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Effects of Cognitive and Non-cognitive Skills on Earning Outcomes: A Case of Khonkaen Province of Thailand

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Abstract

From the well-known Mincer equation explained years of schooling and potential training periods as main sources for earnings differential, this study further analyzes another explanation of earnings in terminology of non-cognitive skills. Difference in wages in different occupations and genders could be explained by non-cognitive traits. Significant non-cognitive variables are 1. locus of control 2. self-esteem 3. big five personalities and 4. conflict management. After adding a non-cognitive skill called "Locus of Control" into the model and comparing without it, the coefficients declined when adding a non-cognitive skill. Unlike cognitive skills, adding non-cognitive measures to the model greatly reduces the explanation by cognitive skills (years of schooling), experience year, and training hour.

Keyword: Cognitive skills, Non-cognitive skills, Earning, Khonkaen Province of Thailand

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ผลกระทบของทักษะทางปัญญาและทักษะด้านบุคลิกลักษณะต่อรายได้กรณีศึกษาจังหวัดขอนแก่น ประเทศไทย

*จงรักษ์ หงษ์งาม**

บทคัดย่อ

เป็นที่ทราบกันดีว่าสมการของมินเซอร์กล่าวถึงปัจจัยที่ส่งผลต่อความแตกต่างกันของรายได้ ได้แก่ ระดับการศึกษา ระยะเวลาที่สั่งสมจากการฝึกอบรม การศึกษาวิจัยนี้ได้ต่อยอดองค์ความรู้ของมินเซอร์โดยการเพิ่มแนวคิดทางจิตวิทยา ผ่านตัวแปรด้านบุคลิกลักษณะเข้าไปในสมการรายได้ของมินเซอร์ ผลการศึกษาพบว่านอกจากปัจจัยเดิมที่สามารถอธิบายรายได้แล้วนั้น ยังมีปัจจัยด้านบุคลิกลักษณะที่ชื่อว่า *1. การเชื่ออำนาจแห่งตน 2. ความภาคภูมิใจในตน 3. คุณลักษณะทั้งห้าของผู้นำ และ 4. พฤติกรรมการบริหารความขัดแย้ง* ที่ส่งผลต่อรายได้ (ในต่างอาชีพ และต่างเพศ) เช่นกัน นอกจากนั้นเมื่อเปรียบเทียบสองกรณีในสมการรายได้ของมินเซอร์ คือการวิเคราะห์แบบมีและไม่มีตัวแปรด้านบุคลิกลักษณะในสมการ ก็พบอีกว่า การเชื่ออำนาจแห่งตน สามารถอธิบายรายได้ และยังทำให้อำนาจในการอธิบายตัวแปรทางปัญญา (ระดับการศึกษา จำนวนปีประสบการณ์ ระยะเวลาที่สั่งสมจากการฝึกอบรม) นั้นมีค่าลดลง

คำสำคัญ: ด้านทักษะปัญญา, ทักษะอื่นๆ ที่ไม่ใช่ทางปัญญา, รายได้, จังหวัดขอนแก่น ประเทศไทย

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1. Introduction and Conceptual

Quantity versus quality endowments in human capital are a cause of wage differentials among occupations and genders. According to the mass production of education system in an undergraduate level, there is a big problem such as a mismatch issue between employers and employees. Schools have inadequately cooperated with firms to decline this gap. Some particular curriculum has no direction to generate students for what their occupations should be in the future. About training, Thailand has no obligation law for business to sustain development to their staffs due to its relation to the firm's cost. Even though the cost of training can reduce the tax revenue, most firms seem to ignore them. For Thailand public sector, training is considered weak in terms of passion and continuity especially in middle and a high class staff level. Nonetheless, as a whole picture, so far the average years of schooling increased from 7.1 years in the 1999 to 7.8 years in the 2003 (For students aging more than 15 years, completion rate in primary schools grew up from 92.6 percent in the 2000 to 100 percent in the 2004 and secondary schools enhanced from 48.8 percent in the 2000 to 53.5 percent in the 2003. These numbers only show a quantity of achievements through levels of schooling. However, the point of view in terms of quality such as personalities or traits may have been concerned by employers. Define the name of skills, the quantity measure in the name of "Cognitive Skills", and the quality indicator called "Non-cognitive Skills." This study focuses on micro-mechanisms where it governs the labor markets to find some answers on the relationship between different types of personalities and its rewards in labor markets. In other words, it investigates the types of personal traits desired by employers being known in economics as "Non-cognitive skills (NC)". The objectives of this study are:

