

Research Article

THE IMPACT OF EMPLOYEE PERSONALITY TRAITS, PERCEIVED STRESS AND STRESS MANAGEMENT ON QUALITY OF WORK LIFE OF OPERATIONAL EMPLOYEES SELECTED FOR LAYOFF

Suthinan Pomsuwan

The Graduate School of Bangkok University, Rama IV Road, Bangkok, Thailand

suthinan.p@bu.ac.th, s_pomsuwan@yahoo.com

ABSTRACT

The objectives of this study were to: 1) study the impact of employee personality traits on quality of work life of operational employees selected for layoff, 2) study the impact of perceived stress on quality of work life of operational employees selected for layoff, and 3) study the impact of stress management on quality of work life of operational employees selected for layoff. The tool was the close-ended questionnaire, which was verified by the experts. The reliability test of 0.936 was shown in this study. The statistics used was the descriptive statistics and inferential statistics including the multiple linear regression analysis. The results showed that there was an impact of employee personality traits on quality of work life of operational employees selected for layoff, except the agreeableness and the neuroticism factors. In addition, there was an impact of perceived stress on quality of work life of operational employees selected for layoff. It was also found that there was an impact of stress management on quality of work life of operational employees selected for layoff, except the step of finding strategy and technique to cope with stress, with a statistical significance of 0.05.

Keywords: employee personality traits, perceived stress and stress management, quality of work life, layoff policy

INTRODUCTION

Layoff policy often makes people petrified, especially among the operational employees in private companies. No one would

like that to happen neither to themselves nor their coworkers or friends. In the Thai society, people often view that the company usually lays off the employees who cause trouble in the organization.

They think that work termination in any forms is a result of the employees' inefficient performance or problematic behaviors, and layoff is the solution to keep the organization operating efficiently, when in fact the problem may be from the organization itself. Layoff can cause stress affecting the work life quality and may lead to social problems in the future. (Bolger & Zuckerman, 1995) and (Vollrath & Torgersen, 2000) stated that when addressing the stress issue, we should also take into consideration the personality traits, perceived stress, and stress management. The degree of stress can partly reflect the above three aspects of the employees. Therefore, it is important for the organization to predict any violence caused by layoff. The studies of (Selye, 1976) and (Aldwin, 1993) show that people unavoidably experience stress in various situations that affect them physically and mentally. The level of stress varies depending on their personality traits which determine how they react to stress, which becomes the perceived stress and leads to stress management. They may find a way to manage their stress based on their own experience or other people. It can somewhat reduce stress, but cannot completely get rid of it. (McCrae & Johns, 1992) and (Poropat, 2009) also stated that personality traits could influence people's response to stress. These personality traits can be evaluated through the

personality test to try to understand one's personality. The five-factor model of personality test can determine the Big Five personality traits including 1. extraversion, 2. agreeableness, 3. conscientiousness, 4. neuroticism, and 5. openness to experience. In addition, the studies of (Peneley & Tomaka, 2002) and (Leandro & Castillo, 2010) found that personality has a significant influence on physical and mental health. People with good personality feel confident. On the other hand, bad personality can make them feel unconfident and paranoid, which is the cause of anxiety and stress, and may lead to depressive disorder. In that case, it will badly affect that individual and people around them. As a result, conducting the five-factor model of personality test can be a way to prevent any serious stress problems. Furthermore, it was found in the studies of (Totton & Jacobs, 2001), (Pittenger, 2004), and (Maltby, Day & Macaskill, 2009) that personality is formed based on the relationship between emotion and self-awareness. In a critical situation, if one can manage the relationship between their emotion and self-awareness well, other people will have faith and confidence in them, promoting good personality and life quality that is free of worry and stress. This ability is called self-efficacy. Those who have high self-efficacy will have high confidence and appropriate behavioral

