

A Study of the Emotional Intelligence and Interpersonal Relationships of College Students in Southern Taiwan

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Abstract The main purpose of this study was to explore the emotional intelligence(EI) and interpersonal relationships(IRs) of college students and understand the important factors that were relevant to them. A cross-sectional study was adopted and a structured questionnaire was sent to the college students who agreed to participate in this study. A total of 600 subjects were recruited from three colleges in southern Taiwan, and 587 questionnaires were completed and returned. SPSS18.0 was used for statistical analysis, mean, standard deviation, ANOVA, t-test, multiple regression, factor analysis and Pearson correlation were employed to analyze the data. The empirical results showed that: (1) The emotional intelligence (EI) and interpersonal relationships(IRs) of college students were above average level.(2) College students' EI and IRs showed significant differences by gender, romantic relationship, monthly allowance, family status. Female students have higher EI and IRs than male students. (3) The perceived level of EI was positive correlated with IRs. The higher the college students' emotional intelligence was, the higher interpersonal relationships was. (4) In examining the predictors of IRs, 3 important factors including " empathy ", " self-regulation " and " relationship management " was found to explain 50.7% of the variance in IRs.

Keyword College Student, Emotional Intelligence(EI), Interpersonal Relationships(IRs)

1. Introduction

Students are a very important constituent part of a society. High emotional intelligence substantially contributes to cordial interpersonal relationships and interaction (Wang, 2006). A school is a place where students need to get along with others for a long period of time, and their interpersonal relationships are mainly developed at the schooling stages. Tarvis (1989) ascertains that improperly expressing emotions can be destructive to interpersonal relationships.

An interpersonal relationship is social interaction between two or more people, which involves language, thoughts and emotions and closely correlates with one's popularity, leadership performance, and agreeableness. Experiencing interpersonal difficulties has been confirmed to be one of the major causes of pressure in everyday lives of college students in Taiwan(Liu, 2004; Chu, 2013). Many researchers point out that interpersonal difficulties are often found to be associated with the depression that Taiwan's college students suffer from (Lu, 2005).

Emotional intelligence, or more widely known as emotional quotient (EQ), involves self-control, devotion, perseverance, and so on. With high emotional intelligence, one is able to accept others' emotions with empathy and feel at ease within interpersonal relationships (Shen, 2005; Hsu, 2013). Emotional intelligence is an ability to prevent 'emotional outbursts' in a passive sense and to improve 'emotional ability' in a positive sense. It is widely confirmed that one's level of emotional intelligence is highly correlated with his/her future success and happiness (Tang, 2005; Kuo, 2007). Hence, one's ability to perceive and manage emotions is more important than his/her intelligent quotient (IQ). EQ has been found to account for 80% of the factors in one's success (Goleman, 1995).

2. Research Objectives

Students are most susceptible to changes and influence of emotional intelligence in their college lives. This period of time is also viewed as the most critical one when a person may establish appropriate behavior patterns in the most effective and systematic manner, which in turn will positively contribute to their future development. Therefore, the main objectives of this study include four purposes: 1. to know how college students maintain their interpersonal relationships and manage their emotional intelligence; 2. to explore the relations between college students' interpersonal interaction and their emotional intelligence; 3. to investigate demographic variables affecting college

students' interpersonal relationships and their emotional intelligence management; 4. to find out predictors of college students' interpersonal relationships and emotional intelligence.

3. Literature Review

Emotional intelligence includes two abilities: to deal with one's own emotions and to deal with others' emotions, which involve perception, understanding, inference, judgment, expression, regulation, motivation and reflection. Positive emotional intelligence enables us to properly respond to different emotions and to face and solve problems with innovative thinking when confronted with challenges and frustrations in our lives. Goleman (1995) suggests that feelings and thoughts interact with each other and each one of our decisions is under the influence of both perceptiveness and rationality. Elaborating Gardner's intrapersonal intelligence and interpersonal intelligence (1996) on the basis of Mayer and Gardner's theory (1983), Goleman considers that emotional intelligence is an ability to maintain self-control, self-happiness and self-confidence and to motivate oneself and that it consists of five main domains: self-awareness, self-regulation, social skill, empathy, and self-motivation (Goleman, 1996; Yang, 2013).

An interpersonal relationship is an interdependent and interrelated relationship established during personal encounters, which is also known as social contact. It is often used as a generalized term for all types of relationships except for family relationships, including friendship, teacher-student relationships, employer-employee relationships, leader-follower relationships, etc., thus also being called interpersonal communication. Some researchers consider that interpersonal relationships include interaction between family members, friends, and peers and that interpersonal relationships involve social acceptance, family relationships, peer relationships, a sense of humor, and intimate friendship (Yang, 2002; Su, 2002). Berger and Calabrese (1975) propose that people may reduce interpersonal uncertainty through active, interactive, or passive strategies.

