Comparison of Students in Vocational Health and Vocational College with Respect to Self-Esteem and Career Adaptability

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Abstract
The purpose of this study is to examine the relationship between self-esteem and career adaptability of vocational college students and vocational health college students. Total 125 male vocational college students took part in the study (their programs were mechatronics environment protect and control and mechanic). Total 123 female vocational health college students took part in the study (their programs were old people care, emergency medical technician, optician, medical documentation and secretary medical imaging and medical laboratory program). The study was carried out in the cross-sectional model. The relationship between variables was examined by t-test for independent groups and multiple regression analysis technique. In this study, positive moderate significant relationship was found between career adaptability and self-esteem. Vocational health college students have higher career adaptability than vocational college students. The dimensions of self-esteem are differently related with adaptability of students in different college.

Keywords: Career adaptability, college students, self-esteem, exploration, planning

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Introduction

Human is a bio-psycho-social creature. This creature develops itself by successfully fulfilling various development tasks while it is maintaining their lives between birth and death (Santrock, 2006). In other words, it makes an effort to self-actualization (Maslow, 1971). There are several life domains which people experience like a relationship, spirituality, body and achievement. Working life of individuals is related to the achievement domain (Pesesckian, 1996; Peseschkian and Walker, 1987). Individuals in work life reveal the factors that are important to sustain them through to achieve a successful life. One of these factors is career adaptability and the other one is self-esteem of individuals.

Career is one of the important structure that it is discussed in the career counselling field and studies have been made on it. According to Savickas (2005), career adaptability is a psycho-social pattern. This pattern is defined in various ways in the literature. For example, Creed, Fallon Hood (2009) state career adaptability as a function of the individuals' regulation itself; career adaptability includes discovering himself and his career opportunities, and it includes career planning and decision making. Rottinghaus, Day and Borgen (2005) evaluate career adaptability as an individuals' capacity to deal with future changes, coping with new levels of job responsibilities and getting over unpredictable changes in career perceptions. Career adaptability is an ability to ready for process of individuals' decision-making, data collection, making the discovery, planning and take responsibility (Koen, Klehe, Vianen, Zikic & Nauta, 2010). Career adaptability is examined by various researchers. Some researchers handle career adaptability with two aspects such as career exploration and career planning (Stumpf, Colarelli & Hartman, 1983); other researchers handle it with various aspects like a control, concerns, curiosity, confidence (Savickas & Porfeli, 2012), emotion, ability, source and purpose (Hirschi, 2009).

There are several factors that affect individuals’ career adaptability. According to Krumboltz (1996), Nauta (2010), Reed and his friends (2004) and Solberg and his friends (2004), factors which are affecting individuals' career adaptability grouped under two heading, namely adapting with environmental and personal factors. Self-esteem is evaluated in the context of individual factors. While people are maintaining their life, they produce various feelings, thoughts and reactions for both themselves and the environment. Individuals' attitudes towards themselves are expressed by the concept of self-esteem in psychology literature (Eryılmaz, 2008). Self-esteem refers whether individuals approve themselves or not and how valuable and important they see themselves as an individual (Baumeister, 1993; Suls, 1989). This concept was evaluated by some researchers as a one-dimensional (Rosenberg, 1979) and some researchers evaluated it as a multi-dimensional psychological construct (Coopersmith, 1967; Tafarodi & Swann, 2001).

Self-esteem is closely related to career development. In many researches, self-esteem and relations among major psychological structure in career development were examined. For example, self-esteem and career indecisiveness and certainty (Smith and Betz, 2002), self-competence for career certainty (Betz, Klein and Taylor, 1996), low levels of unemployment (Kokko & Pulkkinen, 1997), work experience (Burke, 2001), burnout (Janssen, Schaufel & Houkes, 1999), engagement to work (Schaufeli et al., 2002) have been associated with such
variables. As a result, such an important psychological structure has been associated with career adaptability.

Career development is a lifelong process. One important step in this process is the choice of a profession while the other is career adaptability. After individuals select their professions, they are trying to make themselves adapt to the profession which has already been selected by the individual. Otherwise, they assess different career options and they find themselves in a mini-cycle (Super, 1980). In order to reduce individuals' mini-cycle, studies on factors that improve the career adaptability can contribute to the literature. By reason of parallel with the increasing career adaptability, individuals' commitment to their work has been increasing (Rossi et al., 2012), individuals are living in less job stress (Johnson et al., 2013) and individuals' job satisfaction has been increased (Fiori, Bollmann & Rossier, 2015) and their career achievements (Zikic & Klehe, 2006) and their academic satisfaction (Duffy, Douglass & Autin, 2015) have been more positive. Additionally, vocational college students are preparing for adult life by exploring their identities (Arnet, 2001). Since they develop themselves both for work life and adulthood period successfully, adaptive factors must play a key role (Zacher, 2014). At this point, career adaptability and self-esteem should be considered as adaptive factors. As a result, this study aimed to investigate the relationship between self-esteem and career adaptability of vocational college students and vocational health college students.

