Self efficacy, social acceptance and locus of control as predictors of social interest among Iranian students
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Abstract
Social interest is human phenomenon which can be considered as structure of personality in psychology. This descriptive correlation study aimed to investigate self efficacy, social acceptance and locus of control as predictors of social interest. This was correlational study. The sample consisted of 153 boys and 147 girls who were studying at private middle schools. Multistage cluster sampling method was used. General self efficacy questionnaire, marlowe-crowne social desirability scale, Rotter's Locus of control scale and sulliman scale of social interest were used to collect data. The level of significance was at 5%. The results showed that social interest had significant positive relationship with self efficacy and social acceptability and had significant negative relationship with locus of control. Three variables of self efficacy, social acceptance and locus of control were able to explain about 59% of social interest variance. According to obtained results about social interest in adolescents and also consider other predictors in this context appropriate training promotion of social interest should be used and developed.

Keywords: Locus of Control, Self Efficacy, Social Acceptance, Social Interest

Introduction
Adler in 1927 defined social interest as strong risk factor for later offending behavior. Review of social interest's concept shows interesting array of definitions. It has been broadly defined as active interest in furthering welfare of human kind [1,2]. Ansbacher and Ansbacher [3] suggested that construct be understood as “man-as-socius”, interpersonal being with capacity to identify and empathy with others. Similarly, Berkowitz and Connor [4] described social interest as being experience of identification and empathy, but went on to explain that this enables individual to cooperate with others and meaningfully contribute to progression of human kind. A lack of social interest affects child’s ability to effectively perform in social settings such as; school, therefore leads to subsequent
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social problems. These social problems stem from reduced socialization opportunities and foster association with deviant peers which in turn promotes continued antisocial behavior. A child’s pro-social behavior prevents escalation of problems during child’s school years. Pro-social behavior was connected with school maladjustment and poor academic performance as well as with later peer rejection, juvenile delinquency, school drop-out, substance abuse, etc [5].

Adler believed that foundation of every kind of discord is immature social interest. Social interest should be developed in social environment. Manifestation so social interest is useful measure to assess mental health [6]. According to Ancbacher [7], “manifestation of social interest is useful criterion for assessing of individual's psychological health”. Various studies have found association between mental health and social interest. Mozdzierz, Greenblatt & Murphy [8] in study to assess characteristics and symptoms of drug abuse in adults concluded that participants who gain lower scores on sulliman scale of social interest gain significantly higher scores on millon clinical multiaxial inventory at 9 to 13 of personality disorders.

One of the most famous scientists associated with the attempts to structure an approach and create a necessary tool for measuring social interest is James E. Crandall, professor of psychology at university of Idaho in the United States. Choosing more characteristics connected with manifestation of empathy, readiness to help or interest in problems of others is indicator of higher level of social interest. According to Crandall, this scale correlates positively with values in individual’s system of values such as equality, peace, family safety [9].

Self efficacy is another variable in this study. Self efficacy is important and effective concept in cognitive-social Bandura's theory and it means confidence and belief in relation to their ability to control their thoughts, feelings, activities and also function effectively in stressful situations. Therefore, self efficacy is individuals' actual performance, emotions, choices, inhibiting events' influence, organize and execute courses of required action to achieve level of performance goals, progress and ultimately amount of individual's effort for activity [10]. So often it can be predicted how behavior of people through their beliefs about their abilities due to the fact what they are really capable to do [11]. It seems that people with high self efficacy have prominent role in social transformations. They are not secluded. They know society from themselves and receive assistance from it to achieve their goals with confidence. Whatever person has higher self efficacy would have strong tendency to social activities and humankind. As a result person would be fruitful life.

Locus of control is another variable which refers to study belief in abilities and talents inner in problem solving or belief in chance and powerful external factors and thus passively collision with environmental conditions [12]. Individuals with internal locus of control in their homework have better performance, are less influenced by others and give higher value for their skills and progress, are more ready to accept responsibility for their actions and have better mental health [13]. People with self efficacy rely on their innate abilities. They also have clear understanding of their potential and have assigned higher value for their skills and progresses. People with external locus of control have low compatibility with external environment and humans and do not sense of unity with them while it would have recognized abilities as well. These people consider their interests in contrast with cosmos benefits and they know big part of their problems and frustrations related to cosmos and destiny.

