
Hope	6	0.89
Negative Affect	10	0.78
Job Alienation	2	0.61
Anxiety	6	0.78
Anger	3	0.80
Job Satisfaction	20	0.86
Physical illness	10	0.95
Psychological illness	10	0.97

Instrument

Table 2: Summary of Variables Table

Survey	Construct	Definition	Item Numbers	Source	Number of Indicators
<i>Independent Variables</i>					
<u>Positive Stress Indicators</u>					
Positive Affect	Positive Affect (PA)	Section 3, the stress made result as positive states	Items 1,3,5, 9,10,12,14, 16,17,19	Watson, Clark, & Tellegen, 1988; (PANAS)	10
Meaningfulness	The Extent to which a situation makes sense to be emotionally; and worth to investing the energy in worthy of commitment and engagement, and are as a challenges	Section 4, Items 1,3,5, 7	Section 4, Items 1,3,5, 7	Artinian, 1997; Subscale of Situational Sense of Coherence Scale	4
Manageability	The extent to which one perceives that he or she can manage the balance between work and life	Section 4, Items 2,4,6, 8,9	Section 4, Items 2,4,6, 8,9	Artinian, 1997; Subscale of Situational Sense of Coherence Scale	5

Table 2: Summary of Variables Table (Continued)

Survey		Item		Number of
Construct	Definition	Numbers	Source	Indicators
Hope	A cognitive set that is based on a reciprocally derived sense of goal career path	Section 5, Items 1,6,8, 14,18,20	Snyder et al., 1996; State Hope Scale	6
<u>Negative Stress Indicators</u>				
Negative Affect	Negative Affect (NA) made result as negative state	Section 3, Items 2,4,6, 7,8,11,13, 15,18,20	Watson et al., 1988 PANAS	10
Job Alienation	One's generalized state of psychological separation from one's job, distance as the job is perceived to lack the potential for satisfying themselves.	Section 6, Items 1-2	Kanungo, 1982	2
Anxiety	Transitory sense of danger and threat of loss (job)	Section 7, Items 1-6	Beck et al., 1987 6 of 12 items from the Anxiety Subscale	6

Table 2: Summary of Variables Table (Continued)

Survey		Item		Number of
Construct	Definition	Numbers	Source	Indicators
<hr/>				
Anger/Hostility	Dimension of neuroticism Result to emotional expression	Section 8, Items 3,5,9	Derogatis et al., 1970; Subscale of Symptom of Distress Checklist (SCL)	3
<i>Dependent Variables</i>				
Job Satisfaction	an attitude that individuals have about their jobs. It results from their perception of their jobs	Section 9 Item 1-15	The Employee Satisfaction Inventory(1997)	15
Physical Health	The physical appearance symptoms	Section 2 Item 1-10	Department of Mental Health SPST 20 (2002)	10
Psychological Health	The mental appearance symptoms	Section 2 Item 1-10	Department of Mental Health SPST 20 (2002)	10
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Total				81
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Results

Structure Equation Modeling (SEM) can test the theoretical model, which provide model into two parts; one is the structural model (path analysis and regression analysis), and the second is measurement model (confirmatory factor analysis). In addition, the advantages of the SEM is to release some assumptions, for example error must not be normal distribution (mean= 0, standard deviation=1) and variance could be correlated (Schumacker & Lomax, 2004). Moreover, all of the variables have to be checked for skewness and kurtosis before input to Structure Equation Modeling (SEM) because maximum likelihood must perform effectively in normal distribution.

The US, Japanese, and Thai model fit with the data at a significance level of 0.05, passing major requirements including P-value, RMSEA¹, GFI, RMR, and so on. The analysis of the three models found that the US, Japanese, and Thai company models illustrated clear differences among the results of each model. Likewise, the positive stress and negative stress variables in each models, which effected job satisfaction and illness, also suggested evident quantitative discrepancy.