One, find how well non-cognitive skills relative to cognitive skills explain earnings differentials. Non-cognitive skills include conscientious work habits, effort, other behaviors and traits, leadership, sociability (extraversion), self-confidence, social sensitivity, impulsiveness, openness to experience, emotional stability (calmness), vigor, aggressiveness, disruptiveness, high culture, locus of control, and self-esteem (Farkas, 2003: 544). Two, identify the role of non-cognitive skills in various types of occupations.

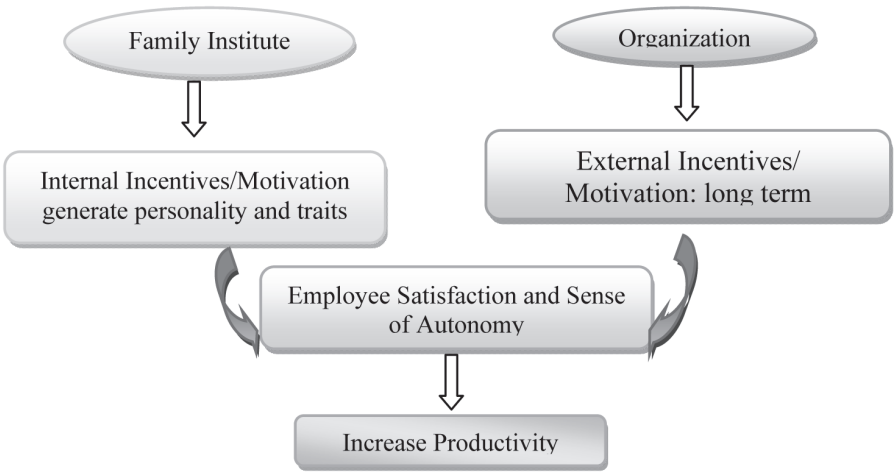
According to Mincer's Earnings Regression where it is one of the popular models that economists have employed to find significant factors to predict the earnings; however, the principal-agent problem has also been discussed as a source of compression of the internal earnings distributions of firms (Shavell, 1979: 55-73).

Conceptual framework to earnings comes from human capital and psychological concepts. Previously, lots of researchers found that cognitive skills, occupations, and demographic backgrounds are set as causes of earnings and I set as a base case. Recently, non-cognitive skills are other independent variables which are of importance to earnings both directly and indirectly. Moreover, in terms of a specific need in each occupation type, non-cognitive traits have played different roles in different occupations.

Do non-cognitive skills enhance productivity? Incentive and motivation could come from internal and external motivation. Internal motivation affects human's personality. External incentives, such as long term employment which was defined in "Ouchi's Theory Z" is another type of motivation (Sullivan, 1983: 132-133). Both kinds of incentives

have enhanced productivity. Motivation can generate non-cognitive skills while it is also another external force that leads to change in worker's behavior. Finally this behavior leads to push the productivity.

Figure 2: Internal and External Motivations



Source: Sullivan, 1983: 133

Consider the left hand side of Figure 2 referred to family's interaction which Filer (1986: 418) showed that father's socioeconomic status could drive their children to be a manager rather than other lower status. Parent's economic status depends upon a level of schooling where it may be implied from Filer that parents tend to invest in education for their children not less than they were ever used to be. Furthermore, Heckman, Stixrud and Urzua (2006: 9-15) have applied an earnings function which are given by a linear- in- the- parameters specification in which they called "An Hedonic Model". The hedonic model was constructed under an assumption that both cognitive skills and non-cognitive skills

have affected earnings. Therefore, in this model it consisted of cognitive and non-cognitive factors.

From psychological concepts related to economic concepts, beyond all standpoints made by psychologists who tried to explain that "motivation" is a base of "behavior." Likewise, Goldsmith, Veum, and Darity (2000: 109-146) stated that motivation is a part of unobserved individual-specific heterogeneity. Nonetheless, some economists and social psychologists have examined the significance of motivation on consequent labor market outcomes. A concept could be established where it implies the concept of Goldsmith, et al.(2000: 110). Generally, in competitive market, personal productivity has been measured by wage. Human capital is one of the important factors determining wage.

$$Wage = f(Human\ Capital) \quad (1)$$

According to Ouchi's Theory Z we can imply that productivity is a function of motivation. Therefore if wage, productivity, and marginal product of individual i are equal in competitive market then the conclusion is that market outcome or wage is a function of motivation.

