The Effectiveness of Emotional Intelligence Training Program on Social and Academic Adjustment among First Year University Students

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Abstract

The purpose of the study was to examining the effect of emotional intelligence training in raising the level of social and academic adjustment. The study was a quasi-experimental pre-post design involves two groups of first year university students from two universities in north Jordan (289). The experimental group was exposed to ten days on an hour to an hour and half sessions of emotional intelligence training, while the control group was only given pre-post questionnaires. ANCOVA analysis results among the groups showed that the training program was effective in significantly raising the level of emotional intelligence, but the improvements of social and academic adjustment were not significant. Overall, female and elder students showed better scores of all dependent variables than their younger counterparts, but the results were not significant for social and academic adjustment. It was recommended that emotional intelligence training should be used as adjunct strategy to improve student social and academic adjustment among adolescents and adult students.

Keywords: Emotional Intelligence, Social Adjustment, Academic Adjustment, Training Program, First Year University Student.

It assumed that most university students in Jordan are adolescents and young adults between the ages of 18-30 years. Being in their late adolescents and late adult, and during the transition period to university many problems confront them including physical, social, academic, and emotional adjustment. A major hurdle for the students during this time is the managing emotions, developing autonomy, and developing interpersonal relationship (Chickering & Reisser, 1993). Specifically, the “adjustment” was defined as a psychological process of adapting to coping with, managing their problems, challenging, tasks and requirements of daily life (Halonen & Santrok, 1997). Baker and Syrik (1999) categorized and identified the different type of adjustment; which are academic, social, personal-emotional adjustment, and institution attachment/goal commitment. Literature review showed that studies on adjustment problem among first year university students have been done in the development countries such as Malaysia (Azniza, 2005), USA (Tinto,1996), but no study has been done among Jordanian university students.
The student’s successful transition into a university is evidenced to be associated with other variables or a combination of variables consisting of academic and non-academic factors. Emotional intelligence is one of these factors and is gaining more and more attention from scholars and educators alike. Although it is a relatively new concept in the educational and psychological fields, appearing only in the beginning of 1990s, it has motivated the interest and scrutiny of many scholars in various scientific fields. 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. Goleman (1998) defined emotional intelligence as the ability to identify, control one’s emotions, use feeling to generate self motivation, empathized with others and build a good relationship with others. Emotional intelligence is relatively new and growing area of behavioral investigation, having matured recently with the aid of previous studies related to this concept. A large number of studies with adolescents further suggest that the capacity of to decode, understand, and regulate emotions, interaction with other people, manage relationship associated with social and academic adjustment (Saarni, 1999; Jensen et al., 2007; Low & Nelson, 2005; Goleman, 1998; Mayer & Salovey, 1997; Chan, 2003; Vela, 2003). Among university students, emotional abilities are positively associated with the quality of social interactions (Lopes, Brackett, Nezlek, Schutz, Sellin & Salovey, 2004; Paulo, Croucher, Sohanpal, Muirhead, & Seymourk, 2004) and prosocial behavior (Brackett & Mayer, 2003), perform effectively under stress (Baumeister, Heatherton, & Tice, 1994) positive mood and higher self esteem (Schutte, Malouff, Simunek, & Hollander, 2002), social adjustment (Chan, 2003), and academic achievement (Abdallah, Elias, Mahyuddin, & Uli, 2004). It is important to note that different authors have proposed conceptualization of emotional intelligence and the asserted to the prominent role of it to assist student’s success during their study at the university.

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 for people ability to improve their emotional and social competencies with sustained efforts through systematic programmes of training. Thus, the current study does not found available publish study which studied the effect of emotional intelligence training program on student social and academic adjustment among university students (Schutte & Malouff, 2002; Austin, Evans, Goldwater, & Potter, 2005; Salami, 2010; Lin, Lee, Hsu, & Lin, 2011). For this reason, the present study attempts 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. Furthermore, considering the fact that gender and ages factors may affect the influence of training program on the emotional intelligence, social adjustment, and academic adjustment, the present study also considered gender and age as a second level independent variables to determine it is influence on emotional intelligence and student social and academic adjustment.