**Method**

**Research Design**

The purpose of this study is to examine the relationship between self-esteem and career adaptability of vocational college students and vocational health college students. The study was carried out in the cross-sectional model. The relationship between variables was examined by t-test for independent groups and multiple regression analysis technique. In the study, maximum variation sample method was selected from purposive sample method (Freankel & Wallen, 1993). In Turkey, mostly male students prefer vocational colleges. On the other hand, women prefer much more vocational health colleges. In order not to likely to happen imbalance between pores, exclusion and inclusion criteria were identified in study. As inclusion criteria to the study, after a high school, studying at two years college program; being the only male from vocational college students; being the only female from vocational health college students were identified. In the study, data were collected in the way of group application.

**Study group**

In this study, two different groups of individuals participated in including vocational college and vocational health college students. Vocational college students were selected from vocational college students who are studying at a public university in Eskisehir, Turkey. Total 125 male students took part in the study. In the study, 50 (40%) males are mechatronics program students, 25 (20%) environment protect and control program students, 50 (40%) mechanic program students. The age range of vocational college students is 18-24. Their age average is 19.17 and standard deviation is 1.22.
Vocational health college students were selected from vocational college students who are studying at a public university in Eskisehir, Turkey. Total 123 female students took part in the study. In the study, 24 (19.50%) females are old people care program students, 21 (17.10%) females are emergency medical technician program students, 13 (10.60%) females are optician program students, 23 (18.70%) females are medical documentation and secretary program students, 23 (18.70%) females are medical imaging program students and 19 (15.40%) females are medical laboratory program students have been received education. The age range of vocational health college students is 17-24. Their age average is 19.48 and standard deviation is 2.65.

**Instruments**

**Two-Dimensional Self-esteem Scale:** The scale was developed by Tafaro and Swann (2001). It is a self-report style scale and it consists of sixteen items. The scale comprise of two dimensions. These dimensions are self-liking and self-competence. The process of adaptation of the scale in Turkish culture, reliability and validity studies were made by Dogan (2011). Accordingly, internal consistency coefficient was found as a respectively 0.83 and 0.74 for sub-dimensions of self-liking and self-competence. Test-retest reliability coefficient was found as a 0.72 for both dimensions. According to the results of confirmatory factor analysis, it was confirmed to have a two-dimensional structure as the scale of the original form. So as to validity studies, correlation with Rosenberg Self-esteem Scale was examined. It was found (0.75 and 0.69) positive and high correlation between self-liking, self-competence and Rosenberg Self-esteem scale.

**Career Adaptability Scale:** Career Adaptability Scale was developed by Eryılmaz and Kara (2016). The scale is 5 point likert-type, and also consists of 10 items and two dimensions. The first one is career exploration and the second one is career plan. In order to examine the psychometric properties of the scale, internal consistency, test-retest method, item analysis, exploratory factor analysis and criterion validity and construct validity studies were conducted by Eryilmaz and Kara (2016). The reliability of the scale was performed by internal consistency and test-retest methods. Dimension of the career exploration scale's internal consistency coefficient is 0.84, career plan's internal consistency coefficient is 0.71, and the entire scale's internal consistency coefficient is 0.85. Reliability coefficients of career exploration which were made by test-retest method were 0.82 and career plan's reliability coefficients were found as a 0.87. According to results of exploratory factor analysis, two dimensions of the scale which were total explained variance %55.87 was obtained. This scale factor loading ranged between 0.57 and 0.80. Career Future Scale was used by correlation analysis technique for criterion validity. There are highly positive correlation 0.64 between the entire Career Adaptability Scale and Career Future Scale. The confirmatory factor analysis was conducted for construct validity. According to the results of the analysis of two-dimensional scale, the value of RMSEA 0.071; degree of freedom is 34 and it was found that the chi square value is 70.75. In consequence of chi square value divided by degree of freedom (70.75 / 34 = 2.08) 2.08 values were obtained. Goodness of adaptability values ,which occur depending on confirmatory factor analysis of Career Adaptability Scale, were found as a NFI, 0.95; NNFI, 0.97; IFI, 0.98; CFI, 0.98; GFI, 0.94 and AGFI value was found as a 0.90. According to the results of confirmatory factor analysis, it was concluded that the
scale consisted of two dimensional structures and scale gave good fit values. In conclusion, it was concluded that the scale is reliable and valid.

