# EMOTIONAL INTELLIGENCE AND DEMOGRAHIC DIFFERENCES AMONG STUDENTS IN PUBLIC UNIVERSITIES

## Najib Ahmad Marzuki; Che Su Mustaffa; Zarina Mat Saad
## Suhaini Muda; Suhanim Abdullah; Wan Bee Che Din

College of Arts and Sciences
Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia
**Corresponding Author:** *Najib Ahmad Marzuki*

_____

## ABSTRACT
Emotional intelligence is the grassroots of all intelligence dimensions. It provides individuals with the ability to understand one's own emotions, managing it and hopefully be able to understand other people emotions as well. The purpose of this research is to determine the emotional intelligence level of Malaysian university students from demographic aspects (gender, academic background, place of residence, academic courses and cumulative grade point average (CGPA). The importance of studying emotional intelligence in students is imperative since it indicates other competencies such as communication and interpersonal relations. A total of 3101 final year students from 10 public universities were randomly chosen as samples. The Bar-On Emotional Quotient Inventory: Short (EQ-i:S) by Bar-On (1997) has been utilized for the purpose of measuring emotional intelligence. Scores were categorized into high and low emotional intelligence level. Results were analyzed based on demographic factors such as gender, academic background, place of residence, academic courses and cumulative grade point average (CGPA). It was found that in general, majority of students were quite low in terms of emotional intelligence. Other demographic factors showed varying results. This study implicates that more should be done in higher learning institutions to alleviate and enhance students' emotional intelligence.
*© Emerging Academy Resources*

KEYWORDS: Emotional Intelligence, Public Universities, Students, Demographics, Skills
_____

## INTRODUCTION
Emotional intelligence is an important element in enhancing individual's ability and skills in communication and interpersonal relations. Being excellence in general intelligence (IQ) alone will not guarantee success in life. Psychologist has noted that IQ only contributed about 20 percent of life success while the remaining 80 percent comes from other factors including emotional intelligence (Goleman, 1995). Emotional factors must not be taken lightly in discussing student's competencies. A study on 448 college students in the United States found that there was a significant difference in terms of academic excellence between those who have low and high emotional intelligence level. Students with high emotional intelligence level were better in academics compared to those with low emotional intelligence level (Swart in Bar-On, 1997).

Dulewicz and Higgs (2000) stressed the importance of managing emotion as tools to determine life success. Performance and life success is related to the role of students in higher learning institutions. They have to be ready for entering the job market after graduating. To what extent will they master the skills and competencies are dependent upon the strength of

emotional intelligence. Important qualities that should be taken into consideration in emotional intelligence include communicational skills, skills in English and information technology skills. These skills and competencies are related to emotional intelligence aspects such as self-awareness, self-motivation, impulse control, humanistic skills and mood management.

Goleman (1995) has introduced the emotional intelligence concept in his book entitled 'Emotional Intelligence: Why It Can Matter More Than IQ'. Since then, emotional intelligence has been discussed widely in organizations, schools and communities all over the world. In schools, teachers have the main objective of making sure students will excel in life by applying the knowledge taught in class. However, student's success could not be measured based on academic standing alone but must also be measured based on other aspects such as emotional control (Abisamra, 2000). It is not unlikely that people who gain success in life are those who were actually moderate students in schools or colleges. According to Goleman (2001), all actions and decisions should not be measured based on general intelligence alone but on the components of emotional intelligence.

Some may excel in academics but are unable to socialize or understand other people feelings.

Emotional intelligence allows individual to understand the complex human interaction. It helps individual to manage his own emotion as well as others (Abisamra, 2000). The concept of emotional intelligence is also discussed in organization in order to explain and determine the effectiveness of work done by workers. Goleman (Boyatzis & Sala, 2003) conclude that when individual achieve a high emotional intelligence level, they will be able to perform better at work. Apart from the general concept regarding emotional intelligence, Mayer, Salovey and Caruso (2000) mentioned that emotional intelligence may also be understood based on the approaches by Salovey and Mayer (1990), Bar-On (2000) and Goleman (1995).

The first approach by Salovey and Mayer (1990) refers emotional intelligence as the ability to monitor individual's emotions and feelings. In addition, it helps individual to differentiate emotions and to use the knowledge to assist actions and individual thinking (Salovey, Bedell, Detweiler and Mayer, 2000).