responses, whereas those who have low self-efficacy will get worried and anxious when they have to respond to the environment that may be beyond their control. (Jung, 2006) believed that personality of each individual is unique and has been accumulated since they were born and throughout their life, and it is categorized into extrovert personality and introvert personality. The extrovert personality relates to people who are outspoken, like to socialize, be in the spotlight, dress nicely, and love new and challenging things. These people can adapt easily and express their emotion clearly whether they are angry, sad, sorry, bored, or stressed. This theory corresponds with the studies of (Ewen, 2003) and (McNiel, Lowman & Fleeso, 2010) which stated that it is obvious to notice the behaviors of extrovert people when they are sad, angry, or stressed while working in the organization. This is beneficial to the organization as it can help to predict probable consequences and come up with ways to deal with potential problems to ensure good work life quality of all the employees within the organization. (Warr, 1987), (Winkelmann & Winkelmann, 1998) and (Clark, Georgellis & Sanfey, 2001) stated that people with introvert personality will engage with themselves more than with other people or the surroundings. They are reserved during work presentation, do not socialize, do not like

changes, and have a fixed set of rules that they follow, and like to stick to the plan. Therefore, it is difficult to predict their work behaviors. The organization may have to consider the result of their last decision to determine their behavior. This is similar to people with ambivert personality which shows both extrovert and introvert personalities. They can be put in the middle of the spectrum. In other words, they are neither outgoing nor reserved. Their work performance is moderate. The majority of employees in an organization has ambivert personality.

The issue of perceived stress can be explained by the concept and theory of (Lazarus, 1966) and (Folkman & Lazarus, 1988) who stated that work stress is a result of pressure the employees feel due to high psychological job demands but low control or job decision latitude, and low social support. Work stress arises from the interaction among these three factors. The kind of job with the least stress is the one where the employees have high control or job decision latitude, high social support, and moderate psychological job demands. (Dewe, O'Driscoll & Cooper, 2010), (Cooper, 1998), and (Samahingpan, & et al., 2012) pointed out that perceived stress can lead to good mental health and happy living because people should be able to perceive the stress in their life and can

differentiate the perceived stress between distress and eustress. Distress is a negative feeling that will lower work enthusiasm and performance while eustress is beneficial stress that helps encourage the employees, making them have good mental health. Eustress can help them perceive true happiness and adapt themselves when they experience anxiety or distress. Eustress can be divided into three aspects: 1. self-esteem – be proud and have faith in themselves, 2. life satisfaction – be optimistic and content with what they have, 3. peace of mind – be happy, calm, and relaxed.

In terms of stress management, (Hicks & Caroline, 2007), and (Fried, 2008) stated that every employee unavoidably experiences both distress and eustress which have to be managed so that they do not interfere with their own mental health and other people around them, to ensure nice atmosphere at work. It is also important to try to turn the stress into eustress than distress. It is recommended that the organization create a stress management system that the employees can use as the practical guideline. (Tokhan, 2002), and (The Royal Institute, 2005) mentioned that religious principles are mental health treatment tools for people under stress. They can apply the principles to manage their thoughts to help relieve their stress and find the solution to live a normal and happy life. A good example is

the Lord Buddha's teaching of the Three Characteristics of Existence: impermanence, state of suffering, and soullessness. Everything in life appears, exists, and disappears. Nothing is constant. When a problem occurs, it is only transitory. Nothing belongs to self, and therefore, problems are non-self and can disappear. Problem solving can also be done by applying the principle of the Four Noble Truths: suffering, the cause of suffering, the cessation of suffering, and the path leading to the cessation of suffering. In other words, one can try to find the cause of suffering, prioritize the significance of each problem from high to low, then try to solve the root of the problem one by one instead of confronting all problems at the same time. Then, one should analyze the problem with neutral mindset based on truth and choose the best way to solve it. After the decision is made, one should not regret it if it turns out to be wrong. When that happens, they have to accept it and believe in themselves, keeping in mind that they have made that decision carefully, and are ready to fix any mistakes. (Panpreecha, 1996), and (Visalaporn & Mulsilpa, 1991) stated that a systematic work stress management is recommended. It consists of 4 steps: 1. analyzing and understanding one's own current stress, 2. reviewing and summarizing, 3. finding strategy and technique to cope with stress, and 4. managing

