INVESTIGATING THE IMPACT OF EMOTIONAL INTELLIGENCE (EI) AND ITS ASPECTS ON HUMAN RESOURCE EMPOWERMENT IN RESEARCH ORGANIZATIONS: A CASE STUDY ON THE INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

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ABSTRACT
This study is primarily aimed at exploring the effect of emotional intelligence (IE) on human resource empowerment at the Institute of Information and Communications Technology. To this end, the theoretical framework derived from the emotional intelligence model of Travis Bradbery and Jane Graves was adopted, and Spreitzer model was employed to measure human resource empowerment. A t-test was administered to examine the condition of research variables using SPSS program and structural equation modeling (SEM), particularly a path analysis by means of LISREL application to see whether the research hypotheses could be verified or not and to investigate the relation between variables. The research results suggested that aspects of human resource empowerment except for "feeling of job meaningfulness” are not in good standing. Results of the test measuring the level of personnel emotional intelligence and the resulting score, i.e. 124.65, and the fact that the scores 80 and above imply high levels of emotional intelligence entirely indicate that the staff members at the Institute of Information & Communications Technology have high levels of emotional intelligence. In addition, emotional intelligence has a relatively mediocre and significant effect on human resource empowerment at the Institute of Information & Communications Technology, and from among the aspects of emotional intelligence, only “self-management” has a positive, significant effect on human resource empowerment at the forenamed institute.

KEYWORDS: Emotional Intelligence (EI), Human Resource Empowerment, Institute of Information and Communications Technology, Structural Equation Modeling (SEM).

INTRODUCTION
The source of wealth at any organizations originates from its staff members and their knowledge, skills and motivations. Today, possessing such wealth is important because in the next decade, or may be the century to come, the chief cause of competitive excellence will depend, in addition to modern technology, upon personnel initiation, creativity, commitment and abilities (Aksel et al., 2014). When faced up with future challenges to achieve higher rates of personnel productivity and empowerment, organizations will have no choice but to enlist their personnel support, involvement and commitment (Chiang et al., 2012). Intelligence is undoubtedly a most attractive mental force the instances of which could be observed in different creatures in various levels. The more the creatures evolve and develop, the more complex and intelligence they become (Sobhaninejad et al., 2008). It can be said that our moods deeply affect the information we memorize or consider and the method whereby we react to social situations, that is, we can think well by possessing good emotions. The higher levels of emotional intelligence people have, the more they are aware of the role and impact of their acts and behaviors and attempt to foster the best emotion in them according to the situation so as to think and solve the problems in the best possible way. The notion of emotional intelligence entered the psychology literature in 1990, cited in the previous researches as social intelligence, interpersonal intelligence and social ability (Eriguc et al., 2013). The concept of emotional intelligence has four components, namely self-awareness, self-management, social awareness and relation management (Brackett et al., 2004). Among the reasons behind conducting this study at the Institute of Information and Communications Technology are that the individual who is lacking in social and emotional skills will be deprived of desirable and healthy relationships with the others. Managers should be able in different situations and conditions to identify their own and others’ feelings and manage them in a good manner. A better understanding of emotional intelligence and its relation to promotion of personal empowerment could bring about organizational success in achieving long-term as well as middle-term goals.

Review of Literature and Research Hypothesis Formulation

Emotional Intelligence
Emotional intelligence and its attractive, extensive aspects have recently attracted the attention of not only psychologists and psychiatrists but also the public people (Costa et al., 2014). The initial application of the concept of
emotional intelligence dates back to the 1940s. Afterwards, Mayer and Salovey described the term “intentional role” of emotional intelligence in formation of the theory of “multiple intelligence”. Gardner called his influential model “emotional intelligence” (Ealias & George, 2012). Although there is a good opportunity to form emotional intelligence in the early years of life, this ability continues lifelong in a more limited way (Mayer and Salovey, 1999). Emotional intelligence has social, cognitive and biological merits. Research has suggested that those with high levels of emotional intelligence develop lower levels of stress hormones and other symptoms and signs of emotional arousal (Kassymzhanova & Mun, 2013). Goleman defines emotional intelligence as “the potential or ability to organize one’s own and others’ feelings and emotions for self-arousal and to employ them in relationships with the others (Goleman, 1998).