The second approach by Bar-On (2000) relates success in individual life with their personality traits. Emotional intelligence comprises of a series of non-cognitive skills and abilities which affect individual in his surroundings of challenge and stress. Based on this definition, Goleman (2001) noted that emotional intelligence is categorized in the context of personality theory while Mayer, Salovey and Caruso (2000) stressed that the definition by Bar-On (2000) include a wider concept such as social function, motivation and personality traits.

The third approach has been highlighted by Goleman (1995). He refers emotional intelligence as the ability to understand own's feelings and other people feelings, self-motivating and managing good emotions while interacting with others. Emotional intelligence may also predict success at work, school and at home. The learning process of students is said to be more effective since emotional intelligence reduce the harsh and aggressive attitude of students. This is truly an important entity in discussing emotional intelligence especially for university students who will be joining the outside world as workers in organizations. They will portray self appearance and its relation to social interaction. Emotion control will no doubt play an important role whether at work, school or in normal everyday life.

These three approaches are similar in terms of major concept utilized which is the ability to identify, and handle emotions in self and while interacting with others (Goleman, 2001). Definition by Goleman

(1995) has been referred by other experts such as Sosik and Megerian (1999), Weisenger (1998) and Steiner and Perry (1997). The quality of graduates in local universities has been frequently highlighted. Most graduates produced by local universities in Malaysia have been said to have some form of weaknesses in several aspects. Some of the comments being made by employers were that graduates do not have skills in communication, information technology and other soft skills.

Based on the above discussion, this paper highlights a research done to determine the emotional intelligence level of Malaysian university students from demographic aspects (gender, academic background, place of residence, academic courses and cumulative grade point average (CGPA).

**LITERATURE REVIEW**
Hopkins and Bilimoria (2008) in their study found that there were no significant differences between male and female leaders in their demonstration of emotional and social intelligence competencies. The most successful men and women were also more similar than different in their competency demonstration. However, gender did moderate the relationship between the demonstration of these competencies and success. Male leaders were assessed as more successful even when the male and female leaders demonstrated an equivalent level of competencies.

Cavallo and Brienza (2002) found that most studies on emotional intelligence did not find differences in terms of gender. However, some studies did find differences between male and female in some aspects.

Reiff (2001) has focused on the relationship between learning disabilities and gender in terms of emotional intelligence. His samples include 54 students who have learning disabilities (32 male and 22 female) while 74 students (24 male and 40 female) were those who did not have any learning disabilities. The Emotional Quotient Inventory (EQ-i)(Bar-On, 1997) was employed to measure the level of emotional intelligence. This self-report inventory measured interpersonal skills, intrapersonal skills, stress management, adjustment and mood. Results found that there were no relationship between learning disabilities and gender in terms of emotional intelligence. However, there were differences between students who have learning disabilities with students who did not have learning disabilities in terms of stress management and adjustment. In addition, there was also a difference between male and female in terms of interpersonal skills. Differences were also found between learning disabilities and gender with interpersonal skills.

A study by Nursalam (2000) among 116 employees of Indonesian Mail Office found that there were no differences in all emotional intelligence dimensions (emotional self-consciousness, emotional expression and other people emotional consciousness).

McCluskey (1997) suggested that emotional intelligence should be introduced as a subject in schools. He believed that school is the perfect institution to teach emotional intelligence skills such as self awareness, managing emotions, empathy, communication, cooperation and resolving problems. The reason for this was because parents were found to be too busy to teach children these skills at home. In addition, most children spend much of their time at school with different activities.

## METHODS
### Research Design
The study was a quantitative study and employed questionnaire as the main data gathering method. A cross sectional design was performed on students from 10 public universities in Malaysia.

### Population and Samples
The population consisted of students from 10 public universities. The universities were Universiti Utara Malaysia (UUM), Universiti Kebangsaan Malaysia (UKM), Universiti Malaysia Sabah (UMS), Universiti Malaysia Sarawak (UNIMAS), Universiti Sains Malaysia (USM), Universiti Teknologi MARA (UiTM), Universiti Teknologi Malaysia (UTM), Universiti Putra Malaysia (UPM), Universiti Malaya (UM) and Universiti Islam Antarabangsa Malaysia (UIAM).

A total of 3101 respondents were selected through stratified random sampling (2,290 female, 769 male and 42 did not specified their gender). Stratifications were based on gender (male and female), race (Malays and Non-Malays) and courses taken (Sciences, Arts and Technical).