**Literature Review**

The topic of emotional intelligence is controversial. Debates rage on and critical questions continue to arise as to the concept of emotional intelligence, as well as its definition, nature, measurement, and application. As noted by Van Rooy and Viswesvaran (2004), the difficulty to provide an operational definition of emotional intelligence that is accepted by all has been largely due to the differing names given to emotional intelligence. The reason emotional intelligence models differ has to do with the fact that these models were developed by different people for different purposes. Cherniss (2000) cites an example of Salovey and Mayer's model, which was developed deductively to Goleman's and Bar-On's models that were developed inductively. Other proponents of emotional intelligence, such as Cherniss, Extein, Goleman, & Weissberg (2006), agree that although differences between several major models do exist, there is considerable overlap among them. They further argue that, in fact, Goleman's dimensions of self awareness and social awareness are similar to Salovey and Mayer's perception of emotion and understanding of emotions, as well as to Bar-On's self-awareness and empathy subscales. Similarly, Bar-On's interpersonal, stress management, and adaptability dimensions relate to Mayer and Salovey's emotional facilitation of thinking and managing emotions, as well as Goleman's self- management and relationship management dimensions. Thus, according to both these academic and practitioner emotional intelligence researchers, although differences in these models exist, there are also many similarities that cannot be ignored. Regardless of the models used, emotional intelligence researchers agree that in addition to emotional management, emotional intelligence encompasses emotional awareness in relation to self and others, that emotional intelligence is important in predicting successful life outcomes, and that it has the potential to be learned and developed with proper training (Ciarrochi, Chan, & Caputi, 2002; Goleman, 1998).
Emotional Intelligence Training Program Development

Generally, researchers claimed that students need early emotional intelligence programs in order to succeed in their environment because it incorporates a number of abilities, including the ability to be aware of one’s own and others emotions, to be able to manage those emotions, and to understand the complex relationships that can occur between emotions and likely emotional transition (Austin et al., 2005; Mayer & Salovey, 1997). Both descriptive and correlation studies regarding emotional intelligence notably originate from earlier efforts (Goleman, 1995), while recent studies are more inclined to concentrate more on the training of emotional intelligence. Due to its advocacy in the possibility of increasing emotional intelligence, developing a quality emotional intelligence program has become more and more crucial for researchers (Schutte et al., 2001). The resources providing exercises for emotional intelligence improvement are readily available but a review of these resources revealed a lack of detailed training program information related to research particularly those related to university students (Jensen et al., 2007; Salami, 2010; Lin et al., 2011). Moreover, several studies showed that within the realm of emotional intelligence and the measurement of emotional intelligence improvement throughout the training, there is lack of reporting regarding effective learning designs that have been empirically tested (Eichmann, 2009; Weis & Arnesen, 2007).

Although this study was unable to found a single study dedicated to studying the combined effects of emotional intelligence training program on university student's (Schutte & Malouff, 2002; Austin et al., 2005; Lin et al., 2011), there are many studies (Boyatzis, Stubbs, & Taylor, 2002; Goleman, 1998; Mayer & Salovey, 1997; Murray, Jordan, & Thompson, 2006) that have evidenced the successful development of EI among employees and managers. For instance, The American express program is one of the pioneering intelligence training programs aimed at increasing the trainees’ understanding of their own emotions and to find ways to manage their emotional reactions. Findings revealed that approximately 90% of the training participants claimed positive job-related benefits from the program. Moreover, the company’s growth sales revenue increased by 11% when compared to other units whose management did not take part in the training program (Cherniss & Caplan, 2001). In a related study, Boyatzis (2001) conducted a longitudinal study and revealed success in the development of intelligence in MBA students, and the findings revealed improvement on emotional intelligence competencies (cognitive, self-management, and relationship management). In another related study, Dulewicz and Higgs (2004) took the participation of 59 middle managers in their training program scheduled one-day-per week training program in a span of four weeks. The study made use of a paired-sample t-test analysis which revealed statistically significant improvements in the managers’ total EQ score as well as on five of the seven elements of emotional intelligence.

Therefore, the primary purpose of this study was to developed emotional intelligence training program and how the training influenced students’ adjustment at university. Therefore, the emotional intelligence training program for this study has developed based on several sources which are: increase emotional literacy and self efficacy (Assanova & McGuire, 2009); vision and guidance (Nelson, Low, & Hammet, 2007); communication strategies (Wilson, 2007); effectiveness and teaching of emotional intelligence (Cherniss & Adler, 2000).

Objectives of the Study

1- To identify the difference effect of emotional intelligence training program towards emotional intelligence.
2- To identify the difference effect of emotional intelligence training program towards social adjustment
3- To identify the difference effect of emotional intelligence training program towards academic adjustment.
4- To identify the interaction effect between training groups and gender towards emotional intelligence, social adjustment, and academic adjustment.
5- To identify the interaction effect between training groups and age towards emotional intelligence, social adjustment, and academic adjustment.

Hypotheses of Study

Three hypotheses were raised and tested with significant level fixed 0.05:-

1- There will be no significant differences in the effect of training program between experimental and control groups on student’s level emotional intelligence.
2- There will be no significant differences in the effect of training program between experimental and control groups on student’s level of social adjustment.
3- There will be no significant differences in the effect of training program between experimental and control groups on student’s level of academic adjustment.

