Perceived Influences in Vocational Preference of Turkish High School Students

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ABSTRACT
Various researchers investigated the influential factors in students’ vocational decision-making as vocational preference plays a vital role in the life of students. In this context, this study has investigated the motives behind high school students’ vocational preference in Turkish high schools. In this regard, 121 high school students, 71 girls and 50 boys, were participated in this research. Content analysis is used for analyzing the interviews. Chi-square test is conducted for presenting the relations between the vocational preference and perceived factors. The findings reveal that availability of jobs, pay, guidance teacher and school type are considered independent of students’ vocational preference while genuine interest, favorite subject, parents, prestige are influential in students vocational preference in terms of gender as well for example, education is preferred by girls as vocation mostly but engineering for boys.

Keywords: vocational preference, high school students, gender differences

INTRODUCTION
Vocational preference is a complex developmental process comprising of several stages (Ginzberg, Ginsburg, Axelrad and Herma, 1951; Gottfredson 1981; Roe 1956; Savickas 2002; Super 1990). These stages are structured considering the ages of individuals. Developmental vocational theorists have underlined that

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high school time ages between 15-18 has been significant for the development of individuals’ interests, abilities and knowledge (Farmer 1985; Ginzberg 1984; Seligman 1994; Super 1990). High school students prefer their vocations in terms of their capability (Athanasou, 1994). For example, a student at the age of 18 has established a vocation’s appropriateness to their gender as well as the prestige level of the vocation throughout the members of society while they prefer a vocation (Gottfredson, 1981).

Germeijks and Verschueren (2006) have found out that high school students of decisional process had already started before the measurement time. Parents are the primary role model for students in obtaining several perspectives for their prospective vocations (Bempechat, 1992). Whiston and Keller (2004) noted that parental socioeconomic status as well as parental support and expectations have influenced the vocational preference of high school students. On the other side, the information and perspectives on vocations are developed when the school life starts. Several factors such as guidance teacher, favorite subject, gender etc. in the school can influence this development.

Gender differences in vocational preference and favorite subject (educational preference) have been a predominant factor studied for several years (Anker 1998; Ellis 2011; Ellies, Ratnasingam and Wheeler, 2012; Rose 1986). Eccles (1983) claimed that comparing to boys; girls have lower self-concept of math ability. While boys mostly prefer work in engineering and physical science, girls preference work typically in teaching, health care (Block, Denker and Tittle, 1981). Girls typically perform better than boys in verbal tasks while boys perform better than girls on quantitative tasks (Croson and Gneerzy, 2009). Weinberg (1995) stated that while boys expressed more science related vocations, girls expressed arts-related and service vocations. Prestige of a vocation, a significant factor in vocational preference, is defined as a socially constructed referring to the respect and high standing to the vocation constructed by the members of a society (Kuzgun 2000; Rojewski 2005). Pay and availability of jobs are specific factors in high school students’ vocational preference (Paa and McWhirter, 2000). The research of Farmer (1987) has been modeled as a framework for this study. In this framework, possible factors for vocational preference have been divided into three categories as background, personal and environmental. Background factors are prearranged as gender, ethnicity, school type, socio-economic status and age. Personal factors are as ability attributions, inner values such as interest. Environmental factors are defined as parents, guidance teachers.

The current study is a part of a larger endeavor, the aim of which to probe the possible factors of vocational preference. In Turkey, students have to choose a specific study in the first year of high school as applied science (math, science), social science (Turkish-math, Turkish-social) and foreign language (English, French, German). And, after completing four years in a specific study area, students are enrolled to the university exam depending on the study area in high
school. Thus, high school is important in determining students’ vocations. This study is conducted in the hope of shedding light on the following questions: (1) What are the influenced factors for high school students’ vocational preference? (2) How do students define the perceived influences while evaluating their vocational preference?

METHOD

Participants
Participants in this study were 121 (71 girls and 50 boys) students from urban high schools in Istanbul. Ages range from 17 to 18 years. And the students were in the last year of the high school. Participants were 104 Turkish and 17 non-Turkish students. In each classroom, students with high grades were purposefully selected for the study.