Components of Emotional Intelligence

Emotional intelligence has four components (Goleman, 1998):

1. Self-awareness: By deeply identifying others’ emotions and mental states, one could gain understanding of their own strengths and weaknesses and the ability to carry out proper self-assessment. In other words, in self-awareness, you read your emotions and feelings and become aware of them (Perreault et al., 2014).
2. Self-management: This refers to the ability to control honest and sincere emotions and behaviors. (Johnson et al., 2014)
3. Social awareness: People who have such awareness exactly know that their words acts influence others and that they should change such words and acts if they have negative impacts. (Koydemir & Schütz, 2012)
4. Relation management: This includes establishing communication, influence, shared attempts and teamwork (His-An & Ely, 2010).

Emotional Intelligence and Effective Performance

The ability to use or develop emotions to facilitate problem solving plays an important role in efficacy of team members. Expansion of positive emotions inside groups facilitates collaboration and cooperation of the team members, reduces conflicts, and makes improvements in the level of members’ efficacy (Yozgat et al., 2013). In a study on emotional cognition, Barsade (2000), of Yale School of Management, found out that performance of the groups with high levels of emotional intelligence was significantly better and higher than that of the groups with low levels of emotional intelligence. According to the results of these and other studies, it seems that emotional intelligence, as an intermediary and organizing factor, could make improvements in the group performance because it allows the group to become highly and effectively coordinate. It also appears that the groups with low levels of emotional intelligence need more time to experience effective working as a group (Barsade, 2000).

Instances of Emotional Intelligence in Personnel Environments

Working with emotional intelligence brings about awareness on the existing conflicts over traditional approaches to teaching and self-regulatory learning and also develops leadership (Maizatul et al., 2013). Characteristics of emotional intelligence provide a general view on the topic of capital return in organizations when the relevant training plans are applied to affect performance (Baezzat & Sharifzadeh, 2012). Goleman holds that investing in leaders’ emotional intelligence with specific personal plans influences organizational atmosphere and performance; whoever, new findings highlight investing in principal employees too (Yozgat et al., 2013). Many jobs require possession of mental ability. In this respect, multiple abilities have been put forward by psychologists, and basic mental abilities have a role in effective performance (Shamsuddin & Abdul Rahman, 2014), including:

1. Verbal perception: perceiving what is said and heard and what is said in relation to the others;
2. Counting: the speed of doing mathematical calculations;
3. Spatial imagination: envisaging how things appear if objects or issues are displaced;
4. Memory: memorizing and remembering past experiences; and,
5. Inductive reasoning: identifying a general order from a specific, not general, case.

These abilities are treated as the basis for selecting employees and job training plans; of course, it should be noted that these abilities are more necessary when it comes to more complicated duties, tasks and jobs. In Working with Emotional Intelligence, Goleman argues that many of these mental abilities are rooted in emotional intelligence and not necessarily in logical intelligence (Baezzat & Sharifzadeh, 2012).
Human Resource Empowerment

Today, organizations are under too much pressure as a result of such factors as increased global competition, abrupt changes, need for quality and after-sale-service and restricted resources, etc. After many years of experience, it has been decided worldwide that for an organization to pioneer in its economic and business affairs and not to lag behind in competition, it needs to have specialist, creative, and highly motivated employees. Human resources are the origin of real wealth at any organizations (Jiraro et al., 2014).

A successful organization is the one composed of people with organizational culture, common thoughts and goals who, through teamwork in the flexible organizational system, provide their experiences and knowledge for their managers with love for ever-increasing organizational progress (Bitmis M.Gökhan, Ergeneli Azize, 2011). Employing potential human resource abilities is a big advantage to any organizations. The necessity for achieving organizational goals is effective management of such valuable resources. In this respect, growth, achievements and promotion of employees which have recently been referred to as human resource empowerment have been taken into consideration by human resource experts and specialists (Dehghani et al., 2014). As a type of participatory management, empowerment refers to empowering and vesting authorities in lower-level employees to make and implement decisions (Robbins, 2005).