4- There will be no significant interaction effect of training groups and gender on student’s level of emotional intelligence, social adjustment, and academic adjustment.

5- There will be no significant interaction effect of training groups and age on student’s level of emotional intelligence, social adjustment, and academic adjustment.

Methods

Participants and design

The study is a pre-post test, experimental control groups design with 2x2x3 factorial design. The various factors are groups (experimental and the control group); and gender which was observed two levels (male and female); and age levels which was observed 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 randomly selected from two universities in Jordan and a purposive sample is drawn from the population based on willingness to undergo motivational programs. Students were randomly assigned to experimental and control groups based on their gender and age in each of the group.

Instruments

This study has three sections; first section obtained information about student demographic characteristics such as gender and age. The second section emotional intelligence appraisal (EIA) scale consisted of four dimensions that assess emotional intelligence through 28 items. Each item consist of 6 likert scale ranged from (1= never to 6= always). The researcher’s adapted the emotional intelligence appraisal (EIA) developed by Bradberry and Greaves (2004) because the development of the items has a theoretical foundation, which was based on Goleman, Boyatzis and McGee (2002) early work model of emotional intelligence.

The third section is the instrument of Student Adjustment to College Questionnaire (SACQ; Baker & Syrik, 1999). This instrument contains two sub-scales which are social adjustment and academic adjustment based on the importance of these scales to evaluate student’s adjustment to university as well as has been used widely in multicultural population (Baker & Syrik, 1999; Tinto, 1996). The instrument contains 67 items, each items answered on a nine point likert scale, ranged from 1 “does not apply to me at all” to 9 “applies very closely to me”.

Before the final questionnaires were distributed to the targeted participants, they were pre-tested by using respondents of the targeted populations. The outcome of Cronbach Alpha towards all of these research instruments were proven highly reliable which are: emotional intelligence appraisal (.84); social adjustment (.95); academic adjustment (.94). In exploratory factor analysis, the present study indentifying the factor structure of EIA, and the results shows that the (KMO) index and Bartlett’s test of sphericity yielded values of .818 and a chi-square value of 3506.729 (df=351, p=.000) respectively. As well as Catell’s scree-test of the data supported the four factors solution. Furthermore, factor analysis for social adjustment was calculated; the KMO index and Bartlett’s test of sphericity yielded values of .902 and chi-square value of 6465.310 (df=136, p=.000). Finally, factor analysis for academic adjustment was calculated and the result showed that the KMO index and Bartlett’s test of sphericity values were .863 and chi-square value of 5906.874 (df=231, p=.000).

Procedures

This research has developed emotional intelligence training program and student were freely volunteered themselves to participated for 10 days period. They were randomly assigned into two group’s namely experimental group and were given 9 sessions within the duration of 10 days. Otherwise, the control group was not given any treatment. 6 trainers were involved in the training program administrations. The training program was executed through series of lectures, discussion, demonstration, and experimental methods such as role-play. Summary of the treatment which utilized Goleman et al. (2002) conceptualization is presented below:

Session 1, introduction about emotional intelligence skills and the importance of these skills to maximize student adjustment.
Session 2, understand one’s emotion and build up one self confidence.
Session 3, build self concept and autonomy.
Session 4, provide students opportunity to recognize their appropriate emotional response to different situations.
Session 5, educated students how to setting goals for themselves.
Session 6, fostering cooperative classroom environment.
Session 7, educate students away to deal with others.
Session 8, provide students ways to improve their social skills.
Session 9, provide students the value of teamwork and working with group, and post test administration and closing of the program.

**Results**

Univariate analysis of covariance (ANCOVA) was employed to analyze the data collected through pre-post test treatment administration.

Hypothesis one: - There will be no significant differences in the effect of training program between experimental and control groups on student’s level of emotional intelligence. The result of the ANCOVA in table (1) showed that there was a significant difference between student’s in experimental group on the level of emotional intelligence, $F(5.306, p=.022, <.05)$. It showed that both of groups are effective to increase student emotional intelligence.

Hypothesis two: - There will be no significant differences in the effect of training program between experimental and control groups on student’s level of social adjustment. The results in table 1 showed no significant differences between experimental group and control group on social adjustment $F(.949, p=.331, <.05)$. It showed that both groups experimental and control group did not differ in the level of social adjustment.

Hypothesis three: - There will be no significant differences in the effect of training program between experimental and control groups on student’s level of social adjustment. The results in table 1 showed no significant differences between experimental group and control group on social adjustment $F(3.211, p=.074, <.05)$. It showed that both of groups are not different on the level of academic adjustment.