stress to survive. The quality of work life is based on the satisfaction of the employees and their feeling about the work environment and conditions set by the organization to achieve its goals. It is necessary to make the employees feel good and happy in order to promote good quality of work life. (Lau & May, 1998), (Akdere, 2006), and (Gholami, 2009) stated that the quality of work life relates to each employee's work life and environment within the organization. However, the important objective is to reduce mental stress and increase work satisfaction, which is an important means to improve the quality of work life in the organization. To prepare for any unpredictable incidents in the future, improving employee quality of work life is a long-term investment that every successful executive should consider important. Unfortunately, at present, the executives do not pay much attention to human training and development but focus on short-term policies which yield temporary results. According to the studies of (Nussbaum a& Sen, 1993), and (Easton & Van Laar, 2013), the concept of quality of work life comes from that of the life quality which refers to developing an individual to ensure that they live well and are happy at work. Good work conditions mean work environment that is appropriate, safe, fair, beneficial, and unprejudiced. The quality of work life should

be taken into consideration for current employees, and employees who are retiring or getting laid off due to economic crisis. The organization should be able to determine the relationship among employee personality traits, perceived stress, and stress management, and find a way to improve the situation and develop a solution to deal with any related problems. The evaluation form for work-related quality of working life mentioned by (Worrall & Cooper, 2006) includes the aspects of job and career satisfaction, working condition, general well-being, home-work interface, stress at work, and control at work. This form has been used for evaluating current employees, and employees who are retiring or getting laid off due to economic crisis.

RESEARCH OBJECTIVES

The objectives of this study are as follows:

1. To study the impact of employee personality traits on the quality of work life of operational employees selected for layoff
2. To study the impact of perceived stress on the quality of work life of operational employees selected for layoff
3. To study the impact of stress management on the quality of work life of operational employees selected for layoff