According to Becker (1964, 1993) when he established the importance of human capital theory, he offered a well-known investment account of the supply-side forces, whilst Polachek and Siebert (1993: 13) had also defined that market-equilibrating process creates "wage stickiness."

Goldsmith, et al.(2000: 109-146) found that in a short-run period motivation drives productivity and finally increases wages. Thus, both motivation and human capital where both could be measured by schooling,

work place experience, and academic achievement, are the important determinants of wage earnings. In addition, the evidence suggested that the impact of human capital accumulation on wages depends on motivation, especially in male, female, and Hispanic. The accumulation of human capital is a consequence of motivation (Goldsmith, et al., 2000: 110). In case of profit maximization, a firm will pay worker a real wage. Production function depends on both productivity of capital and labor. Hence, wage could imply the production function. Moreover, motivation which is embedded in labor force's productivity might be a factor affecting individual wage. Goldsmith, Veum and William Darity (2000: 111-112) specified that motivation affects labor's productivity, so called "Human Efficiency: HE" as shown in four equations below:

$$W_i = MP_i(K_j, HE_i) \quad (2)$$

Individual wage (w_i) is a function of individual marginal product (MP_i) which related to capital in the jth firm and human efficiency capital of firm j (K_j)

$$HE_i - HE_j(M_i, e_i * HC_i) \quad (3)$$

Human efficiency could be explained by motivation. Motivation presents an effort. Therefore, magnitude of human efficiency can be understood by motivation and multiple of human capital and their effort. Equation 3 can imply $HE_i = M_i + e_i * HC_i$ and after taking differentiation by HC_i and then by M_i we obtain new meaning in equation 1.2.4. Actually, increment of motivation leads to higher effort or in other words $\frac{\partial e_i}{\partial M_i}$ imply a positive motivation effect.

Finally the solution is presented

$$\frac{\partial\left[\frac{\partial HE_i}{\partial M_i}\right]}{\partial HC_i} = \frac{\partial e_i}{\partial M_i} > 0$$

Where M_i is individualmotivation, HC_i is Human Capital. The above state that more human capital leads to the greater effect of motivation on productivity. It implies that $\frac{\partial e_i}{\partial M_i}$ might be a "motivation effect" or "non- cognitive skills" hidden in the work. The psychological theory and behavior to a concept of human capital is considered. These hypotheses are the points of which non-cognitive traits could influence earnings. All non-cognitive traits were classified by four categories (1) Mini-marker; (2) Conflict management; (3) Locus of control, and lastly (4) Self-esteem.

2. Data and Estimation

Data collection was obtained from a field survey where the sampling populations were derived from a sector of non-agricultural workers within the urban area of the Mueang District, Khonkaen Province in Thailand. Some of them have been collected by the Nation Statistical Organization carried out during 2008. The samples were randomly selected based on a stratified randomized sampling technique (by non-agriculture sector with seven occupations categories), where a large number of documented questionnaires set was used. This comprises cognitive ability, demographic data, socio-economic data, and non-cognitive factors.

The log-linear equation of earnings are estimated (wages and other income) by sets of cognitive variables and non-cognitive variables in different occupations by controlling for lists of socioeconomic backgrounds.

New assumption is non-cognitive skills as additional factors to explain earnings. However, this study has employed weighted least square (WLS) to measure impacts from non-cognitive variables that should be playing the role behind the cognitive ability (Borghans, Meijers and Weel, 2006; Heckman and Rubinstein, 2001; Viinikainen and Kokko, 2012).

Lists of controlled socioeconomic backgrounds are a number of schooling years, a number of experience years and its square term, training hour, level of English proficient, ability to speak Esan language (rural language of Northeastern or the "Esan" Region of Thailand), gender, parent's years of schooling, year duration that workers live in Khonkaen province, and level of illness.

