The investigation of difference career maturity based on identity status among adolescence with visual disorder

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Objectives: The current study aimed at investigating the relationship between identity status and career maturity among adolescents with visual disorders, as compared to normal adolescents. Method: The study had two populations: all normal high school students in Tehran city (including boys and girls) and all visually-disabled high school students in Tehran (including boys and girls). The sample consisted of 275 students, of whom 65 were students with visual disabilities and 210 were normal students. For the students with visual disabilities the sample included all the population and normal students were selected using a multi-stage sampling. To collect data, participants completed Dellas Identity Status Inventory (DISI-O) and Career Development Inventory- Australian- Short Form (CDI-A-SF). Data were analyzed using kolkogrov-Smirnov test, one way analysis of variance, T-test for independent groups and covariance.

Results: Results indicated career maturity differed significantly by different identity status of the participants (p<0.0001). The statistical differences obtained indicated there were relationships between identity status and career maturity. It was also found career maturity differed significantly among normal and visually-disabled students (p=0.04). However, no significant difference was found among male and female students in terms of career maturity (p= 0.14).

Discussion: The results of the current study suggested career maturity differed by the four identity statuses. And there is differences between career maturity in normal and visual disabilities group’s results indicated mean score of normal student in career maturity was significantly higher than the other group.

Keywords: identity status, career maturity, visual disorders, adolescence.

Introduction:
Late adolescence is among the issues which have received extensive attention on behalf of family, and also individualistic theorist. Entering adolescence is accompanied by significant changes including sexual maturity, developing intimate relationships with peers, risk taking and gaining new cognitive abilities. The occurrence of these considerable changes makes the adolescence seek coherence and consistency in their self – definition and develop the self – identity independent from others (1). They start making decisions on religious, occupational, political and sexual areas (2). Identity was first posed by Erikson in 1950, as a genuine issue (3). Erikson’s theory was tested and elaborated by James Marcia. Through semi structured, open – ended interviews he came to the conclusion that there are four identity statuses: 1) identity achievement 2) identity moratorium 3) identity foreclosure 4) identity diffusion (4). On the other hand, in super’s career development theory, career maturity is viewed as an ongoing process across lifespan which is of many dimensions. Career maturity provides one with important guidelines for employment
and choosing a job that are among the most
important factors in one's identity development
(5). In Marcia’s identity dimensions commitment
is a referential framework of values and
beliefs which might either be self-made or just
prescribed by others (6) “commitment” refers
to the degree of one’s investment on their job or
beliefs (7). The concept is so much similar to the
concept “willingness to choose a job”- one of the
most important dimensions of career maturity
in super’s theory which deals with attitudes and
determines whether one is concerned about his/
her future job or not (5). In fact “commitment”
is the point where identity and career maturity
meet each other. Career maturity, in simple
term, describes an individual’s ability to adjust
successfully to the career development tasks
(Crystallization, Specification, Implementation,
Stabilization, Consolidation) one encounters
all through their developmental process from
exploration to decline (8).

Studies conducted on the relationship between identity status and
career maturity have been outside Iran and have
focused on normal samples such as high school,
sport college and medical students; the results of
such studies have shown relationships between
these variables. While it seems likely that students
with disabilities differ from normal
students in some aspects of career maturity,
none of the studies conducted so far, have ever
centered on exploring the relationship between
these two variables (identity status and career
maturity) among individuals with disabilities.
These probable differences might emanate from
such individuals limited access to the world of
work information, as in the light of previous
researches it has been shown (occupational)
planning, responsibility taking and knowledge
of various aspects of career reference are among
the most determining factors in career maturity
and ones career maturity, self-knowledge and
mature occupational planning are inter-related.
The characteristics are all prone to limitations
in individuals with disabilities and so is
occupational planning (5). For instance, (9) found
exceptional children had significantly lower
information on occupational tasks as compared
to their normal counterpart’s. Although there
are a few researches studying’s career maturity
and other developmental-related constructs (like
identity) among adolescence with disabilities,
empirical findings support their usefulness. For
example (10) reported a positive relationship
between occupational commitment and clarity
of self-identity and also between occupational
exploration and identity moratorium. Most
empirical research has studied the relationship
between identity development and career
maturity variables, with a focus on the fifth stage
of Erickson, namely identity versus role diffusion
(10&11). There are only a few studies having
investigated the relationship between cognitive
development stages and career development
variables (5).

Based on the points mentioned above we can
pose the question if there is any difference in the
level of career maturity of both groups (normal
and visually – disabled adolescents) and if
career maturity differs, at all, among normal and
visually-disabled adolescents.

