"DEVELOPMENT OF SOCIAL INTELLIGENCE INDICATOR FOR TERTIARY STUDENTS IN THAILAND"

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ABSTRACT:

This research aimed to develop and examine social intelligence indicators. Survey research was design. The sample group in quantitative research was 600 students from tertiary students in Thailand, was selected by simple random sampling. The instrument used for data collection were questionnaires and interview form. Data were analyzed using confirmatory factor analysis. The results showed that the social intelligence of tertiary students in university of Thailand, contained 8 aspects: 1) interpersonal relation 2) problem solving 3) impulse control 4) social responsibility 5) stress tolerance 6) resilience 7) reality test and 8) empathy, respectively.

INTRODUCTION

Youth or adolescence is the transition age from childhood to adulthood. The youth is the person who has an age between 10-19 years old (World Health Organization, n.d.). It is an age that has changed considerably in terms of physical, emotional, mental, social, and spiritual aspects (Steinberg & Morris, 2001). They will have physiological changes from hormonal changes that lead to sexual development. They also have a lot of emotional changes. Their emotions are easily changed, confused and sensible, unsecured, and begin to seek out their own identity and oneself. In terms of social change, they will pay more attention to peers and outside society. They need recognition from friends and relationships with others as well as they need more independence (Kaewkangwan, 2008). They might have aggressive emotions or easily volatile moods. They might behave violently and aggressively, hurt themselves or others. They might have problems with interpersonal relations (Kaewphonsawan & Tuntasood, 2012). Social intelligence is an important foundation of Thai youth for building relationships with others. A

youth who has high social intelligence can easily adapt themselves with others, is accepted by others, has self-confidence, good social skills, none of the behaviour issues such as aggressive actions, conflict in relationships, stress, anxiety, depression, drug use, or risky behaviour in various fields. For these reasons, the researchers, who are the teachers and are responsible for the mental health care of students and youth have recognized the importance of enhancing the social intelligence of vulnerable youth from the early stages. Therefore, the researchers are interested in a study to enhance social intelligence of Thai youth, especially, those who are studying in the University to be able to strengthen and increase their inner potentials and gain more skills in living with others. The results can help reduce adaptation problems which may lead to mental health problems. After that, the youth in this group can grow up to be adults with good potential and social responsibility. They will be essential influences in further development of the country. Furthermore, the results can provide a basic knowledge foundation of empowering individuals for living with others and socializing skills with other groups of the populations.

RESEARCH OBJECTIVES

1) To develop indicators of social intelligence among tertiary students in Thailand.

2) To examine the quality of the social intelligence indicators among tertiary students Thailand, in terms of content validity and structural validity.

The research conceptual framework

Social intelligence is a fundamental factor within individuals in the development of social skills and the building of interpersonal relations (Albrecht, 2006). Social intelligence is the ability to live with others in society harmoniously and happily. Social intelligence can build good relationships and a person can work with others in society to achieve the objectives required (Goleman, 2006). It is the ability to understand, adapt, and build intelligent relationships with others. It is also the ability to create good feelings in others, make others cooperate (Albrecht, 2006). The person who has high social intelligence tends to have social awareness. The person can perceive other's emotions, understand the situation, and has the ability to interact with others, called a social facility. They can live with others well, have sensitivity, and understand others well. They have always expressed appropriate behaviours with situations, time, and places (Goleman, 2006). They can adapt their emotions or minds to suit others. They can live in harmony with others and the environment (Albrecht, 2006). They behave conducively in society, high ability for helping, sharing, and comforting others (Wongkumsin, 2015). They can reduce depression (Suriyo, Surakarn, & Prasertsin, 2016).