Aspects of Psychological Empowerment:
Empowerment has five cognitive factors developed by Spreitzer and Mishra:

1. Feeling of job competency: Competency refers to the degree by which an individual can skillfully fulfil job duties and tasks (Thomas and Velthouse, 1990). Empowered people feel competent and believe that they have the necessary competencies and abilities to discharge their duties successfully.

2. Feeling of autonomy or the freedom of choice: Autonomy or enjoying freedom of choice refer to the employees’ freedom and independence in determining necessary activities for fulfillment of job duties. When people experience autonomy, they voluntarily and willfully engage themselves in duties willfully and voluntarily not reluctantly.

3. Feeling of effectiveness: This refers to people’s beliefs, in a specific period of time, about their abilities to make changes and alterations in a desirable fashion. Those who feel effective try to keep fluent in what they see not to react to the environment (Sasiadek, 2006).

4. Feeling of meaningfulness: Empowered people feel meaningfulness. They value their goals or the activities in which they are involved (Bektas, 2013).

5. Feeling of trust in partnership others: This refers to confidence in superiors and subordinates’ relationships (manager’s trust in employees and the vice versa) (Joo and Shim, 2010).

The Achievements from Empowerment in Organizations
Empowerment plans allow the organizations to act creatively and innovatively and present business plans in such a way that they can always maintain their positions in the best condition. The most outstanding advantage of using such plans is that they lay the grounds for more and more mutual understanding and commitment of employees and organization (Joo and Shim, 2010). When employees interactively comprehend their respective duties, they often think of themselves as part of duties and tasks and become committed toward exultation of their organization. This is particularly true when there is a logical relation between organizational performance and knowledge employees and such a relation is perceived. Aspects of such perception will result in mutual understanding and ultimately commitment (Humhorstad and Perry, 2011). Among the achievements the competent organizations could gain as a result of applying and executing such factors are the following:

- Satisfying customers and increasing such satisfaction;
- Increasing personnel job satisfaction;
- Increasing the feeling of belonging, participation and responsibility in personnel;
- Changing method of treatment from compulsion to will;
- More commitments of employees and improved performance quality;
- Better communication between employees and managers, directors and heads;
- Increasing efficiency of the process of decision-making;
- Creating new innovations and making more use of the intellectual resources. (Hosseinzaadeh, 2009).
### Review of Similar Research

<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th>Researcher(s)</th>
<th>Research Topic</th>
<th>Research Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>Arab et al.</td>
<td>Investigating the level of managers’ emotional intelligence and its relation to their performance at selected private and state hospitals in Tehran</td>
<td>There is a relation between managers’ emotional intelligence and their performance but none of the aspects of emotional intelligence is statistically significant.</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>Abdollahi Vashvaei</td>
<td>The relationship between emotional intelligence and academic achievement of the students at Imam Mohammad Bagher College of Sary</td>
<td>There is a significant relation between emotional intelligence and academic achievement, while there is no significant relation between average emotional intelligence of the students of different majors and their academic achievement.</td>
</tr>
<tr>
<td>3</td>
<td>2010</td>
<td>Nafari and Omidfar</td>
<td>Exploring the level of impact of organizational structure (structural aspects) on personnel empowerment (a case study on the Budgeting Department of the Ministry of Economic and Finance Affairs)</td>
<td>Mean of psychological empowerment (3.84) indicates relatively high empowerment. Moreover, correlation coefficient suggests that there is a significant relation between organizational structure (structural aspects) and personnel empowerment at the Budgeting Department of Ministry of Economic and Finance Affairs.</td>
</tr>
<tr>
<td>4</td>
<td>2009</td>
<td>Abesi and Bagherkord</td>
<td>Identifying and explicating the personnel empowerment model in the state Iranian organizations (a case study on Yazd province)</td>
<td>The variables of commitment, consistency, and involvement directly affect empowerment and communications, training, salary and pay and employee conditions indirectly affect empowerment.</td>
</tr>
<tr>
<td>5</td>
<td>2013</td>
<td>Eriguc et al.</td>
<td>Investigating emotional intelligence and communication skills of election nominees of healthcare manager: structural equation modeling</td>
<td>Male and female students’ emotional intelligence was determined, and according to structural equation modeling, there is a positive, significant relation between the students’ communication skills and emotional intelligence.</td>
</tr>
<tr>
<td>6</td>
<td>2011</td>
<td>Tessema and Alemu</td>
<td>Emotional intelligence and organizational development leadership</td>
<td>Multistep regression analysis indicated that eight out of 15 emotional intelligence skills remarkably account for variance in evolutionary leadership behaviors.</td>
</tr>
</tbody>
</table>