Procedure
The data were collected in the context of phenomenological study. Prior recruitment, the volunteered ten teacher candidates were informed on content of the research study. They were asked to conduct ten interviews with high school students in their interned schools. Before starting the interview a demographic form covering basic information such as age, gender, ethnicity, parents’ job, income (high-middle-low) was given to the high school students. In order to protect the confidentiality of participants, students’ names were changed. This research applied a one-on-one structured interview procedure. The structured interview questions addressed the possible factors that influence students’ vocational preference. The following questions were asked:

(1) Tell me about your vocational preference. What is your vocational preference?
(2) Now, I would like to know about how and why would you like to prefer this vocation?
(3) How do you see the stress on you?
(4) Then, tell me about your favorite subject. What is your favorite subject? Why?

School canteens were arranged for the interviews. Each interview lasted approximately 15 minutes to complete. All interviews were completed in two weeks. Content analysis was used for the analysis. Each response of students were coded by two coders and agreed on nine codes: (1) genuine interest, (2) favorite subject, (3) prestige, (4) parents, (5) gender, (6) availability of jobs, (7) pay, (8) guidance teacher, (9) type of schools.

Chi-square test was conducted in order to evaluate the relationship between students’ vocational preferences and some other variables (gender, parent, favorite subject, prestige, availability of jobs, pay, school type and guidance teacher)
RESULT

The findings of this study are examined under the topics of background, personal and environmental factors.

Background Factors
Background factors refer to gender, age, income, ethnicity and school type. Table 1 summarizes background characteristics and vocational preference of high school students. Five vocational preferences in the field of education, engineering, medicine, social science and others are found. The results clearly show the difference in vocational preference as engineering and education by gender. While 14 girls prefer a vocation in education, only one boy prefers it. On the other hand, 17 boys prefer vocation in engineering; 9 girls prefer the related vocation. However, the range of preference vocations among medicine and social science has been found almost the same. This relation will be examined in detail in the following part.

Table 1. Number of Students’ Background Characteristics and Vocational Preferences (G: Girls, B: Boys, H: High, M: Middle, L: Low, T: Turkish, N-T: Non-Turkish)

<table>
<thead>
<tr>
<th>Vocations</th>
<th>Gender</th>
<th>Age</th>
<th>Income</th>
<th>Ethnicity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>B</td>
<td>17</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td>14</td>
<td>1</td>
<td>12</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Engineering</td>
<td>9</td>
<td>17</td>
<td>20</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Medicine</td>
<td>17</td>
<td>11</td>
<td>24</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Social Science</td>
<td>20</td>
<td>18</td>
<td>27</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>3</td>
<td>11</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>50</td>
<td>94</td>
<td>27</td>
<td>59</td>
</tr>
</tbody>
</table>

The results show that the majority of the students are coming from high-income parents. However, no determined finding has been occurred in terms of vocational preference in relation to income, age and ethnicity.

Preference and Gender
Preference and gender refer to the differences in vocational preference by gender.
Table 2. Gender Differences in Vocational Preference (Ed:Education, En:Engineering, Me:Medicine, So:Social Science, Ot:Others)

<table>
<thead>
<tr>
<th></th>
<th>Vocations</th>
<th>Total</th>
<th>Pearson Chi-square</th>
<th>p</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ed En Me So Ot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>14 9 17 20 11</td>
<td>71</td>
<td>16,5</td>
<td>0.002</td>
<td>0.370</td>
</tr>
<tr>
<td>Boys</td>
<td>1 17 11 18 3</td>
<td>50</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15 26 28 38 14</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To compare students’ vocational preferences with their gender, chi square test was used. The results revealed that (see Table 1), vocational preference is dependent of gender ($\chi^2(4,121)=16,544; p<0.05; V=0.37$). Therefore, there was a relationship between gender and vocational preference. The cramer’s V is 0.37, indicating that the strength of association is medium.

- Well, I like computers and I would like to be a computer engineer. (Ali)
- Of course, I aspire to be a teacher since my childhood. I like children and want to be a pre-school teacher. (Yeliz)
- Well, medical doctor since I like people and would like to treat them. (Ecem)
- I want to be a lawyer. I can defense myself very well and my parents have encouraged me. (Halil)
- I want to study on chemistry and become an expert. (Zeynep)

**Preference and School Type**

Preference and school type refers to investigate any difference in vocational preference by school types as public and private schools. Chi-Square test was applied to compare students’ vocational preferences with respect to their school type. The results revealed that, students’ vocational preferences is independent of their school type ($\chi^2(4,121)=4,721; p>0.05$).