Base on the reviews of theories and research on social intelligence, the researchers brought the aforementioned results to develop indicators of social intelligence for tertiary students in Thailand, to promote this group of students for having the adaptive skills to live with others in society with high efficiency.
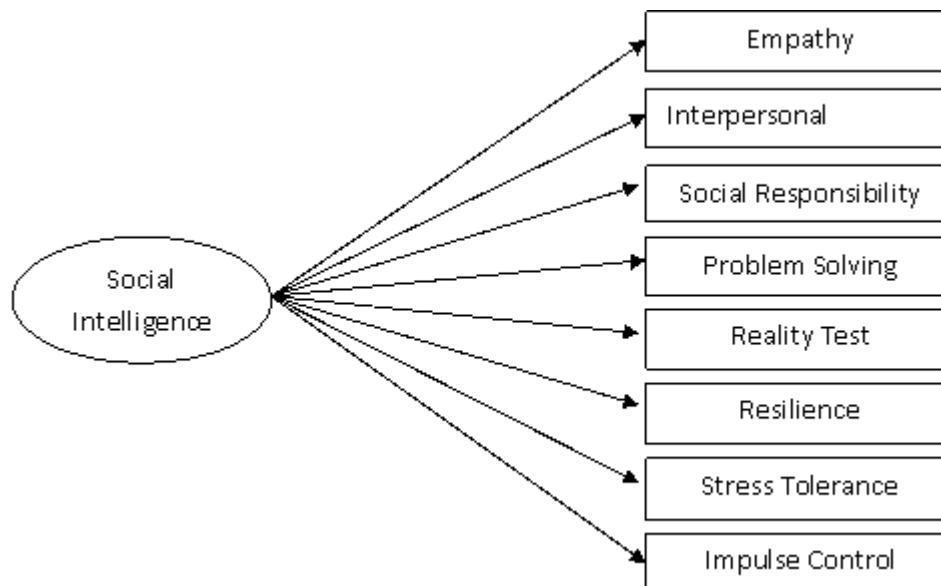

Figure 1. Model of the assumption displaying elements of social intelligence indicators

METHODOLOGY

Population and sample

The population were 1,777,040 tertiary students in Thailand. The sample were 600 tertiary students who were randomized by simple random sampling.

Research tools

A questionnaire was employed for data collection. It comprises two parts:

Part 1: Questions on personal information including 1) gender, 2) academic status, and 3) faculty

Part 2: Questions on the eight key components of emotional intelligence: 1) empathy 2) interpersonal relation 3) social responsibility 4) problem solving 5) reality test, 6) resilience 7) stress tolerance, and 8) impulse control. It is characterized by rating scales with five levels: highest, high, medium, low, and lowest.

The questionnaire was evaluated for content-oriented and structure-oriented validities. In term of content-oriented validity, the researchers selected questions with compliance index of at least 0.50. For structure-oriented validity, the researchers selected questions with discriminant power (r) of at least 0.20.

Data collection

The data was collected by using online questionnaires in the covid-19 pandemic for format of Google form. Questionnaires were distributed via social networks such as Facebook and Line for collecting data from tertiary students in Thailand.

Data Analysis

Basic statistical analysis was performed with SPSS program. The Confirmatory Factor Analysis was examined with the consistency of structural composition model with Mplus program.

Results

The results showed the Confirmatory Factor Analysis of the social intelligence model among the tertiary students in Thailand. There were 8 main elements: 1) empathy 2) interpersonal relation 3) social responsibility 4) problem solving 5) reality test, 6) resilience 7) stress tolerance and

8) impulse control. There were 64 sub-elements with positive values between 0.252 and 0.882, which were not statistically significant at 0.05, and there was 1 sub-element with positive value at 0.062 which was not statistically significant at 0.05. It showed that the 65 sub-elements were important variables of social intelligence, except 1 sub-element which was not significant to social intelligence. The main components were sorted according to the standard element weight which were sorted in descending order as follows: interpersonal relation, problem solving, impulses control, social responsibility, stress tolerance, resilience, reality tests, and empathy with value as follow: 0.756, 0.731, 0.729, 0.713, 0.711, 0.690, 0.675 and 0.446, respectively. It means the interpersonal relation element has the most significant weight in explaining the social intelligence of tertiary students. The element of empathy has the least significance of element weight.

The Social Intelligence Composition Model was consistent with the empirical data with the chi-square statistic being 306.719, the degree of freedom (df) 309, p-value (*p*) .526, the Root Mean Square Error of Approximation (RMSEA) 0.019, the Standard Root Mean Square Residual (SRMR) 0.041, the Comparative Fit Index (CFI) value is 0.999, the Trucker Lewis Index (TLI) 0.998. The p-value (*p*) was sufficient for not rejecting the hypothesis. It showed that the chi-square test result was different from zero which is not statistically significant. This indicated that the hypothesis could be accepted and that the measurement model had structural validity consistent with the result of the Root Mean Square Error of Approximation (RMSEA) and the Standard Root Mean Square Residual (SRMR) being less than .07. The Comparative Fit Index (CFI) and the Trucker Lewis Index (TLI) was close to 1.

Table 1: The results of the confirmatory component analysis of the social intelligence model.