**Research Question Development:**

According to the foregoing research and the theoretical hypotheses of this study, the following questions were extracted and are to be answered in this study. Research questions are divided into two groups, namely primary and secondary as below:

**Primary Question:**
1. How does emotional intelligence affect human resource empowerment at the Institute of Information and Communications Technology?

**Secondary Questions:**
1. How does self-awareness affect human resource empowerment at the Institute of Information and Communications Technology?
2. How does self-management affect human resource empowerment at the Institute of Information and Communications Technology?
3. How does social awareness affect human resource empowerment at the Institute of Information and Communications Technology?
4. How does relation management affect human resource empowerment at the Institute of Information and Communications Technology?
5. How is the level of emotional intelligence of the personnel at the Institute of Information and Communications Technology?

Research Conceptual Model
Through a review of the literature, the following model emerged based on the theoretical foundations of the study from a combination of the emotional intelligence model of Travis and Bradbery and Jean Graves (2005) and Spreitzer’s Model of Psychological Empowerment (1995).

In this study, aspects of emotional intelligence including self-awareness, self-management, social awareness and relation management are treated as independent (exogenous) variables. Likewise, psychological empowerment and its aspects including feeling of job meaningfulness, feeling of job competency, feeling of freedom of choice, feeling of effectiveness and feeling of partnership others are regarded as dependent (endogenous) variables.

MATERIALS AND METHODS
Research Methodology:
Statistical Population and Sample
As the statistical population of this study consists of the employees and managers and directors at the Institute of Information and Communications Technology serving with the respective organization, that is nearly 600 people, the statistical sample of the study is composed of 234 subjects using Cochran’s formula. Then, 250 questionnaires were distributed among the subjects out of which 234 verified questionnaires were applied in analyses.

Data Collection Instruments:
Likert’s 5-point scale was employed to the study for the purpose of surveying and was provided to a number of expert professors personally or via email so as to be verified or expanded or reduced. By means of the personnel psychological empowerment questionnaire based on the Spreitzer’s model, which is standard and was developed in 1995 and applied in several countries and its results were confirmed, an upon addition of the items relating to Bradbery-Graves emotional intelligence test, presented in 2005, and Likert’s grading scale, the basic questionnaire was developed and 50 copies were distributed and after its reliability was verified, the final questionnaire was designed and the required data were gathered.

Reliability
Different methods are adopted by researchers to compute the reliability of measurement instruments, and this study employed Cronbach’s alpha for this purpose. According to the following table dealing with alpha coefficients, the research variables are adequately reliable vis-à-vis the standard, i.e. 0.70.

Table 1: Coefficients of Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Research variables</th>
<th>Cronbach’s $\alpha$ coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-awareness</td>
<td>0.725</td>
</tr>
<tr>
<td>Self-management</td>
<td>0.730</td>
</tr>
<tr>
<td>Social awareness</td>
<td>0.715</td>
</tr>
<tr>
<td>Relation management</td>
<td>0.760</td>
</tr>
<tr>
<td>Feeling of job meaningfulness</td>
<td>0.762</td>
</tr>
<tr>
<td>Feeling of job competency</td>
<td>0.726</td>
</tr>
<tr>
<td>Feeling of freedom of choice</td>
<td>0.850</td>
</tr>
<tr>
<td>Feeling of effectiveness</td>
<td>0.839</td>
</tr>
<tr>
<td>Feeling of partnership others</td>
<td>0.781</td>
</tr>
<tr>
<td>Total questionnaire items</td>
<td>0.895</td>
</tr>
</tbody>
</table>

Data Analysis Methodology:
In order to analyze the data descriptively, the researchers described the particulars of the statistical subjects, including gender, age, working experience, educational background, and organizational positions of the responders. The analyses
employed include t-test using SPSS program and Excel for the purpose of investigating level of emotional intelligence and structural equation modeling (SEM) using LISREL 8.54.