¹ Root Mean Square Error of Approximation

U.S. Model (n=163)

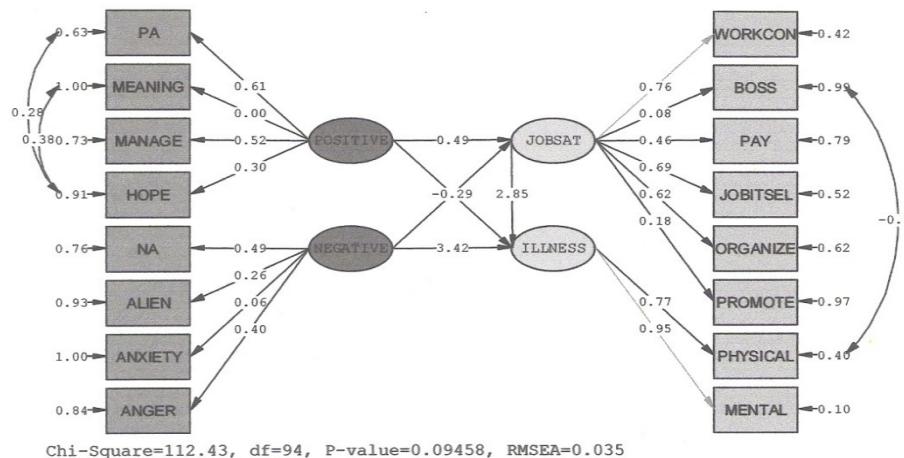


Table 3: Path Analysis (Direct and Indirect Effect)
(Standardized Solution)

Independent (Ksi)	Effect	Dependent (Eta)	
		Job Satisfaction	Illness
Positive Stress	DE	0.49	-0.29
	IE	-	1.40
	TE	0.49	1.11
Negative Stress	DE	-0.53*	3.42
	IE	-	-1.51
	TE	-0.53*	1.91
Job Satisfaction	DE		2.85
	IE		-
	TE		2.85

DE=Direct Effect, IE=Indirect Effect, TE=Total Effect, * P<0.10, ** P<0.05, , *** P<0.01

Japanese Model (n=184)

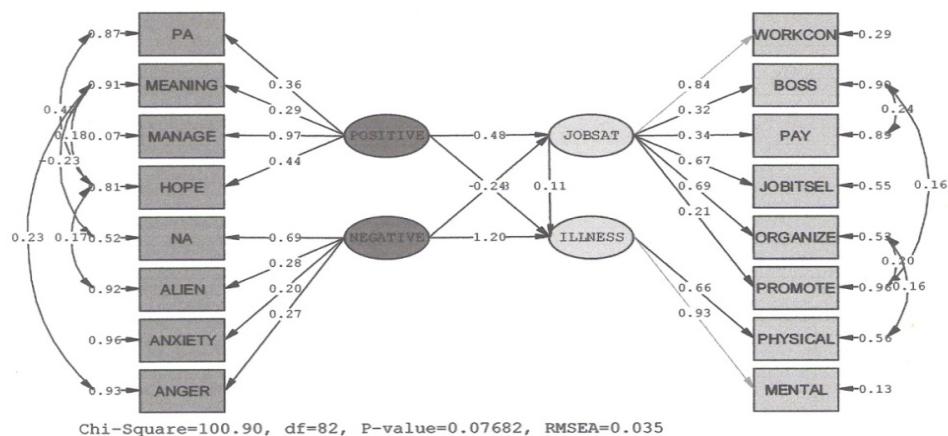


Figure 5: Path analysis of Japanese model (Standardize solution using Lisrel)

Figure 5 shows that the Japanese model was indicated acceptable fit to the data, p-value, RMSEA, GFI pass the requirement (0.077, 0.035, and 0.94). The positive affect, meaningfulness, manageability, and hope are significant of t-value (4.63, 3.86, 9.21, and 5.44²). Therefore, all of the positive stressors indicated strong factors in relation to job satisfaction and illness. On the other hand, negative affect, job alienation, anxiety and anger are significance of t-value (8.61, 3.97, 2.81, and 3.79). Consequently, all of these negative stressors indicated strong factors to job satisfaction and illness.

Table 4 below shows path analysis between exogenous and endogenous latent variables. Positive stress has a direct effect on job satisfaction (0.48***) at the level of significance 0.01; thus positive stress could increases job satisfaction. Negative stress has a direct effect on illness (1.21***) at the significance level of 0.01 thus negative stress could increases the illness of the employee.