Findings

Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
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<td>Exploration</td>
<td>Vocational Health College</td>
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<td>18.70</td>
<td>4.31</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>16.62</td>
<td>4.53</td>
</tr>
<tr>
<td>Planning</td>
<td>Vocational Health College</td>
<td>123</td>
<td>14.07</td>
<td>4.43</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>12.58</td>
<td>3.30</td>
</tr>
<tr>
<td>Total point of career adaptability</td>
<td>Vocational Health College</td>
<td>123</td>
<td>32.78</td>
<td>7.01</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>29.21</td>
<td>7.12</td>
</tr>
<tr>
<td>Self liking</td>
<td>Vocational Health College</td>
<td>123</td>
<td>29.64</td>
<td>5.74</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>29.26</td>
<td>5.38</td>
</tr>
<tr>
<td>Self competence</td>
<td>Vocational Health College</td>
<td>123</td>
<td>25.78</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>26.68</td>
<td>4.69</td>
</tr>
<tr>
<td>Total point of self-esteem</td>
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<td>55.42</td>
<td>8.63</td>
</tr>
<tr>
<td></td>
<td>Vocational College</td>
<td>125</td>
<td>55.94</td>
<td>8.94</td>
</tr>
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</table>

Findings of comparison of vocational health college students and vocational college students with respect to career adaptability and self-esteem

As a result of comparing with the vocational college students and vocational health college students in terms of career adaptability and self-esteem, it was found significant differences. There were significant differences t(246) = -3.98, p = 0.00 between vocational health college students (M=32.78; SD=7.01) and vocational college students (M=29.21; SD=7.12) in terms of total point of career adaptability scale. Career adaptability of vocational health college students is higher than vocational college students.

There were significant differences t(246) = -3.74, p = 0.00 between vocational health college students (M= 18.70; SD= 4.31) and vocational college students (M=16.62; SD=4.53) in terms of career exploration. Career exploration of vocational health college students is higher than vocational college students. There were significant differences t(246) = -3.45, p = 0.00 between vocational health college students (M= 14.07; SD= 4.43) and vocational college students (M=12.58; SD=3.30) in terms of career plan. Career plan of vocational health college students is higher than vocational college students.

There was not significant difference (t(246) = -0.535, p = 0.593) between vocational college students and vocational health college students in terms of self-liking. Similarly, there was not significant difference (t(246) = 1.611, p = 0.108) between vocational college students and vocational health college students in terms of self-competence. Lastly, there was not significant difference (t(246) = 0.467, p = 0.641) between vocational college students and vocational health college students in terms of self-esteem total point.
Findings of the relationships between career adaptability and self-esteem of vocational health college students and vocational college students

The relationship between total points of vocational health college students’ self-esteem total point with career adaptability scale total point, dimensions of career plan, dimensions of self-esteem and dimensions of career exploration were analyzed with multiple-regression analysis technique. The analysis results are showed in Table-2.

Table-2 Vocational health college students’ relationships between self-esteem and career adaptability

<table>
<thead>
<tr>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total point of career adaptibility</td>
<td>.17</td>
<td>.16**</td>
<td>12.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.41</td>
<td>.12</td>
<td>.33**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.22</td>
<td>.17</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>.12</td>
<td>.10**</td>
<td>7.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.19</td>
<td>.08</td>
<td>.25*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.14</td>
<td>.11</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>.19</td>
<td>.17**</td>
<td>13.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.22</td>
<td>.06</td>
<td>.37**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.08</td>
<td>.08</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01

Dimension of self-liking for vocational health college students significantly related total point of career adaptability β = 0.33, t (2,120) = 3.40, career exploration β = 0.25, t (2,120) = 2.43, p < 0.05 and career planning β = 0.37, t (2,120) = 3.79, p < 0.01. On the other hand, dimension of self-competence was not found significantly related with career adaptability and its sub-dimensions.

The relationships between vocational college students’ self-esteem total point and career adaptability scale total point, dimensions of career planning, dimensions of self-esteem and dimensions of career exploration were analyzed with multiple-regression analysis technique. The analysis results are listed in Table-3.

Table-3 Vocational college students’ relationships between self-esteem and career adaptability

<table>
<thead>
<tr>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total point of career adaptibility</td>
<td>.09</td>
<td>.07**</td>
<td>5.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.16</td>
<td>.14</td>
<td>.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.32</td>
<td>.16</td>
<td>.21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>.08</td>
<td>.06**</td>
<td>4.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.07</td>
<td>.09</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.20</td>
<td>.10</td>
<td>.21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>.07</td>
<td>.06**</td>
<td>4.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self liking</td>
<td>.09</td>
<td>.07</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self competence</td>
<td>.11</td>
<td>.08</td>
<td>.16*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01
Dimension of self-competence for vocational college students was significantly related with career adaptability total point $\beta = 0.21$, $t(2,123) = 1.98$, career exploration $\beta = 0.21$, $t(2,123) = 2.02$ and career planning $\beta = 0.16$, $t(2,123) = 1.51$, $p < 0.05$. On the other hand, dimension of self-liking was not significantly related with career adaptability total point and its sub-dimensions.