Data Analysis:
An investigation into the subjects’ demographic data suggests that most of the responders are men, accounting for 56%. According to the information deriving from the questionnaire, the responders are mostly aged between 30 and 40 with master’s degrees. Similarly, most of the responders serve as organizational experts with their majority holding 10 to 15 years of working experience.

RESULTS AND DISCUSSION
Examining Emotional Intelligence at the Institute of Information & Communications Technology
Bradbery-Graves emotional intelligence test was administered in this study for the purpose of measuring emotional intelligence. This test consists of 28 items concerned with 4 aspects of emotional intelligence, i.e. self-awareness, self-management, social awareness and relation management and is scored based on a 6-dot scale, from 1 to 6. The total scores achieved by the subjects on each and every item result in the total test score. This test poses several questions to each person about his/her behavior, and ultimately his/her total emotional intelligence score is calculated. The test result derives from mean of the scores of all responders. The scores equal to or less than 60 indicate low emotional intelligence; 61 to 70 suggest mediocre emotional intelligence, and the scores equal to or more than 80 imply high emotional intelligence.

Mean of the data collected from the emotional intelligence questionnaire demonstrates that the employees serving with the Institute of Information and Communications Technology have high levels of emotional intelligence.

Table 2: Investigating Emotional Intelligence at the Institute of Information & Communications Technology

<table>
<thead>
<tr>
<th>The questionnaire employed</th>
<th>Mean of employees’ emotional intelligence</th>
<th>Level of emotional intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bradbery &amp; Graves Emotional</td>
<td>124.65</td>
<td>High</td>
</tr>
</tbody>
</table>

Table 3: Inferential statistics for t-test of emotional intelligence aspects

<table>
<thead>
<tr>
<th>Variables</th>
<th>t</th>
<th>Degree of freedom</th>
<th>Significance number</th>
<th>Difference in means</th>
<th>95% confidence interval for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low level</td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-awareness</td>
<td>4</td>
<td>233</td>
<td>0.000</td>
<td>1.07564</td>
<td>0.9943</td>
</tr>
<tr>
<td>Self-management</td>
<td>3</td>
<td>233</td>
<td>0.000</td>
<td>1.03543</td>
<td>0.9751</td>
</tr>
<tr>
<td>Social awareness</td>
<td>7</td>
<td>233</td>
<td>0.000</td>
<td>1.11474</td>
<td>1.0370</td>
</tr>
<tr>
<td>Relation management</td>
<td>3</td>
<td>233</td>
<td>0.000</td>
<td>0.77007</td>
<td>0.6883</td>
</tr>
</tbody>
</table>
Table 4: Inferential statistics for t-test of aspects of empowerment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test score = 3</th>
<th>t</th>
<th>Degree of freedom</th>
<th>Significance number</th>
<th>Difference in means</th>
<th>95% confidence interval for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level</td>
<td>High level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling of job meaningfulness</td>
<td></td>
<td>5.058</td>
<td>233</td>
<td>0.000</td>
<td>0.94623</td>
<td>0.8718 1.0206</td>
</tr>
<tr>
<td>Feeling of job competency</td>
<td></td>
<td>1.952</td>
<td>233</td>
<td>0.052</td>
<td>0.09829</td>
<td>-0.0009 0.1975</td>
</tr>
<tr>
<td>Feeling of freedom of choice</td>
<td></td>
<td>3.978</td>
<td>233</td>
<td>0.329</td>
<td>0.05876</td>
<td>-0.0596 0.1771</td>
</tr>
<tr>
<td>feeling of effectiveness</td>
<td></td>
<td>3.067</td>
<td>233</td>
<td>0.946</td>
<td>0.00392</td>
<td>-0.1106 0.1185</td>
</tr>
<tr>
<td>Feeling of partnership others</td>
<td></td>
<td>0.755</td>
<td>233</td>
<td>0.451</td>
<td>0.03689</td>
<td>-0.0594 0.1332</td>
</tr>
</tbody>
</table>