The next variable of study is social acceptability. In fact, social acceptance or acceptability is outcome of many social phenomena such as individuals' social influence, conformity, social judgments and attitudes. So according to context, it can be said that social acceptance means that more people in order to be compatible with others
look angle of their view and act like of them [14]. From Keyes's point of view [15], people who have good level of social welfare, have positive view of human nature, trust other people and believe that people can be good. Whatever person consider social developments from individuals' perspective will have greater sense of unity with it. It appears that this variable will have the highest correlation with social interest.

Various reports showed by increasing social interest various aspects of mental health would be increased. For example, Leak and Leak [16] at extensive research showed that social interest has positive and significant relationship with life satisfaction, confidence, creativity, self-actualization, self-esteem, agreeableness and adjustment values. Leak and Williams [17] found that social interest creates tendency to solve daily problems. Carlson, Watts and Maniaci [18] argued that social interest is tendency of people with high mental health to help their society. Individuals with high social interest such as people with high self efficacy don't feel alone in life they are eager to receive help from others while helping others [19]. Brewer [20] determined that there are positive relationship between social interest and self efficacy. Yalom [21] determined that philanthropic activities can increase sense of self-worth and self efficacy in people can help process of health.

Middle school students have been in ages whose are on boundary login to society in order to pick different jobs or entrance to university it requires spirit of society and empathy with people will be inevitable in their lives. Thus, identifying characteristics associated with social interest at this segment of population can help to properly predict future of their relationship. Predictors' variables in this study were considered personality variables such as self efficacy, social acceptability and locus of control. Also criterion factor used in this study is social interest. In other words, this study attempted to answer question whether we have set of characteristics and personality traits which can be attributed to high social interest.

**Method**

This study is a research within framework correlation design. The statistical population included all of girls and boys who were studying at private middle schools of Parsabad city of Ardabil province, Iran, in 2013-2014 academic years. In this study, two samples were used. The first sample consisted of 200 participants to determine the validity and reliability of Sulliman Scale of Social Interest (SSSI) for the first time in Iran and the second sample consisted of 300 boy and girl students to test the hypotheses that were selected by multistage cluster sampling method and participated in this research. 300 students were chosen as sample size based on Morgan’s table.

The inclusion criteria were: lack of memory impairment; enrolling and studying in middle school; being in the target age range (11 to 18 years old). The exclusion criterions were: Absence of the target age range and incomplete responses to questionnaires.

The following instruments were used: Marlowe-Crowne Social Desirability Scale (MC-SDS): The MC-SDS is 33 items self report questionnaire which uses forced choice, True-False format for responding to items. Total scores' range was zero (low) to 33 (high social desirability). In this scale people who gain between 0 to 8 points it means they are not looking socially accept and may be rejected. People who gain between 9 and 19 points as on average are accepted and their behaviors are consistent with social rules and norms. People whose score is between 20 and 33 points, it means that their actual behavior shows high compatibility with social rules and norms. Crowne and Marlowe [22] revealed 0.88 as internal consistency coefficient and one month test-retest correlation was 0.89. In Ganji's research [23], reliability coefficient has been higher than 0.80. In terms of narrative, this is test with other psychological tools which was designed to measure social acceptance that had shown high correlation and acceptable.

Rotter's Locus of Control Scale: This scale
has 29 items that contains two sentences "A" and "B". Twenty-three items evaluate locus of control and rest of items mislead the participants in diagnosis the purpose of test. Cut-off score on this test is 9 [24]. The reliability of this test was calculated by Salehi [25] as 0.76 by using Cronbach's alpha by giving to 50 Iranian students in master's degree. Rotter's locus of control test was given to 36 participants to calculate validity of test and the data were analyzed by using Cronbach's alpha which obtained 0.72. The reliability of this test also was confirmed by research tutor and advisor [25].

General Self efficacy Questionnaire: This scale was designed by Olandick [26] which has 17 five-choice items that consisted of totally disagree, disagree, sort of, agree and totally agree. The higher the score shows greater level of self efficacy [26]. This scale has been correlated with Rotter internal and external control scale, scale alienation Interpersonal Competence Scale to assess the construct validity. According to survey negative correlation was found between self efficacy scale scores and scores of Rotter's Internal and External Control Scale (r=0.40). Reliability coefficient of scale was obtained through Spearman-Brown with length equal 0.76 and unequal length 0.76 and through Guttman split method equal to 0.76 and Cronbach's alpha with overall consistency of questions equal to 0.76 which is acceptable. Cronbach's alpha and bisection methods were used to determine reliability of self efficacy scale that is respectively equal to 0.85 and 0.82 [26].