² Confident interval of 0.05= -1.96<t-value<1.96 Confident interval of 0.01= -2.57<t-value<2.57

Table 4: Path Analysis (Direct and Indirect Effect)
(Standardized Solution)

Independent (Ksi)	Effect	Dependent (Eta)	
		Job Satisfaction	Illness
Positive Stress	DE	0.48***	0.24
	IE	-	0.05
	TE	0.48***	0.29
Negative Stress	DE	-0.08	1.21***
	IE	-	-0.01
	TE	-0.08	1.20***
Job Satisfaction	DE		0.11
	IE		-
	TE		0.11

DE=Direct Effect, IE=Indirect Effect, TE=Total Effect, * P<0.10, ** P<0.05, *** P<0.01

Thai Model (n=166)

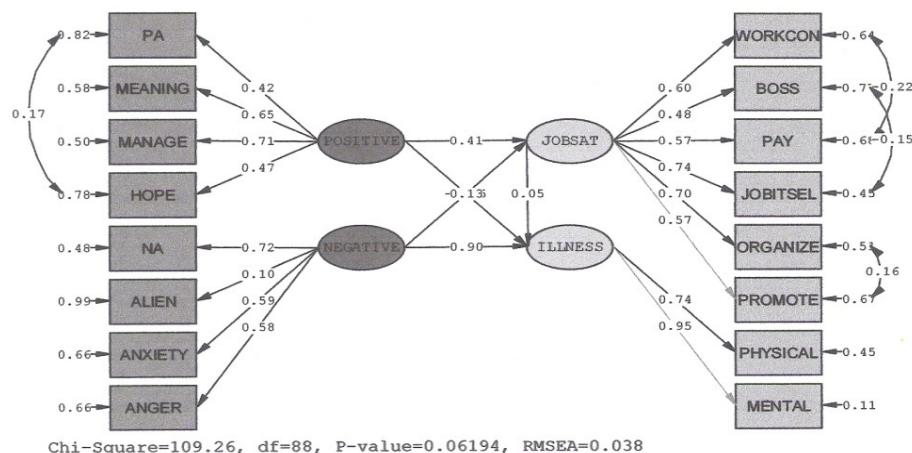


Figure 6: Path analysis of the Thai model (Standardized solution using Lisrel)

Figure 6 shows that the Thai model was indicated acceptable fit to the data, p-value, RMSEA, GFI pass the requirement (0.062, 0.038, and 0.92). The positive effect, meaningfulness, manageability, and hope were significance of t-value (4.85, 7.50, 8.21, and 5.28). Therefore, all of the positive stressors indicated strong factors to job satisfaction and illness. On the other hand, negative effect, anxiety, and anger were significant at t-value (9.44, 7.64, and 7.44). These three negative stressors, then indicated strong factors in relation to job satisfaction, and illness except job alienation.

Table 5: Path Analysis (Direct and Indirect Effect)

(Standardized Solution)

Independent (Ksi)	Effect	Dependent (Eta)	
		Job Satisfaction	Illness
Positive Stress	DE	0.41***	0.13
	IE	-	0.02
	TE	0.41***	0.15
Negative Stress	DE	-0.15	0.90***
	IE	-	0.00
	TE	-0.15	0.90***
Job Satisfaction	DE		0.05
	IE		-
	TE		0.05

DE=Direct Effect, IE=Indirect Effect, TE=Total Effect, * P<0.10, ** P<0.05, *** P<0.01

Table 5 shows the path analysis between exogenous and endogenous latent variables. Positive stress has a direct effect on job satisfaction (0.41***) at the significance level of 0.01, therefore positive stress could increase job satisfaction and negative stress, and has a total effect on illness (0.90**) at a level significance 0.01. Thus negative stress could increases illness for the employee.