**Discussion**

Career choice for college students and engaging those careers are a vital developmental task (Savickas, 2012). In this process, it is important that their self-esteem level high or low. High level of self-esteem both associated with fulfilling successfully development tasks and it was related to involving in work life successfully after individual completed his education life (Salmela-Aro & Nurmi, 2007). In addition to all these, there are studies that examine the relationship between self-esteem and career adaptability in the literature (McArdle, Waters, Briscoe & Hall, 2007; Patton, Bartrum & Creed, 2004; Betz, Klein & Taylor, 1996). However, studies examining the relationship between self-esteem and career adaptability are very few in the Turkish literature. Especially, numbers of studies, conducted on vocational college student, are seen to be few. At this point, this study might be provided a contribution to the literature.

The findings of study is in line with the results of similar studies in literature. In the studies, positive moderate significant relationship was found between career adaptability and self-esteem (McArdle, Waters, Briscoe & Hall, 2007; Patton, Bartrum & Creed, 2004; Betz, Klein and Taylor, 1996). Similarly, in the Duffy's (2010) research, it was found that self-esteem explained $17\%$ of career adaptability. Also in this study, it was found that self-esteem explained $10\%$ of career adaptability. The difference may be due to different study groups. It may also result from cultural factors. Because, self-esteem is an important psychological structure for the individualist-western societies but it is relatively less important for east-collectivist cultures (Markus & Kitiyama, 1991).

The findings of this study can be evaluated in the context of developmental psychology. Individuals are experiencing so much transition period from puberty to adolescence, and emerging adulthood (Caspi et al., 2002). After university students complete their education life and they involve in work life, they will be take part in adult life (Arnet, 2001; Lefkowitz & Shenoy, 2005). Transferring positive features to individuals' life facilitates their transition periods (Schulenberg & Zarret, 2005). In order to complete this process successfully, vocational college students are required in positive position in terms of both career adaptability and self-esteem.

In this study, career adaptability of vocational health college students is found to be higher than career adaptability of vocational college students. The reason of this result can be explained by choice of profession and career development patterns in Turkey. Individuals are based solely on academic achievement in a vocational orientation in Turkey. The main source of this orientation is a future employment condition of the profession (Eryılmaz, 2014). At this point, employment facilities of vocational health college students are higher than employment facilities of vocational college students. Besides, students who are continuing to vocational health college, their academic achievement scores of high school are higher than...
vocational college students (Çetingül & Dülger, 2006). All these cultural patterns are such as to explain the difference in terms of adaptability and sub-dimensions.

While dimension of self-liking is significantly explaining to vocational health college students' sub-dimensions of career adaptability, dimension of self-competence is significantly explaining to vocational college students' sub-dimensions of career adaptability. Evolutionary psychology seems to explain the cause of this situation. According to evolutionary psychologists, women are developed with a maintenance presentment way whereas men are developed with a protective way (Cosmides & Tooby, 1996; Grinde, 2012). These two different patterns feature competence for men and it feature sentimentality for women. This general developmental pattern can be considered to reflect relationships between self-esteem and career adaptability. Future studies on this subject might contribute to the literature. Specifically, Vocational Health Services require providing health care, while all of the vocational college programs require working with the non-human objects, in other words it requires dealing with mechanical things. At this point, since they select the appropriate profession with the requirements of the business, relationships between the dimensions of self-esteem and professional adaptability of individuals in these working groups could be called differentiated. In other words, it can be said that dimension of self-liking associates with maintenance presentment; dealing with mechanical works associates with dimensions of self-competence.

Vocational college students also take part in business life as an intermediate staff. The importance of intermediate staff is incontrovertible for both businesses and national economy. In today's globalized world, studies focus on improving the quality of vocational and technical education (Uçar & Özerbaş, 2013). On the other hand, not only vocational and technical education should be supported but also individuals who are getting education in this area should be supported psychologically. At this point, the study findings are vital. Study results reveal that self-esteem is an important personal factor to increase career adaptability of vocational college students. In particular, counsellors who work on both universities and industrial organization are required to engage in psychological support services to increase self-esteem level of students and employees. In parallel with the increase of this support, their career adaptability can be expected to increase. Experimental studies may be carried out in this field in advancing the process.

This study was conducted on students who are attending vocational and vocational health college students. These students shall take place in business life after graduation. Career development is a life-long process (Super, 1980). At this point, realization of similar studies on intermediate staff who take part in business life can contribute to the literature.

References