Sulliman Scale of Social Interest (SSSI): The Sulliman Scale of Social Interest is objective, self-report measure of social interest. The scale contains 50 items. When individual completes the scale, three percentile scores would be resulted. Derived factors from the first subscale is termed, "concern and trust in others"; derived factor from the second subscale is termed, "confidence in oneself and optimism in one's view of the world"; and the third score is the total test score as "general social interest". In Sulliman's [27] study Kuder-Richardson 20 formula provided reliability coefficient of internal consistency of 0.91, while the test-retest offered coefficient of stability 0.93. The split half method provided third reliability coefficient of 0.90. The concurrent validity coefficient was 0.71. Correlation between the first subscale and total test score was 0.87, while subscale two correlated the total test score 0.90. The subscales had correlation coefficient of 0.65 with each other [27]. Mentioned scale was translated for the first time by this study's researchers in Iran. The reliability of this test was calculated 0.92 through using Cronbach's alpha in this research. Also the face and content validity of present scale was approved by five masters in the field of social psychology.

Data collection began after having secured permission from managers of private middle schools in Pars Abad city of Ardabil Province. In the first stage, three private training schools were selected randomly. Then, from each training school three classes were selected. The students were informed about the purpose of study then general Self efficacy Questionnaire, MC-SDS, Rotter's Locus of Control Scale and Sulliman Scale of Social Interest were used in classrooms in presence of researcher. Time domain the data collection was two weeks.

We performed descriptive study of dependent variables of interest (means and standard deviations). Pearson's correlation and multiple regression analyses were carried out to study research hypotheses. Data analysis was performed with the SPSS-18 and 5% is Type I error.

Results
Three hundred students -153 boys and 147 girls - with mean age (±SD) equal to 13.23 (±1.41) participated in this research. Among the study participants 71 individuals were (23.67%) in first class middle school, 94 students (31.33%) in two class middle school and 135 students (45%) in three class middle schools. Initially descriptive characteristics of research variables were offered to investigate the relationship between self efficacy, social
acceptance, locus of control and social interest. In Table 1, mean and standard deviation of the number of students is presented with divided gender.

### Table 1 Mean and standard deviation of self efficacy, social acceptance, locus of control and social interest variables

<table>
<thead>
<tr>
<th>Group</th>
<th>Indexes</th>
<th>Self efficacy</th>
<th>Social acceptance</th>
<th>Locus of control</th>
<th>Social interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>57.8</td>
<td>19.65</td>
<td>12.37</td>
<td>57.52</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>9.55</td>
<td>4.81</td>
<td>3.6</td>
<td>16.06</td>
</tr>
<tr>
<td></td>
<td>Sample size</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
</tr>
<tr>
<td>Girl</td>
<td>Mean</td>
<td>57.56</td>
<td>19.9</td>
<td>12.22</td>
<td>57.53</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>9.41</td>
<td>4.88</td>
<td>3.71</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>Sample size</td>
<td>153</td>
<td>153</td>
<td>153</td>
<td>153</td>
</tr>
<tr>
<td>Boy</td>
<td>Mean</td>
<td>57.68</td>
<td>19.78</td>
<td>12.29</td>
<td>57.52</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>9.47</td>
<td>4.85</td>
<td>3.65</td>
<td>15.95</td>
</tr>
<tr>
<td></td>
<td>Sample size</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>57.68</td>
<td>19.78</td>
<td>12.29</td>
<td>57.52</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>9.47</td>
<td>4.85</td>
<td>3.65</td>
<td>15.95</td>
</tr>
<tr>
<td></td>
<td>Sample size</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

Correlation coefficient is offered in Table 2 in order to determine the contribution of each variable in predicting social interest.

### Table 2 Correlation coefficients of research variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Self efficacy</th>
<th>Social acceptance</th>
<th>Locus of control (LC)</th>
<th>External LC</th>
<th>Internal LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social interest</td>
<td>0.677*</td>
<td>0.733*</td>
<td>-0.48*</td>
<td>-0.18**</td>
<td>-0.35**</td>
</tr>
</tbody>
</table>

*p<0.001  
**p<0.05

Multivariate regression with method login repeated was used to determine contribution of each dimension of self efficacy, social acceptance, and locus of control in predicting variable of social interest and obtained results separate are provided in Table 3.