### Instrument
Emotional intelligence was measured using Bar-On Emotional Quotient Inventory: Short (EQ-i:S) by Bar-On (1997). This inventory is the short version of the original version (EQ-i) which consists of 133 items. The short inventory consists of 51 items along 5 main scales and one control scale. The scales are Intrapersonal Scale (10 items), Interpersonal Scale (10 items), Adjustment Scale (7 items), Stress Management Scale (8 items), General Mood Scale (10 items) and Positive Impression Scale (6 items). Items are scored according to Likert Scale point from 1 = not true of me, to, 5 = true of me.

This inventory has shown high reliability level where past studies showed that the EQ-i scores can differentiate between professional and non-working individual, selected and rejected applicants in United States Air Force personnel selection, and between clinical and normative samples in Argentina, Israel, South Africa and the United States (Bar-On, 1997). In addition, the inventory has been able to differentiate between students with learning disabilities and students with normal learning abilities (Reiff, Hazes, Bramel & Gibbon, 2001). Other use of this inventory includes in clinical setting, forensic, medical, corporate and psychological research. In terms of psycho diagnostic, this inventory may assess general emotional intelligence, potential emotional health and psychological well being. Internal reliability test showed that the overall alpha level for this study is 0.84.

### Data Analysis
Data was gathered and analyzed using The Statistical Package For The Social Sciences (SPSS). Descriptive analysis, t-test and a one way analysis of variance (ANOVA) were employed to determine differences in demographic factors.

## RESULTS AND DISCUSSION
### General Emotional Intelligence
For general emotional intelligence, scores between 51 to 165 indicates low emotional intelligence level while scores between 166 to 255 indicates high emotional intelligence level. Results found that a total of 1,593 (51.37%) students have low emotional intelligence level while 1,506 (48.56%) have high emotional intelligence level. Two students (0.06%) did not answer questions on emotional intelligence (Figure 1).
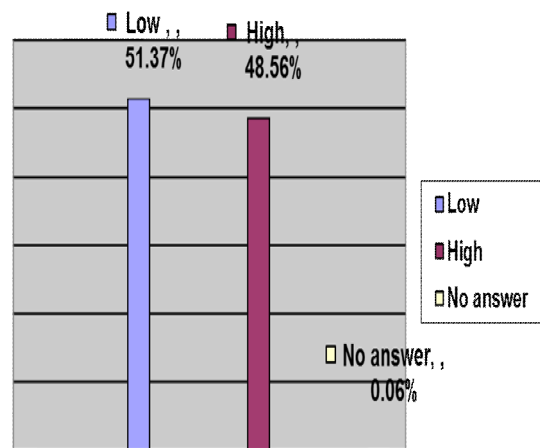


Figure 1: Emotional intelligence level of students

Emotional intelligence incorporates the elements of intrapersonal, interpersonal, adjustment, stress management and general mood. All this formed emotional intelligence in general. This study has found that in general, 51.37 percent of university students have low emotional intelligence. This

implies that more than half of students have low scores reflecting weakness in emotional intelligence skills. This scenario proof that issue of students soft skills weakness is something that needs to be seriously look upon.

In general, university students do not have problems in general intelligence (IQ). Every year, students who apply for places in public universities are those who have good academic standing. Similarly, students graduated with flying colours. However, in reality, most of them did not actually possessed good emotional intelligence skills. This might be due to the current academic structure and syllabus in higher learning institutions. A lot of emphasize was given to academic excellence. As such, students in higher learning institutions were not exposed to emotional intelligence skills and factors related to understanding one's own emotions and also understanding other people emotions.

### Gender

Analysis on gender found that the majority of male (51.25) and female (51.55) students have low scores in emotional intelligence (Table 1).

Table 1: Emotional intelligence and gender

| Variable Gender | | | Score | | Total |
|---|---|---|---|---|---|
| | | | Low | High | |
| Emotional intelligence | Male | Frequency | 394 | 375 | 769 |
| | | % | 51.2% | 48.8% | 100.0% |
| | Female | Frequency | 1179 | 1109 | 2288 |
| | | % | 51.5% | 48.5% | 100.0% |

T test was also performed to look for significant difference between male and female students. However, no significant different was found. This result supports the study by Hopkins and Bilimoria (2008), Cavallo and Brienza (2002) and Nursalam (2000). Their study was also found to be non-significant in terms of male and female differences.

### Academic Background

The majority of students who came from full boarding schools and normal schools have high emotional intelligence level (57.9%) while the majority of students who came from normal schools (51.4%), religious schools (54.4%), vocational schools (52.4%) and private schools (64.3%) have low emotional intelligence level (Table 2). A one way analysis of variance (ANOVA) was then employed and found that there was a significant difference between these five schools (Table 3).