**Personal Factors**

Personal factors represent the influence of genuine interest and favorite subject in students’ vocational preference.

**Preference and Genuie Interest**

95% (N=115) of the students stated that genuine interest is very important when they prefer their vocation as indicated in the following statements of the interviewees.

- Well, I like science so I would like to be a medical doctor, particularly, neurologist. (Asli)
- Actually, I decided personally. I was good at Math. I like it as well. I thought what could be related to math. Then, decided to prefer engineering. (Bora)
- Nobody influenced me. I decided to become an engineer last year. I decided personally. (Ayse)
- No one. I decided by myself. (Yeliz)
-Nobody. This is my life and my preference. (Arda)
-Of course, I decided. No one has any right to intervene me. (Ebru)

**Preference and Favorite Subject**
Favorite subject refers to students’ subject preference in which they have a high academic achievement. While applied science includes math, physics, biology; social science includes history, geography, foreign languages. In this study, 66.6% of the participants stated that their favorite subjects are among the applied science courses and 33.3% of them said that their favorite subjects are among social science courses. In order to compare students’ vocational preferences with their favorite subjects, chi square test was used.

<table>
<thead>
<tr>
<th>Favorite Subjects</th>
<th>Vocations</th>
<th>Total</th>
<th>Pearson Chi-square</th>
<th>P</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied Science</strong></td>
<td>Ed 9</td>
<td>En 23</td>
<td>Me 24</td>
<td>So 13</td>
<td>Ot 11</td>
</tr>
<tr>
<td><strong>Social Science</strong></td>
<td>Ed 16</td>
<td>En 3</td>
<td>Me 4</td>
<td>So 25</td>
<td>Ot 3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Ed 15</td>
<td>En 26</td>
<td>Me 28</td>
<td>So 38</td>
<td>Ot 14</td>
</tr>
</tbody>
</table>

According to Table 3, participants’ preferences in vocation computer games is dependent of their favorite subjects ($\chi^2 (4,121)= 29,082; p<0.05; V=0.490$). The cramer’s V is 0.49, indicating that the strength of association is medium as presented in the following statements.

-I like Math and Biology. I loved math when I was at elementary school. My teacher was perfect. I’m interested in biology personally. I’m considering that biology is placed in major parts of our life. Therefore, I decided to become a medical doctor. (Betul)
-Well, due to I am interested in math and science, I would like to prefer a dentist. My teacher and parents also encourage me. (Sinem)
-Actually, I do not like social science courses. I like math and would prefer a vocation related to math as mathematics engineering. (Veli)
-I like both math course and teacher. Yesterday, I taught math to one of my friends and she told me that I was good at teaching. Therefore, I would like to become a math teacher. (Pinar)
-I’ve made my decision this year, since I’ve started to notice realities in the life. (Gizem)

**Environmental Factors**
Environmental factors represent the influence of parents, prestige, availability of jobs, pay, guidance teacher in students’ vocational preference.
Preference and Parents
Parents refer to the impact of both mother and father in students’ vocational preference. To compare the impact of parents on students’ vocational preferences, chi square test was used. The results showed that (see Table 4), students’ vocational preference is dependent of parents’ impact ($\chi^2_{(4,121)} = 10,852; p<0.05; V=0.299$). Therefore, there was a relationship between parents’ impact and vocational preference. The cramer’s V is 0.299, indicating that the strength of association is small as could be noticed from the following statements.

Table 4. Parents’ Impact on Vocational Preference (Ed:Education, En:Engineering, Me:Medicine, So:Social Science, Ot:Others)

<table>
<thead>
<tr>
<th>Parents’ Impact</th>
<th>Vocations</th>
<th>Total</th>
<th>Pearson Chi-square</th>
<th>p</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Ed 5</td>
<td>En 6</td>
<td>Me 2</td>
<td>So 16</td>
<td>Ot 3</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>20</td>
<td>26</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>26</td>
<td>28</td>
<td>38</td>
<td>14</td>
</tr>
</tbody>
</table>

-My father influenced me most, because he is also an economist. He always tells me that this vocation is really prominent. (Burak)
-My parents are not intervened me too much. They just told me that they would be very happy if I became a medical doctor. Since, there is no medical doctor in our family. They would like me to fulfill this gap in the family. (Ozgur)