### Table 3 Results of multivariate regression with method login repeated of, self efficacy, social acceptance, and locus of control with social interest to method login repeated

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Non-standardized coefficients</th>
<th>Standardized coefficients</th>
<th>T</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SE</td>
<td>β</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self efficacy</td>
<td>0.18</td>
<td>1.54</td>
<td>0.467</td>
<td>8.55</td>
</tr>
<tr>
<td>Social acceptance</td>
<td>0.089</td>
<td>0.495</td>
<td>0.294</td>
<td>5.54</td>
</tr>
<tr>
<td>Locus of control</td>
<td>0.189</td>
<td>-0.498</td>
<td>-0.114</td>
<td>-2.64</td>
</tr>
</tbody>
</table>

**Discussion**

Results showed that self efficacy, social acceptance and locus of control can predict social interest among students in some extent. Research's findings are partly consistent with research of Crandall [28], Nikelly [29], Johnson, Smith and Nelson [30] and Schwartz, Meienhelder, Ma and Reed [31]. Also results of this study are consistent with findings of Leak and Williams [17] which found social interest creates tendency to solve daily problems. Carlson, Watts and Maniaci [18] argued that social interest is tendency of people with high mental health to help their society. Individuals with high social interest such as people with high self efficacy don't feel alone in life they are eager to receive help from others while helping others [19]. Yalom [21] determined that philanthropic activities can increase sense of self-worth and self efficacy in people which can help process of health. Factors associated with welfare as less stress, higher levels of mental health and internal locus of control most are associated with social interest [32,33]. Schwartz [34] and Schwartz, Keyl, Marcum and Bode [35] concluded that altruistic attitudes and behaviors enhance welfare and subjective well-being in patients and healthy adults. Kobasa [36] also found that individuals with high social interest reported levels of life satisfaction even in terms of stressful job. Social interest means seeing with eyes of others, and hearings...
with the others' ears. It can be expected that its increase facilitate understanding of other’s world and this provides background to solve social issues and will increase and strengthens individuals believe in control over the environment and behavior and creates sense of self efficacy in person. By increasing social acceptance in people, they learn to communicate appropriately in group activities [37]. Probably one of the reasons is enhancement of individual’s adaptation with positions which requires secure equilibrium among their demands and others.

The main idea is that tendency of young people to profession and technical in the fields of public and social education is not coincidence by any means; but it is based on a deep interest toward issues relating to other people, such as children, adults and people with disabilities [9]. Adler [38] argued that in order to prevent development of criminal behavior in children and adolescent’s global programs to encourage interest and social orientation should be implemented across schools and incorporated at the head of educational content. He also argued that adolescents' interpersonal relationships with parents, teachers and peers have positive impact on ways to develop relationships with the world around over next few years. Also with educating and encouraging children and adolescents to social interest, they will become influential members of society and their self efficacy and locus of control will be increased by relying on their inner abilities. Undoubtedly people who have close relationship with others and integrated will benefit from the deeper mental health [39]. Unlike people with high social interest, lack of social interest in adolescents located at the age of entry into the wider society, result in the loss of opportunities in order to develop skills and relationships that are typically provided in the classroom and outside school environment. Thus, adolescents without social interest or with lower interest on arrival in society in forming positive relationships and benefit from them will in defective manner [40].

**Conclusion**

Taken as a whole, the results of present study one of causes of low social interest seems to be low self efficacy and internal locus of control. In other words, it can be inferred that high trust and confidence of individual than their internal capabilities and their strict implementation in social and business relationships will increase amount of tendency of individual to enter society and participate in it. This fact can also have been contrary proposition.

There were some limitations to the current study. The study was conducted in one geographical area of the city and the sample size was small. Therefore e generalizability of the results to other populations is limited. The results may give idea that social interest is complex variable and that it is difficult to talk about factors which in general can have effect on person’s social interest. In addition, further studies about this topic are needed. Additional quantitative studies should be completed with larger number of participants among general population.

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**Contribution**

Study design: VA, SB
Data collection and analysis: RA, VA
Manuscript preparation: MP, VA

**Conflicts of Interest**

"The authors declare that they have no competing interests."

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