The data set contains worker's occupations categorized according to International Standard Classification Occupation (ISCO). It should be noted that the categories used here are slightly different from a previous study used by Filer (1986: 415) that comprised 5 categories; i.e., 1) Professional, Technical, and Managerial 2) Clerical 3) sales 4) Service 5) Blue collar. However, this study comprises 7 occupations (non-agricultural sector) as a series of dummy variables represent a series of occupations. OCC1 is Legislators, senior officials and managers, OCC 2 is Professionals, OCC 3 is Technicians and associate professionals, OCC 4 is Clerks, OCC 5 is Service workers in shop and market sales, OCC 6 is Crafts and related trades workers, OCC 7 is Plant and machine operators and assemblers

Non-cognitive skills can be measured by all personalities as Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism, Withdrawn, Forcing, Smoothing, Confronting, Compromising, Self-esteem, Locus of control, and Frequency of Conflict. The last one is a frequency of conflicts in the firms within 3 months.

For the empirical analysis, the field work has been surveyed by a questionnaire which comprises two sections. The first section is related to socioeconomic backgrounds and the second deals with psychological attitudes--study a group of non-cognitive skills. People express their opinions about different statements dealing with experience toward working life such as openness, extraversion, agreeableness, conscientiousness and neuroticism. Moreover, they answered about their behaviors to some conflict situation statements, locus of control and self-esteem.

For each psychological question, they said whether they were "Extremely accurate" (6 point), "Accurate" (5 point) "Quite Accurate" (4 point), "Quite Inaccurate" (3 point), "Inaccurate" (2 point) "Extremely Inaccurate" (1 point). The set of Likert scale as above is employed in every statement except conflict management behaviors. For the conflict behaviors, I employ six levels in terms of how often they behave like this, "Always" (6 point), "Often" (5 point), "Quite Often" (4 point), "Quite few" (3 point) "Few" (2 point), "Never" (1 point) (Likert, 1932: 1-55). The reason for preferring the 6-point scale rather than 5-point scale is to have an even number (6 points) of ratings in the scale the respondents has to answer either the positive or negative end of the scale while 5-points tends to answer "3" for a mid-point

The variables employed in my analysis are based on four perspectives, locus of control by Rotter (1966: 1028), Mini-markers by Saucier (1994: 506-516), self-esteem by Deckers (2005), and conflict management (Feltner and Goodsell, 1972). The measure of labor productivity and the proxies specified for cognitive and non-cognitive skills, schooling, and adult health are first discussed. Then the functional relationships between human capital and wages are described. Three types of estimation problems are

discussed: (1) a bias due to omitted variables, such as ability or frailty; (2) a bias due to the measurement of an aggregation of multiple sources of human capital, e.g. genetic and socially reproducible variation, which may contribute to different gains in worker productivity; and (3) errors in measurement of the human capital stocks. Empirical examples and illustrative estimates are surveyed.

3. Results

The results show that a percentage change in all independent variables (only significant coefficients) would affect how much earnings was changed. Table 1 shows a percentage change of dependent variables, earnings, in which the model is OLS without non-cognitive skills. As a result, one year of schooling increase is associated with 6.92 percent. For example, if wage is 10,000 Baht, then one year of schooling increase is related to 692 Baht additional wage. Explanation in the same way in case of experience year (count per year) is about 6.75 percent or 675 Baht. The effects of years of schooling are higher than experience (6.92 percent greater than 6.75 percent in case of without NC in model). In addition, other cognitive skills, such as English language and increase in level of development in English language skills, are related to 3.33 percent (less than an additional year of schooling). On the other hand, local language than that of immigrants. Therefore, in the firms, most higher wage or higher status belong to staffs that do not use "Esan language." Illness is highly associated with -4.29 percent of earnings that may be dominated by quantity of OCC6 and OCC7 (due to a proportional random sampling). In other words in Mueang District, Khonkaen province, a number of workers is blue collar rather than white collar.

Second column presents in case of the model has NC. The effects of years of schooling still have more impact than experience (6.69 percent greater than 6.65 percent). Likewise, Lathapipat (2007: 6), who explained the trade-off between lower earnings from investigating experience (see detail in chapter 2, equation 2.2) also presented years of schooling's coefficient higher than years of experience (Lathapipat, 2007: 23). The coefficient of training hour addresses that an additional hour enhances earnings only 0.18 percent. It can imply that most firms in Khonkaen do not concentrate on human resource development. Different occupations among OCC1 to OCC7 show the difference in wages or a wage gap. According to OCC1 as a base case, another OCC shows a negative coefficient which infers that OCC4, OCC 5, OCC 6, and OCC 7 have lower earnings than that of OCC1. For example, OCC4 presents -19.60 (without non-cognitive skills). This negative term states that OCC 4 has lower income than that of OCC1 around 19.60%.