According to Table 3, the significance numbers for all variables shown in the table are less than 0.05 and therefore at the level of 5% error, the null hypothesis is rejected, and as suggested by the high-level and low-level amounts and due to the fact that t>1.96, all aspects of emotional intelligence at the Institute of Information and Communications Technology are in good condition. According to Table 4, the significance numbers for all variables shown in the table except feeling of job meaningfulness, are more than 0.05 and therefore at the level of 5% error, hypothesis 1 is rejected for them, and as suggested by the high-level and low-level amounts and due to the fact that t<1.96, the aspects of human resource empowerment are not in good standing, and accordingly, human resource empowerment status is not desirable at the Institute of Information and Communications Technology.

Table 5: Conclusions on the Status of Research Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Aspect</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence</td>
<td>Self-awareness</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Self-management</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Social awareness</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Relation management</td>
<td>Good</td>
</tr>
<tr>
<td>Human resource empowerment</td>
<td>Feeling of job meaningfulness</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Feeling of job competency</td>
<td>Bad</td>
</tr>
<tr>
<td></td>
<td>Feeling of freedom of choice</td>
<td>Bad</td>
</tr>
<tr>
<td></td>
<td>Feeling of effectiveness</td>
<td>Bad</td>
</tr>
<tr>
<td></td>
<td>Feeling of partnership others</td>
<td>Bad</td>
</tr>
</tbody>
</table>

Testing Hypotheses
In order to verify or reject the hypotheses in this study, the path analysis model was applied by means of LISREL 8.54. Path analysis is a technique which demonstrates the relations between research variables (independent, mediating and dependent) simultaneously.

Path Analysis Model for Investigating the Primary Hypothesis
In figures 2 and 3, the research path analysis models are respectively viewed as significance coefficients and standard approximation in which self-awareness is shown as SA, self-management as SM, social awareness as SOA, relation...
management as RM, feeling of job meaningfulness as MEA, feeling of job competency as COM, feeling of freedom of choice as CHO, feeling of effectiveness as IMP, and feeling of partnership with other as PAR. The amounts of standardized coefficients of the factor load indicate the level of impact of each variable on another; and the amounts of significance test, which are either more than 1.96 or less than -1.96, suggest that there relations are significant. All relations existing in the model (single-way flashes) are a simple regression equation the significance of which should be examined (Ramin Mehr, 2013).

Figure 2. Path analysis model in the state of significance coefficients

As is seen, all significance numbers relate to the significant model parameters as their significance numbers are more than 1.96.

The path coefficient of the model in the state of standard approximation shows the level of effect of each variable in accounting for and explaining variance of variable score or the chief factor. The path coefficient and factor loads of each of the research variables could be viewed in Fig. 3. For example, the factor load of the aspect "feeling of freedom of choice" (CHO) vis-à-vis the variable "human resource empowerment" is 0.82. In other words, the aspect of "feeling of freedom of choice" accounts for almost 67% of variance of the concept of "human resource empowerment". (This amount originates from the square root of the factor load.) The amount of 0.33 is an error (the amount of variance which may not be accounted for by this aspect, and clearly the less the error, the higher the coefficients of determination and more correlation between the variable and its respective aspect). In addition, the path coefficient between "emotional quotient" (EQ) and "human resource empowerment" (EMP) is 0.23, implying a rather low level of impact of emotional intelligence on human resource empowerment at the Institute of Information and Communications Technology. The amounts of numerical determination coefficient lies between 0 and 1, and the more it is close to 1, the higher the variance determination amount will be.

According to Fig. 3, the model fit indices suggest good fit of the research path analysis model, which is due to the fact that the ratio of chi square to degree of freedom is 2.97 and less than the permitted amount of 3, and RMSEA amount is less than 0.08 (0.072). Furthermore, other cases in relation to the fit of model (GFI, AGFI, CFI and NFI) are entirely more than 0.9, implying that the model has good fit.