Table 1: Results of ANCOVA for Between-Subjects Effects: Emotional Intelligence, Social Adjustment, and Academic Adjustment Test Scores: ** P < .05

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variables Total Posttest</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>EI posttest</td>
<td>1.287</td>
<td>1</td>
<td>1.287</td>
<td>5.306</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>SA posttest</td>
<td>2.092</td>
<td>1</td>
<td>2.092</td>
<td>.949</td>
<td>.331</td>
</tr>
<tr>
<td></td>
<td>AA posttest</td>
<td>5.246</td>
<td>1</td>
<td>5.246</td>
<td>3.211</td>
<td>.074</td>
</tr>
</tbody>
</table>

Hypothesis Four: - There will be no significant interaction effect of training groups and gender on the student’s emotional intelligence, social adjustment, and academic adjustment levels. A Univariate analysis of covariance ANCOVA between-subject effects were calculated as shows in table (2); the results support that there was significant interaction effects between groups and gender on emotional intelligence: $(F < 6.493, p < .000, <.05)$, and no significant interaction found for social adjustment: $(F < .561, p < .641, <.05)$, and academic adjustment: $(F < 2.179, p < .091, <.05)$.

Table 2: Results of ANCOVA for Between-Subjects Effects: Emotional Intelligence, Social Adjustment, and Academic Adjustment Test Scores: ** P < .05

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variables Total Posttest</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group*Gender</td>
<td>EI posttest</td>
<td>1.513</td>
<td>3</td>
<td>1.513</td>
<td>6.495</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>SA posttest</td>
<td>3.727</td>
<td>3</td>
<td>1.242</td>
<td>.561</td>
<td>.641</td>
</tr>
<tr>
<td></td>
<td>AA posttest</td>
<td>10.331</td>
<td>3</td>
<td>3.444</td>
<td>2.116</td>
<td>.098</td>
</tr>
</tbody>
</table>

Hypothesis five: - There will be no significant interaction effect of training groups and age on the student’s emotional intelligence, social adjustment, and academic adjustment levels.
A Univariate analysis of covariance ANCOVA between-subject effects were calculated as shows in table (3); the results support significant interaction effects between training groups and age on emotional intelligence: (F ˂ 2.355, p ˂ .041 ˂ .05), and no significant interaction found for social adjustment: (F ˂ .716, p ˂ .612 > .05), and academic adjustment: (F ˂ 1.125, p ˂ .347 ˂ .05).

**Table 3**: Results of ANCOVA for Between-Subjects Effects: Emotional Intelligence, Social Adjustment, and Academic Adjustment Test Scores: ** P ˂ .05

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variables</th>
<th>Posttest</th>
<th>Type III Sum of Squares</th>
<th>dF</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group*age</td>
<td>EI posttest</td>
<td>2.833</td>
<td>5</td>
<td>.567</td>
<td>2.355</td>
<td>.041</td>
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<td></td>
<td>SA posttest</td>
<td>7.928</td>
<td>5</td>
<td>1.586</td>
<td>.716</td>
<td>.612</td>
<td></td>
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<tr>
<td></td>
<td>AA posttest</td>
<td>9.242</td>
<td>5</td>
<td>1.848</td>
<td>1.125</td>
<td>.347</td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion and Discussion**

In conclusion, the results of descriptive statistics showed that there were significant differences between experimental and control groups on the dependent variables, emotional intelligence, social adjustment, academic adjustment. The results of experimental and control group showed that the experimental had higher emotional intelligence, social adjustment, and academic adjustment scores than control group. Results of ANCOVA showed that there was a significant difference between experimental and control group on emotional intelligence, but not significant difference between experimental and control group on social and academic adjustment levels. Furthermore, result ANCOVA showed there was significant interaction between training groups and gender on emotional intelligence variable, but not significant interaction between training groups and gender on social and academic adjustment variables. Finally, there was significant interaction between experimental group and age on the emotional intelligence, but not on social adjustment, and academic adjustment. Therefore, one of contribution in this study is it is indication of the significant differences between experimental and control group on emotional intelligence variables, as well as first year students have increases their scores on social and academic adjustment after they participated in the emotional intelligence training program. The finding of this study would help academic people to foster emotional intelligence skills among the students community.

Although a number of studies have indicated that emotional intelligence positively with 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 expected for no differences between groups due to: first, may be the period time of the training was not sufficient to explore significant between experimental and control group. Second, researcher (Baker & Syrik, 1999) recommended to evaluated student adjustment to university in a timely fashion due to that student adjustment to college is a time sensitive issues. So maybe this effect the non-statistically significant differences between experimental and control group. In addition, eighteen items of SACQ were negatively items worded; researchers are warned against utilizing negatively worded items with certain population owing to the confusion that they may cause (Elias, 2004). For all of those reasons, the results should be interpreted with caution until they are replicated. Therefore, the academics should give emotional learning in the right time and place for students especially first year university students.
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