4. Methodology

1. Subjects and Sampling: The sampled population of the study is the undergraduate students from three universities in Tainan, a southern city in Taiwan. Two classes of students are randomly selected from freshman to senior classes in different colleges of the three universities. A total of 600 self-designed structured questionnaires are issued and collected at the universities by interviewers in person. The response rate is 97.83%. A 4-point rating scale was used to evaluate the level of EI and interpersonal relationship.
2. Data analysis: SPSS version 18.0 is used for

statistical analysis in this study.

3. The formal contents include the following components: (1) social demographic: the main background subjects including gender, grade, with/without a cell phone, with/without a part-time job, in/out of a romantic relationship, accommodation status, family status, duration of Internet use per day, and monthly allowance. (2) factors of interpersonal relationship including peer-oriented relationships, humor-filled relationships, communicative relationships, high sociability, satisfaction-filled relationships, and introvert relationships (Su, 2001). (3) factors of emotional intelligence including empathy, self-regulation, relationship management, and self-awareness (Huang, 2009; Kuo, 2005).
4. Reliability and Validity in Measurement
 - (1). Validity: Expert validity is adopted in this study.
 - (2). Reliability: The internal consistency of the instruments was assessed by computing for Cronbach's Alpha coefficients.
5. Terminology used in the interpersonal relationship and emotional intelligence factor analysis was as follows:

Interpersonal relationship includes six factors:

- (1) Peer-oriented relationships: interacting with peers who share common values, being mutually supportive, and feeling at ease and secure during encounters;
- (2) Humor-filled relationships: dealing with everything with a sense of humor, loving making jokes and being able to take jokes, and having easygoing nature;
- (3) Communicative relationships: actively engaging in communication and conveying one's own opinions, and making people feel at ease during encounters;
- (4) High sociability: being very sociable, being able to overcome interpersonal difficulties, and participating in various activities frequently;
- (5) Satisfaction-filled relationships: enjoying the time with friends and feeling content with one's current interpersonal relationships
- (6) Introvert relationships: being taciturn, edgy, and a loner

Emotional intelligence include four factors:

- (1) Empathy: being able to place oneself in others' position, being able to accept and respect others.
- (2) Self-regulation: focusing on how to free oneself from anxiety, anger, dismay, or unease.
- (3) Relationship management: being good at communicating one's own ideas through verbal expressions or body language.

- (4) Self-awareness: perceiving one’s own emotions at any time, knowing what affects their own emotions.

5. Results and Discussion

Table 1 showed the internal consistency measured with Cronbach’s Alpha. The consistency coefficients were 0.929 for the emotional intelligence and 0.918 for the interpersonal relationships.

Table 1. Consistency coefficients

Name of domains	Items	Cronbach's α
Emotional intelligence	27	0.929
Interpersonal relationships	29	0.918

The demographic of sample characteristics is displayed in Table 2. Among all,283 students were males (48.2%) and 304 were females (51.8%)-More students rented from a

private landlord (38.8%) ;-used the internet more than four hours per day (35.5%) ,got a monthly allowance of NT\$3,000 - 6,000 (43.4%). Students' family status was mostly nuclear family(64.2%).

Table 3 shows the average points (Mean) of the constructs of interpersonal relationships range from 2.47 to 3.22, with "peer-oriented relationships" scoring the highest and "introvert relationships" the lowest; the average points of the constructs of emotional intelligence range from 2.92 to 3.20, with "empathy" scoring the highest and "relationship management" the lowest.

Table 4 listed the mean values and significant differences among the demographic characteristics, Scheffe’s test was performed to identify if differences existed. It showed no differences among gender, part-time job, with/without cell phone and duration of internet in interpersonal relationships. However, monthly allowance , romantic relationship and family status had significant differences($p<0.05$). As to emotional intelligence, only gender and monthly allowance made differences ($p<0.01$).

Table 2. Demographic of sample characteristics (N=587)

Variables	N	%	Variable	N	%
Gender			Internet(day)		
Male	283	48.2	≤2hr	167	28.4
Female	304	51.8	2-3hr	123	20.9
Grade			3-4hr	89	15.1
Freshman	139	23.6	≥4hr	209	35.5
Sophomore	152	25.9	Monthly allowance(TWD)		
Junior	82	13.9	≤3,000	152	26.2
Senior	206	35	3,001-6,000	252	43.4
Other	9	1.5	6,001-10,000	129	22.2
Part time job			≥10,001	48	8.3
Yes	198	34.3	Family status		
No	379	65.7	Extended family	121	20.6
Accommodation			Nuclear family	377	64.2
Home	185	31.5	Single-parent family	83	14.1
Relatives	14	2.4	Romantic relationship		
School dormitory	159	27.1	With	187	32.1
Renting	228	38.8	Without	301	51.6
other	1	2	No answer	95	16.3