Factors	Abbreviation	Results			
		β	SE	t	R^2
Empathy	EMP	0.446	0.035	12.647	0.199
Interpersonal relation	INRE	0.756	0.023	32.694	0.572
Social responsibility	SORE	0.713	0.024	30.212	0.508
Problem-solving	PRSOSK	0.731	0.022	32.867	0.534
Reality test	EXPER	0.675	0.025	26.619	0.456
Resilience	FLEX	0.690	0.025	27.957	0.476
Stress Tolerance	STRESS	0.711	0.024	29.863	0.505
Impulse control	CONTROL	0.729	0.023	32.024	0.531

$\chi^2 = 306.719$, $df = 309$, $\chi^2/df = 0.993$, $p = 0.526$, $RMSEA = 0.019$, $SRMR = 0.041$, $CFI = 0.999$, $TLI = 0.998$
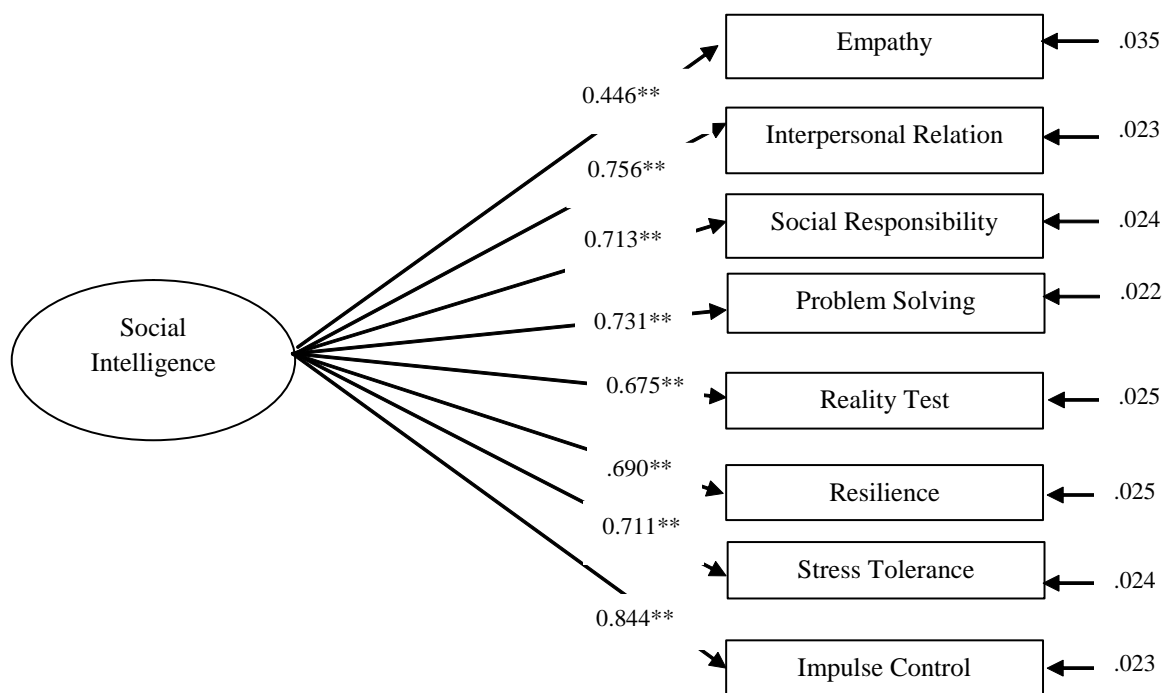

Figure 2. The results of the confirmatory component analysis of the social intelligence model.

From Table 1 and Figure 2, the results of the confirmatory component analysis of the social intelligence model showed that the model was consistent with the empirical data. This was determined from the chi-square statistics of 306.719, the degree of freedom (df) of 309, p-value (*p*) of .526, the Root Mean Square Error of Approximation (RMSEA) of 0.019, the Standard Root Mean Square Residual (SRMR) of 0.041, the Comparative Fit Index (CFI) value of 0.999, the Trucker Lewis Index (TLI) of 0.998 and by the

Root Mean Square Error of Approximation (RMSEA) and the Standard Root Mean Square Residual (SRMR) being less than .07. The Comparative Fit Index (CFI) and the Trucker Lewis Index (TLI) was close to 1.

It can be concluded that the key component model of social intelligence indicators among the tertiary students in Thailand, comprising eight key components, was consistent with the empirical data.

DISCUSSIONS

The research results showed the social intelligence of tertiary students in Thailand had 8 elements, sorted by the significance of element weight as follows: interpersonal relation, problem solving, impulse control, social responsibility, stress tolerance, resilience, reality test, and empathy. Each element corresponded to the concept and the research results as follows.