**Method:**
275 students aged between 14-18 participated in
this causal-comparative study, of women 65 were
visually disabled and 210 were normal.
Therefore, the current study had two populations:
1) All normal high school students going to school
in the academic year 2009-2010 in Tehran city;
and 2) All visually disabled high school students
in the same academic year and in the same city.
As there are only three schools for the blind in
Tehran(Shahid Mohebbi, Narjes and Khazaeli)
for the second population the sample covered all
the members of the population of normal students
so multi-stage sampling was used to select the
participant: specifically, two regions were at
first selected from among all educational regions
of Tehran, then a high school for girls and a
high school for boys were selected randomly
from schools of each of the selected regions
and finally two classes were selected randomly
from among each of the selected high schools.
Regions selected for the study were regions number two and five of ministry of education. In Tehran criteria for selecting participants of the blind group included their age being between 14-18, and they are not having any other disabilities other than age were exerted. For moral considerations, the purpose of the study and its administration procedures were explained to all the participants and they were ensured of the privacy of the information they provided. To collect data, two questionnaires were utilized. To specify participants’ identity status “Dellas Identity status Inventory” (DISI-O) and to specific their career maturity “Career Development Inventory – Australian – Short Form” (CDI-A-SF) were used. DIS-O is a paper–pencil questionnaire with 35 items, categorized in 7 categories, each having five statements each of which represents an identity status. Criterion validity of the Dallas Identity Status Inventory (12) obtained on the bases of “Marcia’s semi–structured identity” Interview held true for go percent of the participants; In addition, validity of the Dallas Identity Status Inventory has been evaluated between 0-60 to 0-94 (through internal consistency method) in previous studies. In this study short form of CDI was used. The long form of this inventory was made by (5) in order to measure career development variables. Then it was standardized by (13) for the Australian population (CDI-A). In this study we used the short form of this inventory with 33 items. Internal correlation coefficients for all the subscales of CDI-A-SF was at a very good level, statistically-initial reliability of the test was evaluated through identical forms, such as occupational determinitiveness scale, self-esteem and self-efficacy in occupational decision making, and taking into account age and gender differences. Chronbach’s coefficient was calculated as 0/71-0/83 for the test. Since it was the first time the questionnaire was being used in Iran, validity coefficient was calculated 0/75 for the first and between 0/81-0/85 for the second part. Data analyses are presented in two parts; i.e. descriptive and inferential data. In the descriptive part, the obtained results, mean and standard deviation and to test the equality of age and gender distributions chi square and Uman whittey tests were utilized. In the inferential part one-way analysis of variance was used to examine the difference in career maturity by identity status and t-test for independent groups was used to compare mean scores in career maturity in the two groups being studied (i.e. adolescents with visual disabilities and normal adolescents); To control for the effects of age on career maturity co-variance test was administered. To analyze the date either in descriptive or inferential part, SPSS was used.

Results:
As it’s seen in Table 1, of the 275 adolescents participating in the study 210 were normal and 65 were visually-disabled. Also, 142 of the participants were male, of whom 108 were normal and 34 were visually disabled. In addition of the 133 female adolescents 102 were normal and 31 had visual disabilities. To test equality of genderdistribution among the groups being studied and with regard to gender being a nominal scale, chi square test was utilized. As you can see normal and visually – disabled adolescents are identical in terms of gender distribution (p=0/90)

Table 1. Gender distribution and its equality among the two groups

<table>
<thead>
<tr>
<th>groups</th>
<th>female</th>
<th>male</th>
<th>Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Normal</td>
<td>102</td>
<td>76/7</td>
<td>108</td>
</tr>
<tr>
<td>Visual disabilities</td>
<td>31</td>
<td>23/3</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>100/0</td>
<td>142</td>
</tr>
</tbody>
</table>

The age range of the adolescents participating in this study was between 14-18; age distribution
the participants is also presented in Table 2. As Table 3-4 shows 0/7 of adolescents were aged between 14-15; 18.9 were between 15-16; 51.6 were between 16-17 and 28.7 were between 17-18.

**Table 2.** Age distribution of normal and visually disabled adolescents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Normal group</th>
<th>Visual Disabilities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>14-15</td>
<td>2</td>
<td>1/0</td>
<td>0</td>
</tr>
<tr>
<td>15-16</td>
<td>50</td>
<td>23/8</td>
<td>2</td>
</tr>
<tr>
<td>16-17</td>
<td>106</td>
<td>50/5</td>
<td>36</td>
</tr>
<tr>
<td>17-18</td>
<td>52</td>
<td>24/8</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>100/0</td>
<td>65</td>
</tr>
</tbody>
</table>

Since age variable is not normally distributed, and we are to compare age among the two groups, Uman whitney test was utilized for hypothesis testing; the obtained result demonstrated age differs statistically between the two groups (p<0.001)

Based on the result of Kolmogrov-Smirnov test which showed career maturity is of a normal distribution and by parametric tests. To compare career maturity by the four identity statuses, one way analysis of variance was used to test the hypothesis.

