

# Individual Differences in Social Intelligence: Evidence from College Students in Thailand

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**Abstract:** The purpose of this research was to scrutinize social intelligence in relation to demographics variables including gender, background, and age. A total of sixty undergraduate students in a selected public university in Bangkok were selected as a sample for data collection and asked to complete a survey questionnaire. An instrument for scale measurement in this study was a modified version of Tromsø Social Intelligence Scale (TSIS). Findings demonstrated that the overall social intelligence among undergraduate students was at a moderate level, and social skills sub-scale of social intelligence was rated as the highest dimension. Analysis of independent samples t-test indicated no significant differences in social intelligence according to gender, background, and age. Nevertheless, results found a significant difference in social information process between students with different groups of age indicating that students aged above 25 years old had more social information process than students aged between 18-25 years old.

**Keywords:** Social intelligence, Individual differences, College students, Thailand.

## INTRODUCTION

Social intelligence alludes to a capacity to recognize and understand others and be able to build effective relationships and robust connections with them [1]. The examination on social intelligence in relation to other variables in different fields and contexts has extensively been explored in past decades. Precisely, the importance of social intelligence for students' life success has been mentioned in many ways [2]. Numbers of studies have attempted to scrutinize relationships between social intelligence and academic success [3, 4].

Although the investigation on social intelligence has been observed in numerous areas and contexts, the emphasis on social intelligence in relation to individual difference has still obtained an interest from scholars and researchers in this field. Previous research argued that individuals might have an equality of general intelligence, but they are distinguished in special forms of intelligence in particular social intelligence [5]. Past research revealed that females are biologically better in sensing and understanding the emotions, feelings and needs of others than males [6]. Some scholars traditionally considered emotional

intelligence or social intelligence as a feminine trait [7]. A recent study of Ferry [8] who conducted the research on emotional intelligence and social intelligence in business firms still supported this assumption as this study found that female were more socially intelligent than males. Not only evidenced in business areas, but also differences in social intelligence between males and females was found in other context, particularly colleges and universities [9]. In addition, prior research did not place its emphasis on studying social intelligence in relation to gender difference solely, but also attempted to scrutinize the linkage between social intelligence and age difference as well. Recent research of Hartshorne and Germine [10] explored that social intelligence has progressed during the 20s and 30s, and people in age of 40s received the highest scores on a social intelligence test. Similarly, research on social intelligence in a Thai business firm demonstrated a significant difference in social intelligence between employees with different age groups [11]. Moreover, some research attempted to examine social intelligence in relation to individual's background (urban or rural) [12]. Though this assumption was not found any differences, it was still interesting to repeatedly investigate in different contexts and cultures.

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Although research on social intelligence in relation to individual differences in terms of sex, age, education level, and background has been increasingly conducted, lack of this examination in Thai context, particularly colleges and universities has still existed. Therefore, this present study aimed at examining social intelligence in relation to demographics variables including gender, background, and age in Thai context focusing on an educational setting.

## LITERATURE REVIEWS

Social intelligence has long been in the focus of psychological research almost a century since a famous psychologist Thorndike [13] categorized intelligence to three types including abstract intelligence, mechanical intelligence, and social intelligence. In the early stage of social intelligence study, a well-known psychologist named Hunt [14] was the first scholar who developed the instrument called the George Washington Social Intelligence Test to measure social intelligence, which composed of numerous subtests. However, this instrument fell to distinguish between social intelligence and intelligence quotient, and was interrogated on its validation leading to the declining interest in this scale. Since the falling of GWSIT scale measurement, researchers had taken almost 40 years to develop a new instrument to test social intelligence, but still measured as part of intellectual test [15]. The ongoing development of social intelligence scale measurement has been constructed reliably based on the progress of knowledge emerged in this area. Many scholars attempted to construct a measurement of social intelligence that encompassed numerous relevant components, but the group of Norwegian researchers proposed a very useful and more applicable social intelligence in the early 2000s. Silvera *et al.*, [16] developed a reliable and valid scale measurement to assess social intelligence, namely Tromsø Social Intelligence Scale (TSIS). This instrument consisted of 21-item of 7-point rating scale that encompassed three sub-scales of social intelligence: social information process (SP), social skills (SS), and social awareness (SA). Social information process refers to the ability to identify and foresee others' feelings and behaviors as well as the ability to understand both verbal and nonverbal messages while being in the interpersonal communication. Social skills refer to the ability to alter own behaviors when living in a new situation and the ability to attach to new comrades. Social awareness refers to the ability to acknowledge and be aware of oneself and others' emotions and actions in the relationship or social interaction.