Eventually, the last column presents impacts on future earnings with and without non-cognitive variables in the model. A unit change in the independent variables is evaluated at sample means of the independent variables. All coefficients of cognitive skills might be overestimated. Heckman James J, et al.(2006) indicated that non-cognitive abilities can also play the significant role in future earnings. Unlike cognitive skills, adding non-cognitive measures to the model greatly reduces the explanation by cognitive skills almost 3.34 percent, by experience year 1.56 percent, by training hour 11.53 percent, and by occupations (except OCC7) around 1 to 5 percent. Hence, non-cognitive skills might be determinants

to an earnings model, or in other words, if we adjust the model with non-cognitive skills, then we could reduce an overestimated bias of the parameters.

Figure 3: Cognitive and Non-cognitive skills by Occupations

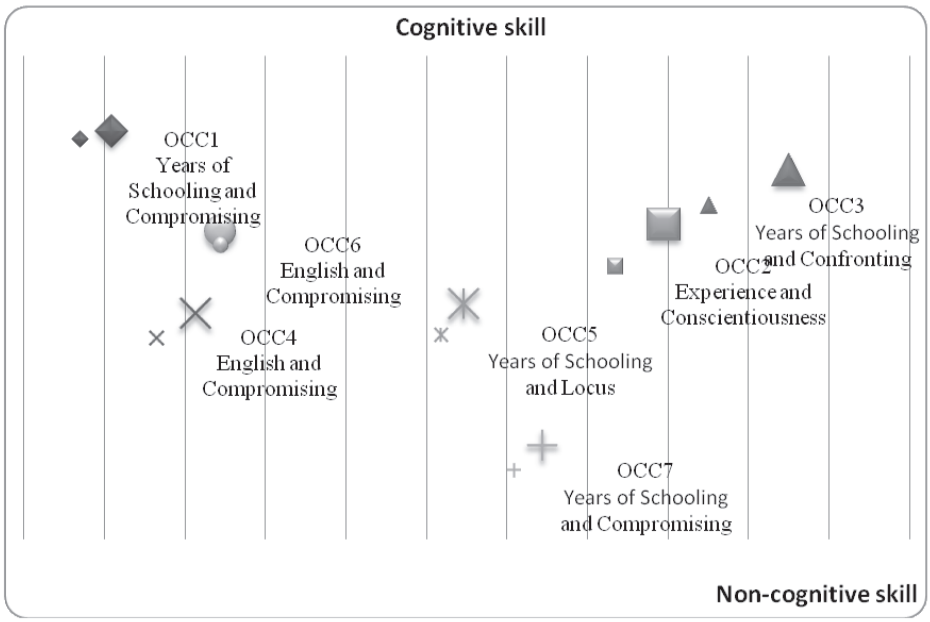


Table 1: Empirical Results on Earnings

Dependent : ln (wage)	OCC1	OCC2	OCC3	OCC4	OCC5	OCC6	OCC7
Year of schooling	0.101***		0.091**		0.058***	0.048**	0.0230**
Year of experience	0.024***	0.078***	0.023***	0.045***	0.044***	0.066***	0.014**
Year of experience^2		0.0001***				0.0001***	
Training hour		0.002**	0.001**	0.007***		0.005**	
Male							
Father Schooling				0.037***		-0.055**	
Mother Schooling	0.032**		-0.035***			0.075**	-0.043**
Live KKN			0.029***	-0.013**			
English skill	0.0443*	0.052***		0.056***	0.026*	0.076***	
Esan skill					-0.043*		-0.023*
Illness				-0.106***			-0.089***
Openness	-0.049*						0.023**
Conscientiousness		0.059***					
Extraversion							
Agreeableness							
Neuroticism							
Self	0.022*						
Locus	0.022**				0.009**		
Conflict	-0.023**		0.017**	0.029***	-0.011**	-0.025**	
Withdrawn						0.039**	
Forcing		0.043**	-0.034*	-0.054***			
Smoothing						-0.047**	
Confronting	0.047**		0.089***				-0.024**
Compromising	-0.078**			-0.057***		-0.051**	0.028***
Constant	5.779***	7.891***	7.198***	9.119***	7.686***	8.169***	8.410***
R-Square	0.692	0.562	0.580	0.748	0.455	0.486	0.346

