Emotional Intelligence in Modifying Social and Academic Adjustment among First Year University Students in North Jordan

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Abstract
The present study examines the influence of emotional intelligence training in increasing social and academic adjustment among first year university students in North Jordan. A total number of 289 first year university students who were randomly selected from the two universities in North Jordan comprised both the experimental and control group. The results of the study indicate significant mean differences between the two groups having emotional intelligence as a variable. Additionally, the results indicate no significant differences between experimental and control group on social and academic adjustment variables. Supported by no significant mean difference according to gender between participants but the results indicate significant mean differences according to age between them. Although the descriptive statistics results show no significant differences as expected; the experimental group is revealed to be more effective with participants in all the research variables. Therefore, it is recommended that emotional intelligence training should be utilized as adjunct strategy in enhancing student social and academic adjustment among adolescents and adult students.

Keywords: Emotional intelligence, Social adjustment, Academic adjustment, Training program, First year university student

1. Introduction
It has been generally assumed that most university students in Jordan are adolescents and young adults between the ages of 18-30 years. Being in this age range, the students normally face many challenges during the transition period to university such as physical, social, academic, and emotional adjustment. Some examples of the major challenges are managing emotions, developing autonomy, as well as developing interpersonal relationship (Chickering & Reisser, 1993). For the purpose of explaining these challenges, the word ‘adjustment’ has been defined as a psychological process of adapting to cope with, managing their problems, challenges, tasks and requirements of daily life (Halonen & Santrok, 1997). Baker and Syrik (1999) have divided and identified the different types of adjustments into academic, social, personal-emotional adjustment, and institution attachment/goal commitment. Based on the literature review, studies concerning adjustment problems among
first year university students have been done in countries that are developed as well as developing such as Malaysia (Azniza, 2005) and USA (Tinto, 1996), but no such study has been done in Jordan. Instead, other areas that are being explored - currently, focus on non-educational settings such as workplace, is found to be related to the incorporation of emotional and social skills in the population. In addition, researchers have proposed that understanding the emotion of oneself and others is the key to a satisfying life. The theory of emotional intelligence proposed by Mayer and Salovey (1990, 1997) posits that the ability to recognize, understand, use, and manage emotions contributes to adaptation in various realms of life. To this end, Goleman (1998) defined emotional intelligence as the ability to identify and control one’s emotions, to use feeling to generate self motivation, to empathize with others and to build good relationship with them.

The topic of emotional intelligence is still a novelty and an expanding area of behavioral investigation, having been developed recently with the assistance of prior studies related to the concept. Majority of studies revolving around adolescent, further states on the capacity to decode, understand and regulate emotions, interaction with other people, manage relationship associated with social and academic adjustment (Saarni, 1999; Jensen, Cohen, Rilea, Hanon, & Howells, 2007; Low & Nelson, 2005; Goleman, 1998; Mayer & Salovey, 1997; Chan, 2003; Vela, 2003). With university students, emotional abilities are believed to be positively linked with the quality of social interactions (Lopes et al., 2004; Paulo, Croucher, Sohanpal, Muirhead, & Seymour, 2004) and pro-social behavior (Brackett & Mayer, 2003), effectively performed under stress (Baumeister, Heatherton, & Tice, 1994). It has also been linked to positive mood and higher self esteem (Schutte, Malouff, Simunek, & Hollander, 2002), social adjustment (Chan, 2003), and academic achievement (Abdallah, Elias, Muhiddin, & Uli, 2004). It is imperative to note the various authors’ proposals of conceptualization of emotional intelligence asserted its prominent role in assisting student’s success during their university study.

A wide range of research findings from the field of psychology (Goleman, 1998) training programs (Ogunyemi, 2008) and social skills (Pasha & Golshekoh, 2008), all provide evidences of people’s ability to improve their emotional and social competencies with sustained efforts through systematic training programs. The current study failed to find an available published study concerning the effect of emotional intelligence training program on student social and academic adjustment among university students. Due to this reason, the study aims to foster emotional intelligence skills and maximize student’s social and academic adjustment among first year university student in Jordan through the use of emotional intelligence training program.

Moreover, because gender and age factors may affect the influence of the training program on emotional intelligence, social adjustment, and academic adjustment, the current study also considered gender and age as second level independent variables in determining their influence on emotional intelligence and student social and academic adjustment.

1.1 Objectives of Study

To identify the different effect of groups: experimental and control group, towards emotional intelligence, social adjustment and academic adjustment.

To identify the different effect of gender towards emotional intelligence, social adjustment, and academic adjustment.

To identify the different effect of age toward emotional intelligence, social adjustment, and academic adjustment.

To identify the interaction effect between experimental group and gender towards emotional intelligence, social adjustment, and academic adjustment.

To identify the interaction effect between experimental group and age towards emotional intelligence, social adjustment, and academic adjustment.