As this present study focused on examining social intelligence in Thai context, the literature reviews were accordingly conducted with the recognition of this research's objectives. Promsri [11] studied social intelligence of Thai employees in a paper company using a modified Thai version of Tromsø Social

Intelligence Scale (TSIS) to collect data from 231 employees. This modified version of scale measurement showed a Cronbach's alpha of 0.86. To examine gender, age, and educational level differences, independent samples t-test analysis and One-way analysis of variance (ANOVA) were conducted. Results of this study indicated that social information process (SIP) was rated as the highest dimension of social intelligence while social awareness (SA) received the lowest mean score. Analysis of independent samples t-test revealed a significant difference in social intelligence and all three dimensions: social information process, social skills, and social awareness, between male and female employees at .05 level. In addition, findings showed a significant difference in social intelligence between employees with different age groups at 0.5 level. This study found that employees aged between 20-30 years and 41-50 years had a higher social intelligence than employees aged between 31-40 years. However, this study demonstrated no significant difference in social intelligence among employees with different level of education. The results of this study were consistent with Promsri [1] who studied the relationship between social intelligence and change leadership among 76 managers in a listed firm in Thailand. This study demonstrated that social intelligence of managers in different levels of management in Thai listed firms was at a moderate level. Social information process was reported as the greatest dimension of social intelligence among these managers followed by social skills, and social awareness. Also, the latest work of Promsri [17], which attempted to examine the relationship between social intelligence and workplace spirituality, was found the same results. This study collected data from 71 graduate students in MBA program of a public university through the use of TSIS. The Cronbach's alpha score of this scale measurement was 0.78, as the research sustained the range of scale measures (7-point rating scale) as the original version. Findings showed that social intelligence among MBA students was at a moderate level. To focus on each dimension of social intelligence, this study displayed that social information process was the highest dimension of social intelligence followed by social skills and social awareness.

Additionally, a study of social intelligence in a different context found similar results. Saxena and Jain [9] conducted research on social intelligence of undergraduate students to investigate gender differences and compare arts students and other subject streams. Data were equally collected from 60 male and 60 female undergraduate students using Social Intelligence Scale (SIS) developed by Chadda and Ganesan in 2009. Analysis of independent samples t-test indicated that female students were more socially intelligent than male students, and arts students had greater social intelligence than students in other subject streams. However, Eshghi *et al.*, [18] found different results when they studied social intelligence and its sub-scales

among physical education teachers using Tromsø Social Intelligence Scale (TSIS). This study collected data from a sample of 47 teachers in Isfahan education organizations. Findings indicated that the significant differences in social intelligence and its sub-scales between males and females. Results showed that men had higher social intelligence than women. These findings contradicted the previous research on exploring social intelligence in relation gender difference. This might be because the number of male teachers gathered in this study was two times bigger than female samples. These findings were similar to the work of Malik, Siddique, and Hussain [12], which tried to examine social intelligence development during attending college years among students. A total of 560 college students in Bachelor of Science program were chosen as the sample using TSIS as the instrument for measurements. This study found that students with different background (urban and rural) had the equal level of social intelligence while male students had greater level of social intelligence than female students. Although the significant difference in social intelligence among individuals with different ages was not discovered in previous research, it was noteworthy to be the area that had been overlooked and needed more attentions. In addition, Pinto *et al.*, [19] found a significant difference in social intelligence between students with different groups of age and sex. Participants in this study were 540 students with ages between 11-15 years who studied in the 8<sup>th</sup> grade public schools in different parts of Portugal. The instrument used to measure students' social intelligence was the Cognitive Scale of Social Intelligence (CSSI).

Based on this literature reviews, this present study consequently proposed research hypotheses as follows:

H<sub>1</sub>: There was a significant difference in social intelligence between male and female undergraduate students.

H<sub>2</sub>: There was a significant difference in social intelligence between undergraduate students with different ages.

H<sub>3</sub>: There was a significant difference in social intelligence between undergraduate students with different backgrounds (urban or countryside).

## METHODOLOGY

This study was a descriptive study, which aimed at examining social intelligence and its sub-scales and comparing social intelligence according to gender, age, and background. Data were gathered from 60 undergraduate students who registered in management program at one public university in Bangkok. A modified Thai version of Tromsø Social Intelligence Scale (TSIS) was employed to measure social intelligence among Thai college students. This version contained 21-item of 5-point rating scale ranging from 1 = strongly disagree to 5 = strongly agree used in a previous study of Promsri [1]. To ensure internal consistency of scale measurement, Cronbach's alpha was conducted. Alpha score of 0.66 indicated the acceptable reliability of this scale, according to Nunnally [20]. Descriptive statistics including mean and standard deviations were calculated to explore the level of social intelligence among students. In addition, analysis of independent samples t-test was conducted to examine social intelligence in relation to gender, age, and background differences.

## RESULTS

A total of 60 undergraduate students in management program agreed to fill out the survey questionnaire. Among these students, more than a half of them were female (51.7%). Over seventy percent of these respondents aged between 18-25 years old. Nearly seventy percent reported that they were originally from Bangkok (66.7%). More than fifty percent of participants in this study informed that they attended a full-time program in management (51.7%). In addition, almost fifty percent of them reported that they had an average of 3-4 family members (45%) including the respondent.