CONCEPTUAL FRAMEWORK

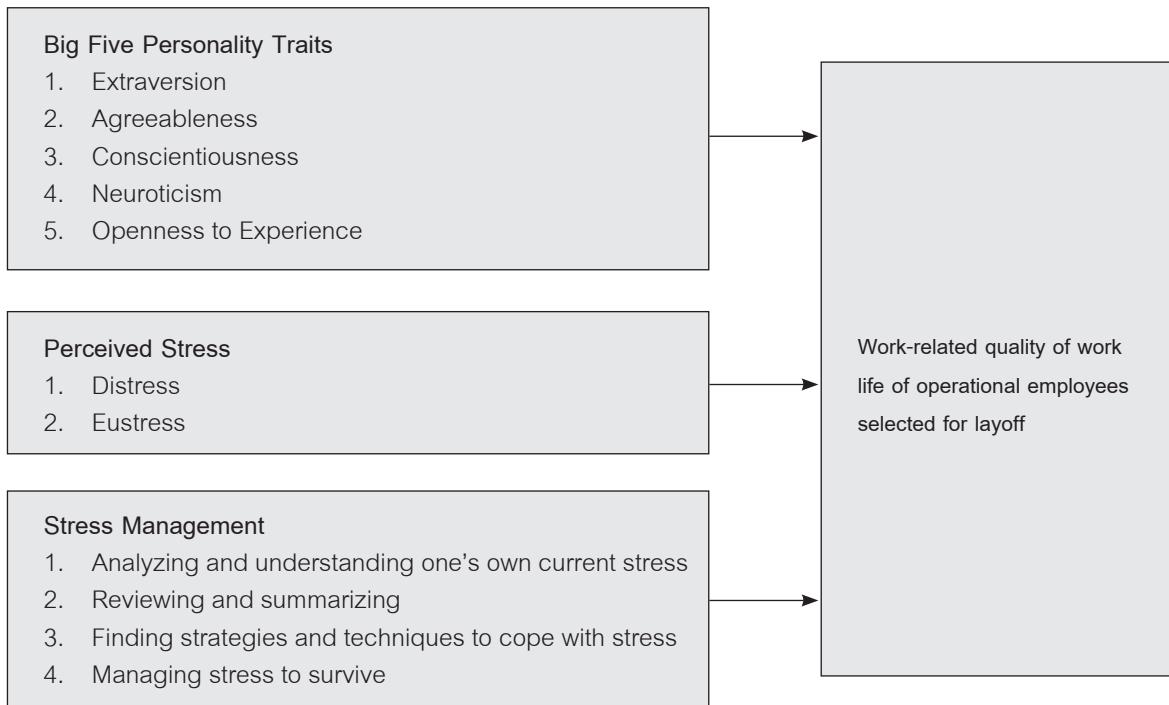


Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

This study is a survey research using close-ended questionnaire as the data collection tool to obtain demographic data, and information about employee personality traits, perceived stress, stress management, and quality of work life of operational employees selected for layoff.

Populations and sample group

The population and sample group in this study were operational employees selected for layoff in 10 out of 50 districts of Bangkok, using simple random sampling,

which includes Phayatai, Ratchathewi, Pathumwan, Bangrak, Sathorn, Klong-Toey, Wattana, Phrakanong, Taweeawattana, and Yannawa districts. The total population in all of these 10 districts were 767,607 (Love Bangkok, and Promote Bangkok, Statistics, Bangkok, 2014). The sample size was 400 based on Yamane's formula (Yamane, 1967) with a confidence level of 95% and the margin of error of ± 5 . Therefore, 40 samples in each of the 10 districts were selected to participate in this study.

Data Collection

The questionnaires were checked for the content validity by experts in the field and tested for the reliability with a volunteer sample group of another 30 operational employees who were getting laid off. The information from the questionnaires were analyzed using Cronbach's Alpha, with a reliability of 0.936. After that, they were distributed to the sample group of 400 employees from the above 10 districts in Bangkok over a 4-month period, from January to April 2017.

Data Analysis

The statistical data analysis was conducted using the descriptive statistics and the inferential statistics, including the Multiple Linear Regression Analysis.

RESEARCH RESULTS AND DISCUSSION**Research Results**

The descriptive statistics including frequency and percentage showed that most participants were male (223 or 55.75%), aged between 30-35 years old (126 or 31.50%), single (159 or 39.75%), had a master's degree (129 or 32.25%), and 5-10 years of work experience (163 or 40.75%). The inferential statistics was conducted using the Multiple Linear Regression Analysis to test the following hypotheses.

Hypothesis 1: There was an impact of

employee personality traits on the quality of work life of operational employees selected for layoff.

Statistics used: Multiple Linear

Regression Analysis

Table 1 Hypothesis Testing 1

Quality of work life of employees selected for layoff	Regression Coefficient (Beta)	T value	Sig (P - Value)
Personality Traits			
1. Extraversion	.231	2.914	.004**
2. Agreeableness	.079	0.875	.231
3. Conscientiousness	.285	2.401	.006**
4. Neuroticism	-.142	-1.653	.093
5. Openness to Experience	.270	3.332	.003**

$R^2 = .465$, F-Value = 18.800, n = 400, P-Value $\leq 0.05^*, 0.01^{**}, 0.001^{***}$

Table 1 shows that the personality traits of operational employees selected for layoff including extraversion ($\beta = 0.231$, $t=2.914$, ≤ 0.05), conscientiousness ($\beta = 0.285$, $t=2.401$, ≤ 0.05), and openness to experience ($\beta = 0.270$, $t=3.332$, ≤ 0.05) had an impact on the quality of work life of these employees. However, the personality traits including agreeableness ($\beta = 0.079$, $t=0.875$, ≤ 0.05) and neuroticism

($\beta = -.142$, $t=-1.653$, ≤ 0.05) had no impact on their quality of work life, with a statistical significance of 0.05.