Path Analysis Model for Investigating the Secondary Hypotheses:
Figures 4 and 5 respectively show the research path analysis model for investigating the secondary hypotheses in states of coefficients of significance and standard approximation, respectively demonstrating significance and level of impact of each aspect of the exogenous variable of "emotional intelligence", including self-awareness, self-management, social awareness, and relation management on the hidden endogenous variable of human resource empowerment.
Fig. 3: Path analysis model in the state of standard approximation

Chi-Square=61.97, df=21, P-value=0.00000, RMSEA=0.077

Fig. 4: Path analysis model for investigating the secondary hypotheses in the state of significance number

Chi-Square=77.27, df=26, P-value=0.00000, RMSEA=0.072

Table 6: Fit indices of path analysis model

<table>
<thead>
<tr>
<th>Criterion (Fit indices)</th>
<th>Acceptable range</th>
<th>Score achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ratio of chi square to degree of freedom  ($\frac{\chi^2}{df}$)</td>
<td>&lt;3</td>
<td>2.97</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt;0.08</td>
<td>0.072</td>
</tr>
<tr>
<td>Good fit index (GFI)</td>
<td>&gt;0.9</td>
<td>0.93</td>
</tr>
<tr>
<td>Bentler-Bonnet normed fit index (NFI)</td>
<td>&gt;0.9</td>
<td>0.93</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>&gt;0.9</td>
<td>0.93</td>
</tr>
</tbody>
</table>
As is seen, not every significance number for the model relations is significant because significance number for all of them is neither more than 1.96 nor less than -1.96, and the effect of just one aspect of the variable "emotional intelligence" on "human resource empowerment" is verified.

As regards the effective factors in "human resource empowerment", it is viewed that self-management positively affects human resource empowerment, while the impact of other aspects of emotional intelligence on human resource empowerment is not significant.

According to Fig. 5, the fit indices of model suggest good fit of the model of measurement for exogenous and endogenous variables because the ratio of chi square to the degree of freedom equals 2.95 and is less than the permitted amount of 3, and RMSEA amount is less than 0.08 (0.077). Moreover, other cases in relation to the model fit imply acceptable fit of the model.

### Table 7: Fit indices of path analysis model

<table>
<thead>
<tr>
<th>Criterion (Fit indices)</th>
<th>Acceptable range</th>
<th>Score achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ratio of chi square to degree of freedom</td>
<td>&lt;3</td>
<td>2.95</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt;0.08</td>
<td>0.077</td>
</tr>
<tr>
<td>Good fit index (GFI)</td>
<td>&gt;0.9</td>
<td>0.94</td>
</tr>
<tr>
<td>Bentler-Bonnet normed fit index (NFI)</td>
<td>&gt;0.9</td>
<td>0.94</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>&gt;0.9</td>
<td>0.96</td>
</tr>
</tbody>
</table>

As figures 2 to 5 suggest:
1. The level of impact of emotional intelligence on human resource empowerment is 0.23 and its level of significance is 2.80. (Primary hypothesis verified)

**Investigating the Secondary Hypotheses:**
2. The level of impact of self-awareness (SA) on human resource empowerment is -0.04 and its level of significance are -0.41. (Hypothesis rejected)
3. The level of impact of self-management (SM) on human resource empowerment is 0.19 and its level of significance is 2.29 (hypothesis rejected).
4. The level of impact of social awareness (SOA) on human resource empowerment is 0.04 and its level of significance is 0.50 (hypothesis rejected).
5. The level of impact of relation management (RM) on human resource empowerment is 0.09 and its level of significance is 1.06 (hypothesis rejected).

DISCUSSION AND CONCLUSION

Studying and investigating the concepts of and effective factors in human resource empowerment suggests that this concept in organizations is one of the topics which has risen in importance among the managers, directors, employees, researchers and specialists of various fields with growth and development of technology, more complication of organizations and their competitions. Meanwhile, what will help the organizations in modern knowledge-based, developing era to achieve their goals is examining and identifying effective factors in personnel empowerment. In this respect, the impact of emotional intelligence on personnel empowerment has been tested. According to the research findings, the positive effect of emotional intelligence on human resource empowerment was confirmed, in relation to which no exactly similar pieces of research were found. Nevertheless, this study somewhat matches results of the one carried out by Arab et al. (2011) in terms of influence of emotional intelligence factor on the performance-related factors. In addition, the present study matches results of the survey conducted by Abdollahi Vashvaei (2010) in terms of positive, significant effect of emotional intelligence, and those of the study carried out by Nafari and Omidfar (2010) in terms of investigation of the factor effect of personnel empowerment from the viewpoint of confirming its impact on personnel empowerment, and the study conducted by Abesi and Bagherkord (2009) in terms of positive, significant influence of self-management – an aspect of emotional intelligence – on human resource empowerment. Moreover, this study matches the one carried out by Eriguc et al. (2013) in that both explore the level of emotional intelligence and determine positive, significant effect of emotional intelligence on a dependent factor, and also matches the paper compiled by Tessema and Alemu (2011) in that both not all aspects of emotional intelligence affect a dependent factor.