The analysis found that students from full boarding schools have high emotional intelligence level compared to students from other schools. This is due to the facts that students who came from full boarding schools have received better education and which may include interpersonal and soft skills training. They received attention from teachers and were well-groomed to be top achievers not only in academics but also as a total person. Their learning environment is more conducive with good surroundings. According to Thorndike (1920), emotional intelligence comprises of three aspects which are mechanical, abstract and social. In this context, the mechanical intelligence aspect helps students to perform better in their assignment. Assignments can be done through effective communication, skills in English and the use of information technology skills. These facilities are provided in full boarding schools. Other schools might not be able to provide such facilities and therefore, may not be able to produce good students with high emotional intelligence level.

Table 2: Emotional intelligence and academic background

| Variable | Academic background | | | Score | | Total |
|---|---|---|---|---|---|---|
| | | | | Low | High | |
| Emotional intelligence | Boarding school | Frequency | | 128 | 176 | 304 |
| | | % | | 42.1% | 57.9% | 100.0% |
| | Normal school | Frequency | | 1125 | 1064 | 2189 |
| | | % | | 51.4% | 48.6% | 100.0% |
| | Religious school | Frequency | | 229 | 192 | 421 |
| | | % | | 54.4% | 45.6% | 100.0% |
| | Vocational school | Frequency | | 55 | 50 | 105 |
| | | % | | 52.4% | 47.6% | 100.0% |
| | Private school | Frequency | | 18 | 10 | 28 |
| | | % | | 64.3% | 35.7% | 100.0% |

Table 3: One way analysis of variance (ANOVA) based on academic background

| Variable | | df | Mean Square | F |
|---|---|---|---|---|
| Emotional intelligence | Between groups | 4 | 1757.294 | 6.448*** |
| | Within Groups | 3042 | 272.527 | |
| | Total | 3046 | | |

***p<.001

**Place of Residence**

Majority of students who lived in a city surrounding (51.1%) have high emotional intelligence level while majority of students who live in small town (51.5%), rural area (54.6%) and small village (56.5%) have low emotional intelligence level (Table 4).

Table 4: Emotional intelligence and place of residence

| Variable | Place of residence | | Score | | Total |
|---|---|---|---|---|---|
| | | | Low | High | |
| Emotional intelligence | City | Frequency | 718 | 749 | 1467 |
| | | % | 48.9% | 51.1% | 100.0% |
| | Small town | Frequency | 310 | 292 | 602 |
| | | % | 51.5% | 48.5% | 100.0% |
| | Rural | Frequency | 527 | 438 | 965 |
| | | % | 54.6% | 45.4% | 100.0% |
| | Small village | Frequency | 26 | 20 | 46 |
| | | % | 56.5% | 43.5% | 100.0% |

A significant difference was also found when a one way analysis of variance was performed (Table 5).

Table 5: One way analysis of variance (ANOVA) based on place of residence

| Variable | Place of residence | df | Mean Square | F |
|---|---|---|---|---|
| Emotional intelligence | Between groups | 3 | 1701.161 | 6.15*** |
| | Within groups | 3076 | 276.722 | |
| | Total | 3079 | | |

***p < .001

In general, the descriptive analysis showed some differences. There is a significant difference between students who came from the city with those students who came from small town, rural area and small village. Learning facilities, social activities and information technology facilities can be utilized more in the city compared to other places. Therefore, students from the city area may have better interpersonal relations through various activities. They may utilize the latest technology in computers, join clubs, recreational activities and other such activities that could enhance their emotional intelligence level. To communicate effectively in a cosmopolitan surrounding, they need skills for social interaction. They interact with various kinds of people. As a consequence, they must be able to use rational emotional skills to survive in a wider surrounding. This is the reason why students from the city may have better emotional intelligence level compared to students from other areas.

**Academic Courses**

For academic courses, the results indicate that the majority of students who took science courses (52.4%) and technical courses (72.3%) have high emotional intelligence level. On the other hand, majority of students who took Arts courses (54.6%) have low emotional intelligence level (Table 6).

The one way analysis of variance performed showed that a significant difference exists between groups of academic courses (Table 7).