Hypothesis 2: There was an impact of perceived stress on the quality of work life of operational employees selected for layoff.

Statistics used: Multiple Linear Regression Analysis

Table 2 Hypothesis Testing 2

Quality of work life of employees selected for layoff	Regression Coefficient (Beta)	T value	Sig (P - Value)
Perceived Stress			
1. Distress	-.212	-2.456	.012*
2. Eustress	-.319	-3.679	.000***

$R^2 = .234$, F-Value = 12.612, $n = 400$, P-Value $\leq 0.05^*$, 0.01^{**} , 0.001^{***}

Table 2 shows that the perceived stress of distress ($\beta = -.212$, $t=-2.456$, ≤ 0.05) and eustress ($\beta = -.319$, $t=-3.679$, ≤ 0.05) had an impact on the quality of work life of operational employees selected for layoff, with a statistical significance of 0.05.

Hypothesis 3: There was an impact of stress management on the quality of work life of operational employees selected for layoff.

Statistics used: Multiple Linear Regression Analysis

Table 3 Hypothesis Testing 3

Quality of work life of employees selected for layoff	Regression Coefficient (Beta)	T value	Sig (P - Value)
Stress Management			
1. Analyzing and understanding one's own stress	.443	4.758	.000***
2. Reviewing and summarizing	.257	2.256	.034*
3. Finding strategy and technique to cope with stress	.115	1.149	.250
4. Managing stress to survive	.265	1.924	.049*

R2 = .734, F-Value = 11.230, n = 400, P-Value $\leq 0.05^*, 0.01^{**}, 0.001^{***}$

Table 3 shows that stress management steps of analyzing and understanding one's own stress ($\beta = .443$, $t=4.758$, ≤ 0.05), reviewing and summarizing ($\beta = .257$, $t=2.256$, ≤ 0.05), and managing stress to survive ($\beta = .265$, $t=1.924$, ≤ 0.05) had an impact on the quality of work life of operational employees selected for layoff. However, the stress management step of finding strategy and technique to cope with stress ($\beta = .115$, $t=1.149$, ≤ 0.05) had no impact on the quality of work life of these employees, with a statistical significance of 0.05.

Discussion

The employee personality traits that have an impact on the quality of work life of

operational employees selected for layoff include extraversion, conscientiousness, and openness to experience. This result corresponds with the theories of (Bolger & Zuckerman, 1995), and (Vollrath & Torgersen, 2000) who stated that the employee personality traits can partly influence the severity of stress, depending on how well they manage their stress. The studies of (Selye, 1976), and (Aldwin, 1993) found that stress is something that people experience unavoidably all the time from various incidents that affect them physically and mentally. Stress level can be high or low depending on the personality traits of each individual in response to their stress. (McCrae & Johns, 1992), and (Poropat, 2009) also stated that personality traits have an influence

on how people respond to stress. People can take the personality test to see their personality traits which include 1. extraversion, 2. agreeableness, 3. conscientiousness, 4. neuroticism, and 5. openness to experience. In addition, the studies of (Peneley & Tomaka, 2002), and (Leandro & Castillo, 2010) found that personality is important to one's physical and mental health. People with good personality will have more confidence while those with bad personality will be unconfident and in an anxious and stressful state of mind that can lead to depressive disorder. Depressive disorder can negatively affect that individual and people around them. Furthermore, the studies of (Totton & Jacobs, 2001), (Pittenger, 2004), and (Maltby, Day & Macaskill, 2009) found that personality is formed based on the relationship between emotion and self-awareness. In a critical situation, if one can manage the relationship between their emotion and self-awareness well, it does not only make other people have faith and confidence in them, but it can also promote their own good life quality. That is because they know not to let difficult situations become the source of worry and stress and know that they can have a happy living. This ability is called self-efficacy. Those who have high self-efficacy will have high confidence and appropriate behavioral responses while those who have