Table 3. Rank order of Means and Standard Deviations of dimension

Dimension	Mean	SD	Rank
Interpersonal relationships			
Peer-oriented	3.2158	0.47945	1
Satisfaction-filled	3.1452	0.65724	2
High-sociability	3.1259	0.57160	3
Humor-filled	3.1096	0.45511	4
Communicative	3.0172	0.52266	5
Introvert	2.4739	0.70923	6
Emotional Intelligence			
Empathy	3.1967	0.41876	1
Self-awareness	3.1032	0.45800	2
Self-regulation	3.0385	0.47339	3
Relationship management	2.9278	0.48911	4

Table 4. Demographic analysis of variations (N=587)

Variables	Interpersonal relationships			Emotional intelligence		
	Mean	t/F	Scheffe's	Mean	t/F	Scheffe's
Gender						
① Male	3.0235	1.254		3.0931	13.271***	
② Female	3.0036			3.0507		
Part-time job						
① Yes	3.0170	0.037		3.0984	2.440	
② No	3.0114			3.0580		
Cell phone						
① Yes	3.0172	1.140		3.0709	2.252	
② No	2.9650			3.1163		
Monthly allowance(TWD)						
① ≤3,000	2.9477	2.895**	③ > ①	2.9937	3.837**	③ > ① ④ > ①
② 3,001-6,000	3.0203			3.0739		
③ 6,001-10,000	3.0494			3.1396		
④ ≥10,001	3.1153			3.1336		
Romantic relationship						
① With	3.0732	0.039*	① > ②	3.1091	1.589	
② Without	2.9805			3.0446		
③ No answer	3.0037			3.725		
Family status						
① Extended	3.0887	5.944***	① > ③	3.0963	0.478	
② Nuclear	2.9938			3.0363		
③ Single-parent	2.9704			3.0559		
Duration of internet(day)						
① ≤2hr	3.0741	2.355		3.1201	1.648	
② 2-3hr	3.0026			3.0938		
③ 3-4hr	2.9428			3.0392		
④ ≥4hr	2.9915			3.0284		

p<0.05 p<0.01** p<0.001***

Table 5. Pearson correlations between interpersonal relationships and emotional intelligence

Item	1	2	3	4	5	6	7	8	9
1 Peer-oriented	1								
2 Humor-filled	.676**	1							
3 Communicative	.469**	.568**	1						
4 High-sociability	.566**	.609**	.530**	1					
5 Satisfaction-filled	.509**	.537**	.378**	.468**	1				
6 Empathy	.600**	.595**	.564**	.515**	.420**	1			
7 Self-regulation	.476**	.589**	.488**	.535**	.398**	.698**	1		
8 Relationship management	.459**	.473**	.478**	.498**	.352**	.576**	.523**	1	
9 self-awareness	.456**	.449**	4.13**	.456**	.326**	.664**	.602**	.575**	1

*p<0.05, **p<0.01, ***p<0.001

Table 6. Regression model for Interpersonal relationships

Variables	B	β	T	p-value	VIF
(Constant)	0.822			0.000	
Empathy	0.347	0.379	8.055***	0.000	2.467
Self-regulation	0.157	0.191	4.444***	0.000	2.059
Relationship management	0.207	0.264	7.040***	0.000	1.571
Self-awareness	0.000	0.000	-0.004	0.997	1.905

p<0.001***, R2=0.507, F=142.531

As for the results of all the variables, three emerged as significant predictors of Interpersonal relationships (F=142.531, p<0.001). They were " empathy ", " self-regulation " and " relationship management ". These factors accounted for 50.7% of the variance in interpersonal relationships.

6. Conclusions

1. Current situation of college students' interpersonal relationships:
2. The average point is 3.01, with peer-oriented relationships, satisfaction-filled relationships, high sociability, humor-filled relationships, communicative relationships, and introvert relationships arranged in descending order of the points received.
3. Current situation of college students' emotional intelligence:
4. The average point is 3.067, with empathy, self-awareness, self-regulation, and relationship management arranged in descending order of the points received.
5. The overall performance of the subjects in emotional intelligence and interpersonal relationships is above average level (2.5 points).
6. In terms of personal background variables, gender and monthly allowance are significantly correlated with the level of emotional intelligence; the amount of monthly allowance, romantic relationship, family status, and the duration of Internet use(???) are significantly correlated with interpersonal relationships.

7. The levels of interpersonal relationships and emotional intelligence are predictable.

7. Suggestions

1. Colleges may provide EQ-related courses to increase students' ability to manage emotions properly (such as courses on emotion management, interpersonal communication and self-development) and help students develop their learning ability through role play simulations.
2. Colleges may boost students' self-motivation and self-development and guide them to develop personal belief and manage emotions properly by providing support group workshops, group counseling, and other diverse learning activities.
3. Counseling centers or mentors at colleges may provide individual counseling for students with poor interpersonal relationships and emotion management.

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