**Table 3.** Comparison of mean scores in career maturity by the four identity statuses.

<table>
<thead>
<tr>
<th>Identity status</th>
<th>Frequency</th>
<th>Mean score</th>
<th>Standard deviation</th>
<th>Probability value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity achievement</td>
<td>63</td>
<td>86/88</td>
<td>6/24</td>
<td>0/001&gt;</td>
</tr>
<tr>
<td>Identity moratorium</td>
<td>71</td>
<td>76/98</td>
<td>5/78</td>
<td></td>
</tr>
<tr>
<td>Identity foreclosure</td>
<td>72</td>
<td>65/06</td>
<td>7/42</td>
<td></td>
</tr>
<tr>
<td>Identity diffusion</td>
<td>69</td>
<td>48/62</td>
<td>7/96</td>
<td></td>
</tr>
</tbody>
</table>

Results of Table 3 demonstrate career maturity differs statistically by the four identity statuses (p<0.001) To specify the difference between the identity statuses, Sheffe follow-up test was used, considering the inequality of the number of participants in each of the statuses.

Results of Sheffe test showed mean score of adolescents with identity achievement in comparison to the there other statuses. It was also found mean score of adolescents with identity moratorium in career maturity significantly higher than adolescents with identity foreclosure and identity diffusion; And finally, mean score of adolescents with identity foreclosure was significantly higher than identity diffusion.

In conclusion adolescents with identity achievement scored highest and adolescents with identity diffusion scored lowest in career maturity.

To compare career maturity scores between normal and visual disabilities groups, t-test for independent groups were used (Table 4). The influence of age was controlled for through covarience test.

**Table 4.** Mean scores of career maturity of normal and visual disabilities groups, after controlling age

<table>
<thead>
<tr>
<th>variables</th>
<th>groups</th>
<th>frequency</th>
<th>mean score</th>
<th>Standard deviation</th>
<th>Probability *value</th>
<th>Probability **value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career maturity</td>
<td>Normal</td>
<td>210</td>
<td>70/05</td>
<td>14/80</td>
<td>0/04</td>
<td>0/57</td>
</tr>
<tr>
<td>Visual disabilities group</td>
<td>65</td>
<td>65/66</td>
<td>17/96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* **probability value for T- test**

** ** Probability value for covariance test

Results of Table 4 indicate career maturity differs significantly among normal and visual disabilities groups after controlling for age (p=0.04).

**Discussion:**

The results of the current study suggested career maturity differed by the four identity statuses. The highest mean score in career maturity belonged to students with identity diffusion. These results are consistent with the finding of (8),(14),(10),(15),(16),(17),(18),(11).

These differences can be explained by characteristics of each of the identity statuses and their influence on occupational decision making,
significant relationships between identity statuses and occupational decision making; self efficacy and occupational exploration - that are among the important aspects of career development - and similarities between the development of identity achievement status and process of successful decision making in job-related areas.

As regards the difference between career maturity in normal and visual disabilities groups results indicated mean score of normal student in career maturity was significantly higher than the other group. These are consistent with (19), (9), (20), (21), (5) and in contrast with (22) and (23).

The reason why adolescents with disabilities have a significantly lower career maturity compared to their non-disabled counterparts is their limited knowledge of the world of work. Also, according to (5) individuals with disabilities tend to have more limited occupational options; For example a blind person may not choose jobs which require working with eyes.

This holds true for other disabilities, as well. On the other hand people with disabilities lock the necessary occupational information, because gaining acquaintance with careers and occupational counseling at schools require learning things through different sensations

Therefore, disabled individuals <failure at achieving career maturity may relate to their inadequate information on occupational areas (8) other factors such as low self-efficacy, feelings of inferiority, negative schemas in the road toward one’s choosing a job and lack of implementing integrative policy for adolescents are also among the reasons contributing to the issue.

References:
1- Nosrati, M; S; Mazaheri M, A; Heidari, M. (The investigation of identity development with secure attachment level of adolescents boys to parents and peer(Persian)) . Journal of family research, 2006. 2(5). 34-53.
2- Abdi, S. (The relationship between identity style and self efficacy beliefs(personal and collective) and to compare them in Iranian and Afghan high school student boys who inhabit in Qom city(Persian)). MA dissertation, Tehran. University of social welfare and rehabilitation science. 2008. 38-51
4- Atckinson, R; Atckinson, R. (Introduction of psychology(persian)). Tehran, roshd publication. 2006. 105-112
16- Waterman, A.A. “Identity in the context of adolescent psychology”, 1985. (pp. 5-24), in S.A.