Descriptive statistics was calculated to examine social intelligence levels among undergraduate students. Table-1 displayed means and standard deviations for the overall social intelligence and its sub-scales. Results showed that the overall social intelligence was at a moderate level ( $M = 3.18$ ,  $S.D. = .381$ ). In addition, findings demonstrated that social skills ( $M = 3.25$ ,  $S.D. = .477$ ) was rated as the greatest sub-scale of social intelligence followed by social information process ( $M = 3.18$ ,  $S.D. = .734$ ), and social awareness ( $M = 3.11$ ,  $S.D. = .710$ ).

**Table-1: Mean and Standard Deviation for Social Intelligence (n =60)**

Social Intelligence	Mean	S.D.
Social Information Process	3.18	.734
Social Skills	3.25	.477
Social Awareness	3.11	.710
<b>Overall for Social Intelligence (SI)</b>	<b>3.18</b>	<b>.381</b>

To explore social intelligence in relation to gender, background, and age, independent samples t-test analysis was conducted. Table-2 revealed no

significant difference in social intelligence between males and females ( $t = -.923$ ,  $p = .360$ ). Thus, research hypothesis # 1 was rejected.

**Table-2: Gender Differences in Social Intelligence (n = 60)**

Variable	Males (n=29)		Females (n=31)		t	P-Value
	Mean	S.D.	Mean	S.D.		
Social Intelligence	3.13	.340	3.22	.417	-.923	.360

Table-3 indicated that there was no significant difference in social intelligence between respondents with different background either urban or countryside (t

= -1.236, p = .221). Hence, research hypothesis #2 was rejected.

**Table-3: Background Differences in Social Intelligence (n = 60)**

Variable	Urban (n=40)		Countryside (n=20)		t	P-Value
	Mean	S.D.	Mean	S.D.		
Social Intelligence	3.14	.310	3.26	.492	-1.236	.221

Findings also showed no significant difference level of social intelligence according to age. Therefore, research hypothesis # 3 was rejected. However, a significant difference between different groups of age was found in one sub-scale. Table 4 revealed a

significant difference in social information process between students with different groups of age. Results indicated that students aged above 25 years old were more socially intelligent in terms of social information process than students aged between 18-25 years old.

**Table-4: Age Differences in Social Information Process Sub-Scale (n = 60)**

Social Intelligence Dimension	18-25 years (n=43)		Above 25 years (n=17)		t	P-Value
	Mean	S.D.	Mean	S.D.		
Social Information Process	3.02	.663	3.59	.764	-2.889	.005**

\*\* Significant at .01 level

## CONCLUSION, DISCUSSIONS, AND RECOMMENDATIONS

The purpose of this present study was to examine social intelligence among undergraduate students, and explore relationship between social intelligence and individual differences including gender, background, and age. Findings of this study revealed that the overall social intelligence among undergraduate students was at a moderate level, which was consistent with similar studies of Promsri [11, 1, 17], which samples were selected in Thai context. Moreover, this study found that social skills sub-scale of social intelligence earned the highest mean score among other subscales, which implies that Thai undergraduate students were sufficiently able to adapt their own behaviors when living in a new situation and able to connect to new friends. This might be described that as these students studied in the university, they had experienced different situation through program of study, college activities, and their daily living as a college student. All of these components strengthened them to improve their social skills in order to survive in the university. However, this result did not support the previous results of Promsri [11, 1, 17] in which social information process was reported as the highest sub-scale of social intelligence.

Additionally, findings indicated no significant differences in social intelligence according to gender,

background, and age, which were inconsistent with Saxena and Jain [9]; Pinto *et al.*, [19]; Promsri [11], but partially supported Malik, Siddique, and Hussain [12] in terms of background differences. Nonetheless, this study demonstrated a new finding of social intelligence when narrowed down its analysis to each social intelligence sub-scale to discover whether there was any significant differences existed in relation to gender, background, and age. Surprisingly, results showed a significant difference in social information process between students aged 18-25 years old and above 25 years old. This can be concluded that students aged above 25 years old were more socially intelligent in recognizing and anticipating others' feelings and behaviors as well as understanding both verbal and nonverbal messages conveyed during the interpersonal communication. This might be because they are mature enough to learn other people's emotions and actions in order to create a good relationship with them. Another explanation is because they might have worked in the organizations and seen a variety of feelings and actions among people at work.

Like other studies, this study has some limitations. The major weakness of this present study is a sample size. This research suggests increasing sample sizes in the future study. Moreover, the generalization of this study's findings was limited and needed to be done with thoughtfulness. Another limitation of this study is variables. As this research placed the emphasis

on gender, background, and age as individual variables for measurement, the further study should enhance additional demographic variables in the study.

For research implication, the university can take advantage of this study's findings. As the overall level of social intelligence among students was at moderate level, it is very valuable for the university and students to develop curriculum and training programs that focus on the area of social intelligence to help increase level of social intelligence among students leading to future career success.

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