low self-efficacy will get worried and anxious when they have to respond to the environment that may be beyond their control. However, the personality traits including agreeableness and neuroticism ($\beta = -.142$, $t = -1.653$, ≤ 0.05) had no impact on their quality of work life. This is in accordance with the study of Jung (2006) which stated that personality of each individual is unique and has been accumulated since they were born and through their experiences in life. Such personality is categorized into extrovert personality and introvert personality. The reason why agreeableness and neuroticism traits did not have an impact on their quality of work life of the employees selected for layoff could be because these employees had the introvert personality. As (Warr, 1987), (Winkelmann & Winkelmann, 1988), and (Clark, Georgellis & Sanfey, 2001) mentioned, people with introvert personality will engage with themselves more than with other people or the surroundings. They are reserved during the work presentation, do not socialize, do not like changes, and have a fixed set of rules that they follow, and like to stick to the plan. Therefore, it is difficult to predict their work behaviors. The organization may have to consider the result of their last decision to determine their behavior. This is similar to people with ambivert personality which shows both extrovert and introvert personalities. They

can be put in the middle of the spectrum. In other words, they are neither outgoing nor reserved. Their work performance is moderate. The majority of employees in an organization has ambivert personality. To determine the behaviors of people with these two personality traits, the organization needs to observe the result. This study showed that such personality trait had no impact on the quality of work life of the employees selected for layoff. They are different from the extrovert personality according to the studies of (Ewen, 2003), and (McNiel, Lowman & Fleeson, 2010) which stated that it is obvious to notice the behaviors of extrovert people when they are sad, angry, or stressed while working in the organization. This is beneficial to the organization as it can help to predict any probable consequences and come up with ways to deal with the potential problems to ensure good work life quality of all the employees who work together within the organization.

The result from the study on perceived stress showed that there was an impact of the perceived stress, including both distress and eustress, on the quality of work life of the operational employees selected for layoff. This result corresponds with the explanation of (Lazarus, 1966), and (Folkman & Lazarus, 1988), which said that work stress is a result of pressure the employees feel due to high

psychological job demands but low control or job decision latitude, and low social support. Work stress arises from the interaction among these three factors. The kind of job with the least stress is the one where the employees have high control or job decision latitude, high social support, and moderate psychological job demands. Dewe, (O'Driscoll & Cooper, 2010), (Cooper, 1998), and (Samahingpan, & et al., 2012) pointed out that perceived stress can lead to good mental health and happy living because people should be able to perceive the stress in their life and can differentiate the perceived stress between distress and eustress. Distress is a negative feeling that will lower work enthusiasm and performance while eustress is beneficial stress that helps encourage the employees, making them have good mental health. They will be able to perceive true happiness and adapt themselves when they experience anxiety or distress. Eustress can be divided into three aspects: 1. self-esteem – be proud and have faith in themselves, 2. life satisfaction – be optimistic and content with what they have, 3. peace of mind – be happy, calm, and relaxed. The result showed that the perceived stress that has an impact on the quality of work life of the operational employees selected for layoff includes the steps of analyzing and understanding one's own current stress, reviewing

and summarizing, and managing stress to survive. This result is in accordance with the studies of (Hicks & Caroline , 2007), and (Fried, 2008) which stated that every employee unavoidably experiences both distress and eustress which have to be managed so that they do not interfere with their own mental health and people around them, to ensure nice and cooperative atmosphere at work. It is also important to try to turn the stress into eustress than distress. It is recommended that the organization create a stress management system that the employees can use as the practical guideline. (Tokhan, 2002), and (The Royal Institute, 2005) mentioned that religious principles are mental health treatment tools for people under stress. They can apply the principles to manage their thoughts, to relieve their stress and find the solution to live a normal and happy life. A good example is the Lord Buddha's teaching of the Three Characteristics of Existence: impermanence, state of suffering, and soullessness. Everything in life will appear, exist, and disappear. Nothing is constant. When a problem occurs, it will be transitory. Nothing belongs to self, and therefore, problems are non-self and can disappear. Problem solving can be done by applying the principle of the Four Noble Truths: suffering, the cause of suffering, the cessation of suffering, and the path leading to the cessation