1.2 Hypotheses of Study

The following hypotheses are raised and tested with significant levels fixed at 0.05:

There will be no significant differences in the effect of groups on student’s level of emotional intelligence, social adjustment, and academic adjustment.

There will be no significant differences in the effect of gender on student’s level of emotional intelligence, social adjustment, and academic adjustment.

There will be no significant differences in the effect of age on student’s level of emotional intelligence, social adjustment, and academic adjustment.
There will be no significant interaction effect of experimental group and gender on student’s level of emotional intelligence, social adjustment, and academic adjustment.

There will be no significant interaction effect of experimental group and age on student’s level of emotional intelligence, social adjustment, and academic adjustment.

2. Method

2.1 Participants and Design

A 2x2x3 factorial design is employed. The various factors are groups (experimental and the control group); gender are observed in two levels (male and female); and age level are observed in three levels (age 1-18/20 years old; age 2-20/25 years old; and age 3- above 26 years old). A total of 289 first year university students are randomly selected by convenience sampling. Students who participated in this study are selected from two different local universities in Irbid governorate in North Jordan and randomly assigned to experimental and control groups based on their gender and age in each of the groups in which as a whole, a total of 148 males and 141 females are used for this study.

2.2 Instruments

The emotional intelligence appraisal (EIA) developed by Bradberry and Greaves (2004) is used to obtain pre-post test data in this study. The scale consisted of four dimensions that assess emotional intelligence through 28 items. The four emotional intelligence dimensions are: Self awareness, Self Management, Social Awareness, and Relationship Management. Each item consists of 6 likert scale ranging from (1= never to 6= always). The researches opts for the emotional intelligence appraisal (EIA) developed by Bradberry and Greaves (2004) because the development of the items has a theoretical foundation, which is based on Goleman et al. (2002)’s early work model of emotional intelligence. It also identify that this measure has a stable and good reliability of .85 to .91.

The second instrument is the Student Adjustment to College Questionnaire (SACQ) (Baker & Syrik, 1999). This instrument contains four scales which are: academic adjustment, social adjustment, personal-emotional adjustment, and institution attachment/goal commitment. The instrument contains 67 items; each item is answered on a nine point likert scale, ranging from 1 “does not apply to me at all” to 9 “applies very closely to me”. For this research two subscales are used based on the importance of those scale to evaluate students adjustment to university (Baker & Syrik, 1999; Tinto, 1996). This instrument has been widely used in multicultural population, and has a high validity and reliability. The reliability coefficient (Cronbach’s alpha) for those two subscales ranged from (.93) for social adjustment, and (.93) for academic adjustment.

2.3 Procedures

The present research has developed an emotional intelligence training program where students volunteered themselves freely to participate for a period of ten days. The students are randomly assigned into two groups referred to as experimental group and controlled group. The former is given 9 sessions within the duration of 10 days while the latter is not given any treatment. 6 trainers assisted in the administration of the training program. The training program is carried out through a series of lectures, discussion, demonstration, and experimental methods such as role-play. For the first session, the trainers provide information about emotional intelligence, encouraging the students to maximize their adjustment. In the second session, the trainers encourage students to understand one’s emotion and build up one self confidence. While the third one, the trainers encourage students to build self concept and autonomy. During the fourth session, trainers provide students with the opportunity to recognize their appropriate emotional response to different situations. This is followed by the fifth session where trainers educate students on how to set goals for themselves. Whereas in the sixth session, the trainers foster cooperative classroom environment and in the seventh one, students are educate on how to deal with others. The eighth session requires the trainers to provide students ways to improve their social skills. Finally the final ninth session, the trainers provide students the value of teamwork and working with a group. This is followed by an administration of post test and the final closing of the training program.

3. Results

Multivariate analysis of covariance (MANCOVA) is employed to analyze the data collected through pre-post test treatment administration.

Hypothesis one: There will be no significant differences in the effect of groups on student’s level of emotional intelligence, social adjustment, and academic adjustment.
The result of the MANCOVA in table (1) shows that there is a significant difference between student’s in experimental group on the level of emotional intelligence, $F(5.393, p=.021, \eta^2 = .05)$. Also, the results show there is no significant differences between experimental group and control group on social adjustment $F(1.005, p=.317, \eta^2 = .05)$, and academic adjustment $F(3.461, p=.064, \eta^2 = .05)$. It shows that both of groups are effective in increasing student emotional intelligence, social adjustment, and academic adjustment.

Hypothesis two: There will be no significant differences in the effect of gender on student’s level of emotional intelligence, social adjustment, and academic adjustment.

The result of the MANCOVA in table (2) shows that there is no significant difference between male and female students on the level of emotional intelligence, $F(.329, p=.567, \eta^2 = .05)$. Also, the results show no significant differences between male and female on social adjustment $F(.566, p=.453, \eta^2 = .05)$, and academic adjustment $F(1.323, p=.251, \eta^2 = .05)$. It shows that both males and females are not significantly different on the level of emotional intelligence, social adjustment, and academic adjustment.