Note: Heteroskedasticity-robust standard errors in parentheses*** statistically significant at 0.01 level ** statistically significant at 0.05 level * statistically significant at 0.1 level

Table 2: Ordinary Least Square by Occupations (With non-cognitive skill)

Dependent : ln (wage)	OCC1	OCC2	OCC3	OCC4	OCC5	OCC6	OCC7
Year of schooling	0.101***		0.091**		0.058***	0.048**	0.0230**
Year of experience	0.024***	0.078***	0.023***	0.045***	0.044***	0.066***	0.014**
Year of experience^2		0.0001***				0.0001***	
Training hour		0.002**	0.001**	0.007***		0.005**	
Male							
Father Schooling				0.037***		-0.055**	
Mother Schooling	0.032**		-0.035***			0.075**	-0.043**
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Esan skill					-0.043*		-0.023*
Illness				-0.106***			-0.089***
Openness	-0.049*						0.023**
Conscientiousness		0.059***					
Extraversion							
Agreeableness							
Neuroticism							
Self	0.022*						
Locus	0.022**				0.009**		
Conflict	-0.023**		0.017**	0.029***	-0.011**	-0.025**	
Withdrawn						0.039**	
Forcing		0.043**	-0.034*	-0.054***			
Smoothing						-0.047**	
Confronting	0.047**		0.089***				-0.024**
Compromising	-0.078**			-0.057***		-0.051**	0.028***
Constant	5.779***	7.891***	7.198***	9.119***	7.686***	8.169***	8.410***
R-Square	0.692	0.562	0.580	0.748	0.455	0.486	0.346
Observation	80	70	64	60	129	116	94

By stepwise method, some blank coefficients are not included in the model because it is not statistically significant in their model..***is statistically significant at 0.01level ** is statistically significant at 0.05 level * is statistically significant at 0.10 level

4. Conclusion and Recommendation

Non-cognitive skills play the role of explanatory factors in earnings function. Future earnings could be predicted more precisely than the original one which only focused on cognitive skills. Difference in wage in different occupations could be explained by non-cognitive traits. Significant non-cognitive variables are locus of control, self-esteem, big five personalities, and conflict management behaviors. Those traits have different effects for different types of occupations. A labor market has valued traits differently in various kinds of tasks. OCC1:Legislators, senior officials and managers are expected by employers in cognitive skills, years of schooling, rather than non-cognitive skills (negative compromising). OCC2: Professionals would earn more than other staffs (same occupation) if he or she have higher experience. Moreover, conscientiousness characteristic is the highest significance among personalities to future earnings due to this occupation having quite high efficient workers. OCC3: Technicians and associate professionals, this career needs cognitive skills (years of schooling) quite equivalent to non-cognitive skills (confronting). OCC4: Clerks is a career which administrates at back of the office. Therefore, non-cognitive skills in the sense of too compromising may lead to ineffectiveness. A positive effect from cognitive skills is English language proficiency. OCC5: Service workers in shop and market sales, in the common sense, this career should use non-cognitive skills rather than cognitive skills, but in this case study, Mueang District of Khonkaen Province, the result presents an opposite way of the common sense. A successful salesman who has high education is very meaningful to their earnings. However, locus of control, a proxy of non-cognitive skills, plays a little role (less than cognitive skills) to earnings.

Consider another collar, blue collar, OCC6: Crafts and related trading workers need cognitive skills, English language, rather than non-cognitive skills. The interesting finding is that non-cognitive skills affecting earnings in a negative way is compromising. The implication from this result is that this career seems to use a special skill, for instance, handy craft workers in a factory will need creativity to their works. Therefore, compromising might not be a beneficial behavior in this job.OCC7: Plant and machine operators and assemblers, most workers here are followers with low education. Therefore, cognitive skills (years of schooling) is of little explanatory power to earnings, similar to non-cognitive skills (compromising)

Non-cognitive skills, so far, are important factors of human capital. Investment in this skills should generate originally from families, schools, and finally on the job training. Like cognitive enhancing, non-cognitive skills could be created by special technique of parents, teachers, and employers. For educational levels which is one of cognitive skills, though the education of Thai labors has increased,

Moreover, as this study presents the significance of non-cognitive skills, some attitudes such as locus of control, compromising, conscientiousness, are expected from employers due to a labor market value as significance to predict future earnings. Therefore, two institutes having to concern and generate beneficial non-cognitive skills are families and academic institutes in process of construction. When a labor force has participated a labor market, the continuous development should be a responsibility of an organization or a working place through a policy of human capacity development.