Finding

1. This research reveals that positive stress is the key factor for enhancing job satisfaction based on the principle that stress should be moderately stimulated, not insufficiently nor excessively, as insufficient stimulation results in inadequate motivation drive while excessive stimulation is likely to cause physical, subconscious, and mental illnesses according to Yerkes-Dodson's Curve Law Theory. Similarly to the study of Kraiger et al.(1989) revealed that positive stress leads to increased job satisfaction and enthusiasm at work (Japanese and Thai model supported).
2. Increasing negative stress also significantly leads to physical and mental illness. Similar to Fields (2002) found that when people gain stresses the physical reaction will lead to mental illness differently depending on individual outstanding (Japanese and Thai model supported).
3. Negative stress diminishes job satisfaction. Levin and Stokes (1989) proved that those who have high negative stress will have low job satisfaction, which is the nature of a general task and serves as a significant variable to effectively forecast job satisfaction level (US model supported).

Implementations³

The diverse management styles among different countries are the key factors that differentiate positive and negative stress, which also effect job satisfaction and illness at a different level. The data shows that positive stress renders positive consequences regarding job satisfaction and negative stress yields positive consequences towards illness at a statistically significant level. *Thai middle managers who report to Japanese senior management stated that "The Japanese management style is usually work very hard six days a week and a few days off traditionally."* That is to say that stress results in positive consequences such as enhanced performance or career growth will elevate the job satisfaction and stress that results in negative consequences such as decreased performance growth will intensify the illness as well. *The interviews also suggested that it is in the self interested of companies to provide facilities and time for their employees to exercise, reduce stress and remain fit rather than become ill and probably miss work.* Chiu and Kosinski (1997) confirmed that nowadays high positive stress leads to relatively high job satisfaction level. The stimulator which is vague or undesirable to a person will turn to be negative stress, instead of being helpful. Stress in an organization will positively or negatively affect the employee's work results. A consultancy unit should be established in the office or in the personnel department to provide proper training for employees. Employees should be given a chance to move to their favorite department in order to increase work efficiency, deploying positive stress as a motivation tool while trying to decrease negative stress.

³ Note: Qualitative result is in *italic letters*

Furthermore, the stress may impact as a result of cultural difference which is not of significance in some cases (Chiu and Kosinski, 1995). Suttleworth (2004) suggested that stress management in an organization is essential. "Managing pressure" training should be organized to search for training programs suitable for the office or organization with an aim to discover the root of the problem by using interviews after answering a questionnaire for prior analysis. The training should be effectively assessed and evaluated.

The qualitative data suggests that Thai middle managers feel more comfortable reporting to Thai senior management. This finding may indicate that being from the same culture they know what to expect and they do not need to adapt their behaviors to a foreign culture. Moreover, the language may also be a barrier because the average Thai person is not fluent in English or Japanese. Another finding with regard to job satisfaction is that all of the Thai middle managers were satisfied with their jobs except in the area of their pay. No Thai middle manager in all three groups perceived that they were paid adequately.

Conclusions

From this research it is possible to conclude that positive stress is like a two-edged sword that may benefit or harm the employees. It is, therefore, necessary for management to use it in a proper way and to avoid insufficient or excessive stress for optimal work efficiency. Negative stress delivers negative consequences, leading to employees' illness and diminution of work efficiency as well as a decrease in job satisfaction level. Consequently, it is important for management to avoid behavior that promotes negative stress. Similarly, too much positive stress beyond the limitation of employees causes the illness.

Stamper and Johlke (2003) discovered that a good way to lessen stress that leads to illness is to provide open communication within the organization at all levels. Moreover, Wood and Fields (2007) advise that building good connections between leaders and teams in jointly setting up strategies would enable an organization to lessen stress while increasing job satisfaction (Chiu and Kosinski, 1995).

Directions for future research

1. Previous researches suggested that it is helpful to find out whether managers are pure Thai or Chinese-Thai. Pure Thai nationals have the characteristic to fulfill their duties and responsibilities, mostly motivated by negative stress, while the Chinese-Thai are diligent with high work motivation strongly driven by positive stress.
2. Personality is one of key factors that affects job satisfaction and stress. Personality is subjective trait: an example is the Big Five Model Theory, where people are categorized into different groups depends on personality trait (Gibson, Ivancevich, Donnelly, Konopaske, 2003). It is worth further studying there are persons of which personality in a successful organization.

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