SUGGESTIONS

An important part of each study is presenting the suggestions which befit the hypotheses and their respective results, which usually comes at the end. In order to make improvements in the present conditions of the managers and directors at the Institute of Information and Communications Technology, the following is suggested. These suggestions are put forward according to the practical and executive solutions. Average personnel abilities of the staff members at the Institute of Information and Communications Technology, which are not that much desirable, indicate that the managers should place personnel empowerment on top of their agendas paying attention to the importance of the issue and the potentials available at this institute. According to the research results, the organization should do the following to empower its personnel. Paying special attention to cleanliness of the workplace, executing the system of suggestions, providing the motivational facilities, regarding training and vesting authorities, fostering an atmosphere of intimacy and friendship among staff, clarifying the personnel positions, roles and duties, establishing a well-organized performance appraisal system at the Institute of Information and Communications Technology, presence of top management of the organization and friendly communications with the staff, improving the organizational structure for flexibility and heightened self-confidence, providing material resources, facilities and equipment, availability of adequate space (for the personnel in using what they need in discharging their duties), supplying physical facilities at the workplace and suitable office tools and equipment for the employees, rewarding and appreciating deserving employees, adopting the rewarding system based on the personnel performance at the company to foster motivation in them, providing the necessary opportunities for personnel development and learning, organizing well-developed, constant specialized training courses in relation to the employees’ duties and responsibilities. Fostering motivation in employees and providing them with information and vesting authorities and powers in them, the research center could involve them in the organizational decision-making processes and pave the way for their empowerment. In other words, by laying the suitable and supportive grounds, the management of the research institute could show the personnel that they could satisfy their own needs and achieve their own goals by making attempts to contribute to realization of the organizational goals, thereby manifesting their potential abilities. Since the impact of emotional intelligence and its self-management aspect on human resource empowerment at the Institute of Information and Communications Technology has been verified, several practical suggestions are put forward below for the purpose of improving and strengthening personnel emotional intelligence at the Institute of Information and Communications Technology:
Identifying the emotional states, in respect of which, there are two basic factors: identifying one's own emotions and identifying others' emotions. When it comes to former, the most effective method for boosting the ability to identify emotions is increasing our attention to the emotional states.

- Self-assessment: Conduct a sincere self-assessment. For example, considering the sentence "I'm happy when...", pay attention to your past experiences and emotions and see how you feel toward them, how well you react and how often these emotions occur. Monitor your emotional states frequently as supervision helps you identify your emotions once they occur and exhibit rational and willful reactions.

- Identifying others' emotions: Understanding others' emotions is different than identifying our own emotions because in addition to the factor of attention, you are required to learn about others' emotional signs properly and make exact guesses about their emotional states.

- Assessing others' emotions: Learn about emotions adequately; e.g., how tone, voice, eyes, eyebrows, etc. change when any emotions occur.

- Increase your supervision on your surrounding people.

Extensiveness and attractiveness of the topic in question provide the researchers with many backgrounds. The following topics are recommended for future studies:

1. As multiple factors affect human resource empowerment, it is recommended that future studies should deal with effective factors in human resource empowerment.
2. Investigating the role of emotional intelligence in other factors such as personnel productivity;
3. Examining and comparing the results of this study at other organizations;
4. Conducting a comparative study on the state and private organizations in relation to the impact of emotional intelligence on human resource empowerment; and,
5. Investigating the interventional role of organizational atmosphere in the relation between emotional intelligence and human resource empowerment.

REFERENCES