of suffering. In other words, one should try to find the cause of suffering, prioritize the significance of each problem from high to low, then try to solve the root of the problem one by one instead of confronting all the problems at the same time. Then, one should analyze the problem with neutral mindset based on truth, and choose the best way to solve it. After the decision is made, they should not regret it if it turns out to be wrong. They have to accept it and believe in themselves, keeping in mind that they have made the decision carefully, and are ready to fix the mistakes. With regard to the stress management in the workplace, (Panpreecha, 1996), and (Visalaporn & Mulsilpa, 1991) stated that a systematic work stress management is recommended. It consists of 4 steps: 1. analyzing and understanding one's own current stress, 2. reviewing and summarizing, 3. finding strategy and technique to cope with stress, and 4. managing stress to survive. However, this study shows that the step of finding strategy and technique to cope with stress had no impact on the quality of work life of the operational employees selected for layoff. This result corresponds with the studies of (Mintzberg & Quinn, 1996), and (Freedman, 2013), which stated that strategy is a means to achieve the organizational goals. Therefore, goals are very important in developing strategies. The organizational

goals must be clear, so that the strategies can be developed accordingly in the right direction. However, since strategies are complicated and one needs to be able to understand the consequence for themselves, their unit, and organization, employees may view strategies as a burden. They will take an action only when they are forced or ordered to do so. This is also in accordance with the studies of (Tichy , 1983), and (Hill & Gareth, 2012), which found that the employees rarely care about participating in the organizational strategies if they are complicated or lead to negative consequences. They are worried and hesitant to be part of those negative consequences. If they were forced to follow the strategies, they could do so inattentively. This can explain why the stress management step of finding strategy and technique to cope with stress did not have an impact on the quality of work life of the operational employees selected for layoff as they considered it unimportant when they were getting laid off. The studies of (Minas, 2000), and (Temple & Gillespie, 2009) also supported the same theory. It was found that employees who are about to retire or be laid off are lenient on their work to decrease their own stress,

especially those who work under pressure. They feel that they do not have to carry the burden of stress from the policies of their organization anymore. They will opt to do the necessary ones to work on until their last day of employment with that organization.

SUGGESSTIONS AND RECOMMENDATIONS

The same research study with a different populations/sample groups including the employees who have already been laid off is recommended so that the results can be compared to see any differences or similarities with respect to the impact of employee personality traits, perceived stress, and stress management on their quality of work life. Another study can also be done by including the participants in the countryside, not only in Bangkok, to give a broader view on this topic. In addition, a qualitative research in the form of interview, observation, and group discussion can be conducted to get in-depth information from both the entrepreneurs/business owners and the employees. The results from these studies can be analyzed to create common regulations to solve the root of the problem.

REFERENCES

Akdere, M. (2006). Improving quality of worklife: Implications for human resources. *The Business Review, Cambridge*, 6(1), 173- 177.

Aldwin, C.M., ed. (1993). *Stress, coping and development: an integrative perspective*. NY: Guildford.

Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, 69, 809-902.

Clark, A. E., Georgellis, Y., & Sanfey, P. (2001). Scarring: the psychological impact of past unemployment. *Economica*, 68, 221-241.

Cooper, C. L. (1998). *Theories of organizational stress*. NY: Oxford.

Dewe, P. J., O'Driscoll, M. P., & Cooper, C. (2010). *Coping with work stress: a review and critique*. Chichester: Wiley-Blackwell.

Easton, S., & Van Laar, D. (2013). *User manual for the work-related quality of life (WRQoL) scale*. UK: University of Portsmouth.

Ewen, R. B. (2003). *An introduction to theories of personality* (6th ed.). NY: Lawrence Erlbaum Associates.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54, 466-475.

Freedman, L. (2013). *Strategy*. NY: Oxford University.

Fried, M. R., (2008). *Stress management for success in the workplace*. London, Oxford University Press.