Table 6: Emotional intelligence and academic courses

| Variable | Academic courses | | Score | | Total |
|---|---|---|---|---|---|
| | | | Low | High | |
| Emotional intelligence | Sciences | Frequency | 553 | 610 | 1163 |
| | | % | 47.5% | 52.5% | 100.0% |
| | Arts | Frequency | 1004 | 835 | 1839 |
| | | % | 54.6% | 45.4% | 100.0% |
| | Technical | Frequency | 18 | 47 | 65 |
| | | % | 27.7% | 72.3% | 100.0% |

Table 7: One way analysis of variance (ANOVA) based on academic courses

| Variable | Academic courses | df | Mean Square | F |
|---|---|---|---|---|
| Emotional intelligence | Between groups | 2 | 3624.669 | 13.20*** |
| | Within groups | 3064 | 274.516 | |
| | Total | 3066 | | |

*** p < .001

In terms of academic courses taken by students, it was found that majority of respondents who took courses in science and technical have high emotional intelligence level compared to students who took courses in Arts. This may seems a bit awkward since theory has indicates that arts students normally are the one who have divergent thinking compared to science and technical students who are more convergent in thinking. Therefore, arts students should be better in emotional intelligence, But the

results proof vice versa. An explanation for this might be referred to the academic background of science/technical students and arts students. Those who are in the science and technical students could be from those who come from full boarding schools compared to the arts students who may come from normal schools. As a consequence, these science and technical students are students with high IQ and EQ.

**Cumulative Grade Point Average**
For the cumulative grade point average category (CGPA), the majority of students who are in the less than 2.00 category (60.00%), 2.51 to 3.00 category (50.8%) and 3.51 to 4.00 category (55.8%) have high emotional intelligence level. The majority of students in the 2.00 to 2.50 (56.8%) category and 3.01 to 3.50 (51.7%) category have a low level of emotional intelligence (Table 8).

Table 8: Emotional intelligence and cumulative grade point average (CGPA)

| Variable | CGPA | | Score | | Total |
|----------|------|--|-------|--|-------|
| | | | Low | High | |
| Kecerdasan Emosi | Less than 2.00 | Frequency | 4 | 6 | 10 |
| | | % | 40.0% | 60.0% | 100.0% |
| | 2.00 - 2.50 | Frequency | 138 | 105 | 243 |
| | | % | 56.8% | 43.2% | 100.0% |
| | 2.51 - 3.00 | Frequency | 523 | 541 | 1064 |
| | | % | 49.2% | 50.8% | 100.0% |
| | 3.01 - 3.50 | Frequency | 431 | 403 | 834 |
| | | % | 51.7% | 48.3% | 100.0% |
| | 3.51 - 4.00 | Frequency | 76 | 96 | 172 |
| | | % | 44.2% | 55.8% | 100.0% |

When a one way analysis of variance was performed, the results showed that a significant difference exists between groups for the cumulative grade point average (CGPA) (Table 9).

Table 9: One way analysis of variance (ANOVA) based on cumulative grade point average

| Variable | | df | Mean Square | F |
|----------|--|----|-------------|---|
| Emotional intelligence | Between groups | 4 | 1639.921 | 6.005*** |
| | Within groups | 2318 | 273.108 | |
| | Total | 2322 | | |

***P<0.001

Majority of students who have CGPA between 3.51 to 4.00 were high in emotional intelligence. Interestingly, majority of students with CGPA less than 2.00 also have high emotional intelligence, but since the number of students for this group is small, this might not reflect true picture of this group. The focus is on the higher CGPA group since this group has high level achievement and is excellence in their study. This is in line with Swart (Bar-On, 1990) and Donna (1998) studies where they have found significant differences of emotional intelligence according to academic achievement. Their study found similar result where students with good grades of CGPA have higher emotional intelligence level. Thorndike (1920) noted that abstract intelligence is an element of emotional intelligence that enhances students in managing and understanding ideas and symbols. Therefore, it is predicted that students with high CGPA have high abstract intelligence that enable them to master the emotional intelligence aspect.

Wieten (1995) comments that based on the Social Learning Theory, the individual believe regarding his ability to take actions is the main element in terms of activity selection, effort, attention and level of achievement to face challenge in carrying out certain task in the examination. In this context, students who have high emotional intelligence level portray better emotional intelligence skills since they possess the important elements that influence other competencies.