Hypothesis three: There will be no significant differences in the effect of age on student’s level of emotional intelligence, social adjustment, and academic adjustment.

Homogeneity of variance covariance assumption underplaying MANCOVA is tested using the Box’s M test. This test evaluates whether or not covariance matrices are equal. Significance level is set at .05. Result reveals that homogeneity of variance-covariance was not met ($F=2.887, p=.001, \eta^2 = .05$). For this reason, in addition to the unequal group sizes, the Pillai’s Trace statistic test is employed for the interpretation of the MANCOVA results (Hair et al., 1998; Mertler, 2005). The first set of analysis yielded no significant main effects for students’ ages with dependent variables. Table (3) shows the results of the investigation comparing the dependent variables of emotional intelligence, social adjustment, academic adjustment on the influence of the independent variable of age indicated no significant difference between age groups when controlling for pretest variables influence to emotional intelligence, social adjustment, and academic adjustment: (Pillai’s Trace .023), $F(1.084, p .371, \eta^2 = .05$, multivariate .011.

Hypothesis Four: There will be no significant interaction effect of experimental group and gender on student’s emotional intelligence, social adjustment, and academic adjustment levels. Table (4) shows the result of MANCOVA which indicate that there is no significant interaction between gender and experimental group ($F=2.718, 1, p=.101, \eta^2 = .05$) on the level of emotional intelligence. Likewise, results indicate no significant interaction between experimental group and gender on the mean score of social adjustment ($F=1.963, 1, p=.163$, .05). Finally, there is no significant interaction between experimental group and gender on the mean scores of academic adjustment ($F=3.603, 1, p=.060, \eta^2 = .05$).

Hypothesis Five: There will be no significant interaction effect of experimental group and age on the student’s emotional intelligence, social adjustment, and academic adjustment levels. A multivariate analysis covariance MANCOVA between-subject effects are calculated as shown in table (5); results indicated there is significant interaction effect of experimental group and age on emotional intelligence ($F=3.706, p=.027, \eta^2 = .05$), and no significant interaction effect of experimental group and gender on social adjustment ($F 1.029, p .360, \eta^2 = .05$), and academic adjustment ($F .907, p .406, \eta^2 = .05$).

4. Conclusion
To conclude the study, the results of descriptive statistics show significant differences between experimental and control groups on the dependent variables, also identify as emotional intelligence, social adjustment, academic adjustment. The results show that the experimental group had higher emotional intelligence, social adjustment, and academic adjustment scores than the control group. Results of MANCOVA show a significant difference between experimental and control group on emotional intelligence, but no significant difference between experimental and control group on social and academic adjustment levels. In addition, there is no significant difference between male and female students regarding the level of emotional intelligence, social adjustment, and academic adjustment. Also the results show no significant difference between student’s age regarding the level of emotional intelligence, levels of social adjustment and academic adjustment as proven by MANCOVA. Furthermore, there is no significant interaction between experimental group and gender on these research variables but there is significant interaction between experimental group and age on the emotional intelligence, social adjustment, and academic adjustment. Therefore, one of the contribution of this study is the indication of the significant differences between experimental and control group on emotional intelligence variables and the fact that first year students have increased their scores on social and academic adjustment after they participated in the emotional intelligence training program. The finding of this study would help academicians to foster emotional intelligence among the students’ community in the following ways:
Enhancing Self Awareness
Ability to develop skills to manage emotions
Ability to handle relationship with others
Method to developing social relationship skills
Providing a good relationship between students and lecturers

5. Discussion
Despite the fact that various studies have revealed that emotional intelligence positively effects student’s social and academic adjustment, the result of this research found no significant differences between experimental and control group on the social and academic adjustment. The reasons attributed to the result may be due to: the short time period of training which is insufficient to explore significant differences between experimental and control group, as clearly evidenced by Baker and Syrik (1999) when they recommended the evaluation of student adjustment to be done in a timely fashion due to the sensitive issues attached to it. This maybe the reason why there are non-statistical significant differences between experimental and control groups. As such, the results should be interpreted with caution until they are replicated and academics should provide emotional learning at the right time and place to students, particularly first year university students.

References
Intelligence: Educational Implications, pp. 3-31.


Table 1. Results of MANCOVA for Group Factor Effect on the Research Variables: ** P .05

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variables</th>
<th>Total Posttest</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
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Table 2. Results of MANCOVA for Gender Factor Effect on the Research Variables** P .05

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Table 3. Result of MANCOVA for Age factor effect on the Research Variables

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### Table 4: Results of MANCOVA for Interaction Effect of Group and Gender on the Research Variables** P .05

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### Table 5: Results of MANCOVA for Interaction between Group and Age on the Research Variables: ** P .05

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