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Appendix

Non-cognitive Skills

1. Mini-Marker

Mini-Marker or Big Five personalities are well known for describe human personality. They are as follow:

1) Openness is a person who has initiated an idea of inventive thinking. This trait includes innovative and complicated minded where it includes initiative and imaginative thinking thus offering some good philosophy in life. These personality traits do have a positive effect on labor market success.

2) Conscientiousness shows how to behave in a good self-discipline and efficiency. For instance, when working he or she possesses courteousness and provided intensive steps in working for the successful job carried out. The managerial officer has a higher thoughtfulness than the service officer. Moreover, other terms of conscientiousness are known as hardworking, which estimated education attainment as a positive thinking, or a hard worker, where it led to a high attainment in education.

3) Extraversion is a behavior of persons who prefer to be out-going persons and seek stimulation in the company of others (this personality could cooperate well with other coworkers). This personality performs a high confidential gesture, high in self discipline, high anxiety, outspoken and ready to confront any problem. The managerial group tends to behave like sociability, but lower than the sales group.

4) Agreeableness represents a trait of friendliness and compassion rather than suspicious towards others. This trait possesses readiness in helping others, encourage and give inspiration with politeness. Filer (1986: 418) estimated the non-cognitive skill on the probability of entering

the occupational group. As a result, managerial occupation has a higher agreeableness or friendliness than sales and clericals. Nonetheless, they have a degree of friendliness lower than the service officers.

5) Neuroticism is the behavior of a sensitive person who is always angered and anxious. This type of traits possesses moody gesture, e.g. he or she always has a wondering eye, uses a crazy word, yell at people due to unstable minded so perform a moody gesture, not happy to see other people attained a better performance or otherwise envy. To look for persons who belong to this trait, researcher must provide some opposite ideas, e.g. whether he or she is a person who could easily create a bad temper then a question to be used should opposite to his or her temper. To cross check these behaviors, a psychologist has to set a question in opposite meaning. For instance, openness comprises of both initiate and conservative (the score would have been reversed).

2. Conflict Management

Among different opinions of staff in the organization, since when it is just the case of not seeing things the same way, this could lead to some conflicts, such as between bosses, staff and among team staff, family conflicts, conflicts of interest. Conflict is a situation that no one can avoid. To find a conflict resolution, one can use one or more of these five available methods (Feltner and Goodsell, 1972: 694).

1) Withdrawing is to refrain from conflicting action, rather than to dissent and perhaps be forced to retreat later. The way of this result is “lose-lose.”

2) Forcing is the way to solve the problem by a “win-lose” situation. The outcome is usually dependent on the relative strengths of the parties in the conflict.

3) Smoothing addresses that what might result in the conflict. It is better not to discuss. Differences are better. It is played down or is a "lose-win" situation.

4) Compromising is the bargaining result in an intermediate position with the satisfaction that half is better than none or "fifty-fifty" benefits.

5) Confronting is a brain storming process by an open exchange about the situation.

3. Locus of Control

Refers to an individual's generalized expectations regarding where control over consequent events resides. Originated by Rotter (1966), it is grounded in expectancy-value theory, which describes human behavior as determined by the supposed likelihood of an event or outcome. (Rotter, 1966: 1-28).

1) Internal Locus of Control : People's misfortunes results from the mistakes they make.

2) External Locus of Control: Many of the unhappy things in people's lives are partly due to bad luck.

4. Self-esteem

occupational success may enhance self-esteem rather than the reverse. Alternatively, self-esteem may be helpful only in some job contexts. Therefore, self-esteem causes good task performance, with the important exception that high self-esteem facilitates persistence after failure. The case of leadership does not stem directly from self-esteem but self-esteem may have indirect effects on leadership.