Preference and Prestige
Table 5. Prestige Differences in Vocational Preference (Ed:Education, En:Engineering, Me:Medicine, So:Social Science, Ot:Others)

<table>
<thead>
<tr>
<th>Prestige of Vocation</th>
<th>Vocations</th>
<th>Total</th>
<th>Pearson Chi-square</th>
<th>p</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Ed 13</td>
<td>En 10</td>
<td>Me 5</td>
<td>So 15</td>
<td>Ot 9</td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>16</td>
<td>23</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>26</td>
<td>28</td>
<td>38</td>
<td>14</td>
</tr>
</tbody>
</table>

The concept of prestige refers to the respectfulness of a vocation in a society. To compare students’ vocational preferences with the prestige of vocation, chi square test was used. The results revealed that (see Table 5), students’ vocational preference is dependent of prestige of vocation ($\chi^2_{(4,121)} = 21,894; p<0.05; V=0.425$). Therefore, there was a relationship between prestige of vocation and vocational preference. The cramer’s V is 0.425, indicating that the strength of association is medium. And this relation could be noticed in the following statements:
Perceived Influences in Vocational Preference of Turkish High School Students  F. F. Kentli

-I would like to prefer to become medical doctor, since it is a very prestigious job. Everybody respects to you. (Lale)
-I would like to be lawyer as my parents. And I really admire them that they are having a very prestigious job. (Baris)
-I would like to prefer prestigious jobs such as academician, engineer. I think this is very important more than ever. (Ahmet)

Preference and Availability of Jobs
Availability of jobs refers to any implications on jobs in the statements of the students. Chi-Square test was applied to compare students’ vocational preferences with the availability of jobs. The results revealed that, students’ vocational preferences is independent of availability of jobs ($\chi^2(4,121)= 4.296; p>0.05$). The following statements of interviewees present their attitudes towards availability of jobs when they prefer their vocation.
-Actually, economist, because you can employ to a job easily. (Murat)
-I would like to study on management, because your chance is high to employ a job. (Sena)

Preference and Pay
Pay refers to wage of any vocation that effects vocational preference of high school students. 9% (N=11) of the students prefers their future vocation by taking account the incomes of jobs, on the other hand 91% (N=110) of them does not consider the high salary. The following statements of interviewees also present the relation between vocational preference and pay.
-Engineer, since you can earn most. (Selim)
-Since, I believe that I will have a high life standard with the preference of this vocation. I mean in terms of boy wage and prestige. (Ece)

Guidance Teacher
Guidance teacher refers to performing any kind of activities for vocational preference of high school students. Chi-Square test was applied to compare students’ vocational preferences with respect to the impact of their teachers. The results revealed that, students’ vocational preferences is independent of their teachers impact ($\chi^2(4,121)= 6.000; p>0.05$). This finding was also supported with the following statements of interviewees.
-Actually, I do not remember any vocational guidance activities performed by our guidance teacher. (Selen)
-Well, I don’t think that my guidance teacher has already had any influence in my vocational preference. (Tuna)

DISCUSSION

The results of this study demonstrate that high school students’ perceived influences on their vocational preference can be classified in sequence as gender, genuine interest, favorite subject, prestige, parents while availability of jobs, and
pay, guidance teacher and school type have not been considered as significant factors for their vocational preference.

In the context of background variables, the current study has revealed that gender is a factor in the vocational preference of students on the basis of level of preparation needed to perform the vocation. Agreeing with the previous researches (Croson and Gneezy, 2009; Lupart, Cannon and Telfer, 2004) it seemed that engineering attracts the career interest of a much larger proportion of boys than of girls. By contrast, medicine and health attract large proportions of females. The current study contradicted with the findings of Rojewski (2005) noting that there were no sex differences in career aspirations at any level of academic achievement among adolescents.

In the context of personal variables, the findings of students in this study have indicated that there is a link between favorite subject and vocational preference in consistent with the findings of Garg, Kauppi, Lewko and Urajnik (2002) indicating that there was a direct relationship between favorite subject and educational aspirations of middle and high school students. Mau and Bikos (2000) found favorite subject of middle school students to be a predictor of vocational aspirations. They offered more evidence, stating that academic achievement was a significant predictor for both educational and career aspirations.