Interpersonal relations was the element of social intelligence indicator with the highest weight as Pawajarleonpol (2016) stated that interpersonal relations meant the ability to communicate positively with peers, displayed a good relationship with people around, live with others with peace of mind, show a sense of familiarity, trust each other, be satisfied with the relationship have appropriate expression to one another, and be able to express conflicting opinions constructively. This is in accordance with the research of Wattana (2014) who examined a effects of the program to enhance the relationship between people and life satisfaction of the elderly in a nursing home. The study showed that the relationship enhancement program for the elderly could strengthen the relationship among the elderly and create greater life satisfaction.

Problem-solving was the second-weighted element of social intelligence. Srisakorn (2004, p. 68) stated the meaning of problem-solving skills as an operation to achieve the desired objectives by using knowledge, experience, and ideas to solve problems in various situations. The solving of complicated issues with quality and success required the selection of the best method or process for problem-solving.

Impulse control was the third-weighted element of social intelligence which Thapayom (2020) defined methods for dealing with stress (Impulse Control) that include stress handling and management as well as controlling and expressing appropriately their own emotions. In accordance with the study of Thapayom (2020), who tested the effects of stress management

ability and interpersonal communication skills on the work performance of accountants. The research results revealed that the ability to manage both areas of stress (including stress tolerance and impulse control) had a positive impact on work performance.

Social responsibility was the fourth-weighted element of social intelligence. Michael and Maryann (1998) found that the person who had social responsibility, strongly performed duties with responsibility for both oneself and society on a regular basis. This caused the progress in both work and society. The person would be praised, gained happiness and good mental health. Thongsuepsai (2009), stated that if a person had knowledge and ability but none of human relations with others and was irresponsible, the person would be unable to work with others and the person would feel unhappy to live with others in society.

Stress tolerance was the fifth-weighted element of social intelligence. Pawajarleonpol (2016) defined it as the ability to endure bad events and stressful situations. Even in difficult situations, the person would not be governed by a bad event.

In accordance with Thapayom (2020) the effects of stress management ability and interpersonal communication skills had effects on work performance of accountants. The research revealed that the ability to manage both areas of stress (including stress tolerance and impulse control) had a positive impact on work performance.

Knowing of resilience is the sixth-weighted element of social intelligence, which Pawajarleonpol (2016) stated as the ability to adjust the mood, thought, and behavior of a person to change conditions and situations. This element is related to a person's overall ability to adapt oneself to unfamiliar, unpredictable, and changing situations. Resilient people will be able to change their minds when available evidence shows they have made a mistake. In general, the

said person generally has open characteristics and open-minded. The study of Beheshtifar and Roasaei (2012) found that resilience was a component of social intelligence and it was an essential characteristic of a competent leader.

Reality test is the seventh-weighted element of social intelligence. Based on Bar-on's Theory of Positive Mental Health (2005, pp. 41-46), if a person has a conflict with a colleague as a result of ambiguity or misunderstanding, the person needs to test the truth so that the problem is clearly understood. Therefore one can create peace of mind for both parties, cause satisfaction to each other, and gain happiness with greater mental health. Pawajarleonpol (2016) referred to the reality test as the ability to assess consistency between what has been experienced and what is actually present. This ability is related to finding evidence to confirm, judge, and support feelings, perceptions, and thoughts. The reality test is related to the immediate situation with the intention of placing things in a correct perspective without imagination or daydreaming

Empathy is the eighth-weighted element of social intelligence. According to Goleman (1998, pp. 137-138) empathy builds and maintains positive relationships with others, understands others, can respond appropriately to others, and help the person to be generous with others. Empathy has great importance to coexistence in society. Empathy can understand the needs and feelings of others. There are coexistence and activity together, and Howe (2017) stated that empathy was the key element in fostering quality relationships. As Suraksa (2000, p. 143) stated that the ability of empathy was a social skill that was an indispensable skill for living in the family, workplace, and in society. Because people have to create relationship with others inevitably, empathy is the key to improve the quality of a person to live happily and successfully with others. A person can adapt oneself to face different situations.

The implementation of research results

1. The educational institutions can adopt these indicators to strengthen social intelligence by measuring the social intelligence of students in comparison with the normality created by researchers to acknowledge the students' social intelligence level.

2. The results of the research indicated that Interpersonal relations are the most important element of social intelligence. Therefore, educational institutions should focus on interpersonal relations as a guideline for organizing activities to promote effective interpersonal relations among students.

Suggestions for further research

1. Establishing the normality of measuring social intelligence among students in other groups of students such as junior high school students, vocational students, and then comparing the normality of social intelligence among groups.

2. Modeling the Social Intelligence Prediction with personalities to investigate success personalities found in students who display social intelligence.

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