**CONCLUSION**
Although demographic factors (gender, academic background, place of residence, academic courses and cumulative grade point average) shows varying results, the overall result signified that emotional intelligence skills of the majority of students are still at the low level. Thus, a few suggestions are forwarded to alleviate the emotional intelligence level of students in universities. Activities that incorporate certain soft skills workshops to enhance emotional intelligence, stress management, anger management and communicational ability should be emphasized. These activities will foster the emotional development of students in order to enable them to understand their own emotion and personality. Although some of these activities have been utilized by the university authorities either through faculties, student's affairs department, clubs or student bodies; it should be done in such a way that it consciously tell the students the importance of emotional intelligence. For example, the understanding of emotional intelligence has to be in line with the understanding of why it is so important in everyday life. Similarly, it should also be stressed in all career development and counseling activities. Therefore,

training module should be introduced where it can be done through a series of direct emotional intelligence training or through other leadership style training. In addition, students need to be told the implications of emotional intelligence in their career planning. Activities such as how to behave professionally in employment interview may expose the students to real like situations.

Finally, exposure to other competencies such as administration, motivation and leadership training should be emphasized. Balance between general intelligence (IQ) and emotional intelligence (EQ) in student learning process is the key element to success in life. Shifting from academic excellence to overall excellence need a total paradigm shift in university administration. This will guarantee student success both emotionally and professionally. University should look at its social responsibility in producing overall quality graduates.

## REFERENCES

Abisamra, N, 2000. The relationship between emotional intelligence and academic achievement in eleventh graders. Available at http://Emotional intelligence and academic achievement.htm (8 March 2005).

Bar-On, R, 1997. The emotional quotient inventory (EQ-i): Technical manual. Toronto: Multi Health Systems.

Bar-On, R, 2000. Emotional and social intelligence. In Bar-On, R & Parker, J.D. The handbook of emotional intelligence, 363-388. San Francisco: Jossey Bass.

Boyatzis, R.E. & Sala, F, 2003. Assessing emotional intelligence competencies. Available at http:// www-campus.uni-regensburg.de/material/ EmotionaleK?ASSESS~1.DOC (8 March 2005).

Cavallo, K. & Brienza, D, 2002. The emotional intelligence and leadership study. Available at http://www.eiconsortium.org/research/ii_ei_study.htm. (18 Februari 2005).

Donna Ng Li Eng, 1998. Level of parents EQ. Relationship with the development of adolescent EQ level and crime problems. Academic Exercise. Universiti Kebangsaan Malaysia. (In Malay).

Dulewicz, V. & Higgs, M, 2000. Emotional intelligence: A review and evaluation study. Journal of Managerial Psychology, 15 (4), 341-372.

Goleman, D, 1995. Emotional intelligence. New York: Bantam Books.

Goleman, D, 2001. Emotional intelligence: Issues in paradigm building. In C. Cherniss & D.Goleman, The emotionally intelligent workplace, 13-26. San Francisco: Jossey-Bass.

Hopkins, M. M. & Bilimoria, D, 2008. Social and emotional competencies predicting success for male and female executives. Journal of Management Development, 27 (1), 13-35.

Mayer, J.D., Salovey, P. & Caruso, D.R, 2000. Models of emotional intelligence. In Sternberg, R.J. Handbook of intelligence, 396-420. New York: Cambridge University Press.

McCluskey, A, 1997. Emotional intelligence in schools. London: Penguin.

Nursalam, M.T, 2000. Personnel expression responsibility in emotional appearance and EQ skills. Academic Exercise. Universiti Kebangsaan Malaysia. (In Malay).

Reiff, H.B, 2001. The relation of LD and Gender with emotional intelligence in college students. Journal of Learning Disabilities, 34, Issue 1.

Reiff, H.B., Hatzes, N.M., Bramel, M.H. & Gibbon, T, 2001. The relation of LD and gender with emotional intelligence in college students. Journal of Learning Disabilities, 34, 66-78.

Salovey, P. & Mayer, J.D, 1990. Emotional Intelligence. Imagination, Cognition and Personality, 9 (3), 185-211.

Salovey, P., Bedell, B.T., Detweiler, J.B. & Mayer, J.D, 2000. Current directions in emotional intelligence research. In Lewis, M. & Haviland-Jones, J.M. (eds). Handbook of emotions, 504-521. New York: The Guilford Press.

Sosik, J.J. & Megerian, L.E, 1999. Understanding leader emotional intelligence and performance. Group & Organization Management, 24 (3), 367-390.

Steiner, C. & Perry, P, 1997. Achieving emotional literacy. New York: Avon Books.

Thorndike, E.L, 1920. Intelligence and its use. Harper's Magazine, 140, 227-235.