Gholami, A. (2009). Factors affecting quality of work life in organizations. *Journal of Human Development and the Police*, 6(24), 100-80.

Hicks, T. & Caroline, M. (2007). *A guide to managing workplace stress*. California: Universal.

Jung, C. (2006). *The undiscovered self: the problem of the individual in modern society*. New American Library, 23-24.

Lau, R. S. M., & May, B. E. (1998). A win-win paradigm for quality of work life and business performance. *Human Resource Development Quarterly*, fall 1998, 9(3), 211-226.

Lazarus, R. S. (1966). *Psychological stress and the coping process*. NY: McGraw-Hill.

Leandro, P. G., & Castillo, M. D. (2010). Coping with stress and its relationship with personality dimensions, anxiety, and

depression. *Journal of Procedia Social and Behavioral Sciences*, 5, 1562–1573.

Love Bangkok and Promote Bangkok, Statistics, Bangkok. (2014). Retrieved September 1, 2016, from [http://www.bangkok.go.th/upload/user/00000130/Logo/statistic/stat2557\(thai\).pdf](http://www.bangkok.go.th/upload/user/00000130/Logo/statistic/stat2557(thai).pdf) (in Thai).

Maltby, J., Day, L., & Macaskill, A. (2009). *Personality, individual differences and intelligence*. Harlow: Prentice Hall.

McCrae, R.R., & Johns, O.P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60(2), 175–215.

McNiell, J. M., Lowman, J. C. & Fleeson, W. (2010). The effect of state extroversion on four types of affect. *Journal of Personality*, 24(1), 18-35.

Minas, C. (2000). Stress at work: a sociological perspective. *The Canadian Review of Sociology and Anthropology*, 37(1), 119-120.

Mintzberg, H., & Quinn, J. B. (1996). *The strategy process: concepts, contexts, cases*. London: Prentice Hall.

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Oxford: Clarendon Press.

Panpreecha, S. (1996). *The manual of self-stress release*. Bangkok: Department of Mental Health, Ministry of Public Health (in Thai).

Peneley, J. A., & Tomaka, J. (2002). Associations among the big five, emotional responses, and coping with acute stress. *Personality and Individual Differences*, 32, 1215-1228.

Pittenger, D. J. (2004). The limitations of extracting typologies from trait measures of personality. *Personality and Individual Differences*, 37, 779–787.

Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135, 322–338.

Samahingpan, S., & et al. (2012). The developmental care program for psychiatric patients by guardians and community network association. Retrieved September 1, 2016, from http://www.bro.moph.go.th/html/downloads/STRATEGY/innovation/PDF_Research_5355/05.mentalhealth.pdf (in Thai).

Selye, H. (1976). *Stress in health and disease*. Reading, MA: Butterworth.

Temple, H., & Gillespie, B. (2009). Taking charge of work and life. *ABA Journal*, 95(2), 31–32.

The Royal Institute. (2005). *International religious dictionary: the royal institute edition 2nd edition*. Bangkok: Arun (in Thai).

Tichy, N. (1983). *Managing strategic change: technical, political, and cultural dynamics*. NY: John Wiley & Sons.

Tokhan, K. (2002). *Buddhism, society, and Thai culture*. Bangkok: Odean (in Thai).

Totton, N. & Jacobs. M. (2001). *Character and personality types*. Philadelphia, PA: Open University Press.

Visalaporn, S., & Mulsilpa, W. (1991). *The way to solve the stress*. Bangkok: Saeangsin (in Thai).

Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences*, 29, 367.

Warr, P. B. (1987). *Work, unemployment and mental health*. Oxford: Clarendon Press.

Winkelmann, L., & Winkelmann, R. (1998), Why are the unemployed so unhappy? Evidence from panel data. *Economica*, 65, 1-15.

Worrall, L., & Cooper, C. L. (2006). *The quality of working life: a survey of managers' health-chartered management institute research report*. London: CMI.

Yamane, T. (1967). *Statistics, an introductory analysis 2nd edition*. NY: Harper and Row.