In the context of environmental variables, the findings of the current study revealed a parental influence on vocational preference of students. In agreement with previous research of Whiston and Keller (2004) and Bempechat (1992) students in this study reported that parents directly involve in their vocational preference and in some cases, they are decision maker of their children.

The findings of the study demonstrated that the students did not consider on availability of jobs or pay. This interesting finding revealed that even for low income students the most important issue was genuine interest, prestige. This result is inconsistent with the study of Yesilyaprapak (2000) in which she indicated that pay was not the only reason for the attainment of a vocation. She suggested that the fundamental issue in the attainment of a vocation is the satisfaction of psychological and social satisfaction in addition to physiological needs.

CONCLUSION

This study reveals that high school students prefer their vocations in accordance with their genuine interest. They also propose parents, favorite subject, and prestige as significant factors. On the other hand, factors as availability of job, pay and guidance teacher are indicated as non-significant factors. Without considering perceived non-significant issues, students might come across with difficulties in their further vocational preference. Therefore, firstly, it is required to re-consider the decision making process of high school students by increasing
the sample size. Are they really ready in their vocational preference although they prose their preference in a self-confident manner? Secondly, most of the students do not perceive their guidance teachers as an important factor for their vocational preference. Hence, it is required to question what the functions of guidance teachers in the high school for informing students in vocational preference are. How the curriculum should be constructed in order to be beneficial in high school students in their vocational decision making process. These problematic issues should be evaluated by the experts in this field.

REFERENCES


ÖZET


Öğrenciler mesleki tercihlerini değerlendirmek için etkili faktörleri nasıl tanımlamaktadırlar?

Bu çalışmaya 71 kız ve 50 erkek olmak üzere yaşları 17-18 arasında değişen lise son sınıfından toplam 121 öğrenci katılmıştır. 104 Türk öğrenci varken 17 Türk olmayan öğrenci bu çalışmaya katılmıştır. Bu öğrenciler fen ve sosyal sınıfından olmak üzere iki kategoriye ayrılmıştır.

Veriler fenomenolojik çalışma çerçevesinde toplanmıştır. Yarı-yapılandırılmış görüşme soruları soruları sorularak öğrencilerin düşünceleri, bakışaçıları belirlemeye çalışılmıştır. Çalışma öncesinde, öğrenciler için iki form verilmiştir. Öğrencilerin gizliliklerini korumak için isimleri değiştirilmiştir. Öğrenciler aşağıdaki soruları sorulmuştur: (1) Şimdi bana biraz mesleki tercihinden bahset. Mesleki tercihin nedir? (2) Şimdi de neden ve nasıl bu mesleğe karar verdin? (3) Kendin üzerinde nasıl bir baskı gördün? (4) Şimdi bana sevdiğin dersten bahset. En çok sevdiğin ders nedir? (5) Neden sevdiğini düşünüyorsun?

Görüşmeler için okulların kantinlerinde gerçekleştirilmştir. Her bir görüşme 15 dakika sürmüştür ve iki hafta içinde görüşmelerin hepsi tamamlanmıştır. İki uzman tarafından içerik analizi sonucunda 9 tane kod oluşturulmuştur: (1) ilgi, (2) ilgi duyulan ders, (3) prestij, (4) aile, (5) cinsiyet, (6) iş imkanı, (7) kazanç, (8) rehber öğretmen, (9) okul türü. Sonrasında, öğrencilerin mesleki tercihlerini belirleme için ki-kare testi yapılmıştır.

Öğrencilerin mesleki tercihini etkileyen faktörler, bireyin geçmişi ile ilgili olarak, cinsiyet en önemli etken olarak bulunurken, okul türü, etnik durum, sosyoeconomik durum ve yaşın bireyin mesleki seçiminde önemli bir etkisi görülememistir. Kişisel kategoride incelenen ilgi, ilgi duyulan dersin mesleki tercihiyle olan iliği yüksek bulunmuştur. Çevresel faktör kategorisinde incelenen aile mesleki tercihinde etkisi yüksek bulunurken, rehber öğretmeninin önemli bir etkisinin olmadığı belirlenmiştir.

müfredatı, öğrencilerin mesleki tercihlerine karar vermelerine faydalı olacak şekilde nasıl yapılandırılabilir? Bu sorunsal durumlar, ileriki çalışmalarında alanındaki uzmanlar tarafından değerlendirilerek cevap aranmalıdır.