Vocational interests of Greek senior secondary school students and factors that can affect them

Introduction
Vocational interests have been identified as an important aspect of career counselling for adolescent students. The vocational preferences of an individual are subject to constant changes, and they are in a continuous process. This article studies the vocational interests of Greek senior high school students and the factors that can affect them, such as their school achievement, gender, grades, and the job of their parents. Lapan (2004, p. 113) argued that ‘academic achievement plays a pivotal gatekeeper role in the selection of career paths leading out of adolescence and into adulthood’. A number of research studies have supported the assertion that economically poorer students have lower academic achievement and vocational expectations (Cook et al., 1996; Wilson, 1996), and female students tend to make traditional female vocational choices (Warrington & Younger, 2000). Also, research has shown that parents play an extremely significant role in the vocational career of their children (Turner et al., 2003; Turner & Lapan, 2002; Wentzel & Feldman, 1993).

Purpose
The two-fold purpose of the study was to determine if differences existed in vocational interests of the students depending on:
- their achievement, gender and grades
- their parent’s occupation.

Method
Participants
The sample consisted of 155 boys and girls aged between 16 and 17 in an urban area of northern Greece. From first grade, there were 41 boys and 40 girls who participated in the research; from second grade, there were 32 boys and 42 girls who participated. (First and second grade equate respectively with Year 11/fifth form and Year 12/sixth form.)

General school achievement
Students were allotted to one of four groups according to their general achievement. Greek senior high school students’ achievement is graded from 1 to 20, with 20 being the highest achievement level and 10 being a pass.

One group was formed by two students (2.5%) in the first grade with low achievement scores that ranged from 10 to 13.4.

A second group was formed by 20 students (24.7%) in the first grade, and 17 (23%) in the second grade, with medium achievement scores that ranged from 13.5 and 16.4.

A third group was formed by 24 students (29.6%) in the first grade, and 28 students (38%) in the second grade with high achievement scores that ranged from 16.5 and 18.4.

A fourth group was formed by 35 students (43.2%) in the first grade, and 29 (39%) in the second grade with excellent achievement scores that ranged from 18.5 and 20.
**Current parental occupation**

The jobs of fathers were categorised as follows.

- jobs without training or low training, such as construction workers
- jobs with medium or higher technical training
- jobs with high specialisation and university studies; public sector, industry, services jobs, such as doctors, electrician/mechanical engineers, architects and teachers
- military jobs, such as those in the armed forces
- artistic jobs, such as painters and musicians
- the 'learned' professions without higher educational level, such as tradesmen and contractors
- the unemployed
- retired/deceased/other.

Table 1 shows the mean scores according to father's job.

The jobs of mothers were categorised as follows.

- jobs without training or low training, such as office cleaners
- jobs with medium technical training, such as dressmakers and hairdressers
- jobs with medium specialisation, higher or secondary education, such as nurses, secretaries and cashiers
- jobs with high specialisation and university studies, such as civil engineers, economists, chemists and doctors
- artistic jobs, such as designer and musician
- the 'learned' professions without higher educational level, such as a business ownership
- housekeeping, unemployed or other.

Table 2 shows the mean scores according to mother's job.

**Instruments**

Two questionnaires were used. One questionnaire was concerned with the demographic data of students (place and time of birth, place of residence, gender, parents' education, current parents' occupation and achievements from the previous school year).

For the assessment of students' vocational interests, the Rothwell-Miller Interest Blank (RMIB) questionnaire was used (Miller, Rothwell, Tyler, 1994). The RMIB was originally developed as an interview aid in career counselling and examines a subject's interest in 12 work fields (outdoor activities,

<table>
<thead>
<tr>
<th>Senior</th>
<th>Jobs without</th>
<th>Jobs with</th>
<th>Jobs with</th>
<th>Military</th>
<th>Artistic</th>
<th>Learned</th>
<th>Unemployed</th>
<th>Retired/deceased</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>high</td>
<td>training/low</td>
<td>medium/</td>
<td>high specialisation &amp;</td>
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<td>school</td>
<td>training</td>
<td>higher technical</td>
<td>university studies/</td>
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<td></td>
<td></td>
<td>training</td>
<td>public sector/industry/services</td>
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<td>1st and 2nd</td>
<td>24.2</td>
<td>3.9</td>
<td>37.3</td>
<td>12.4</td>
<td>0.7</td>
<td>13.1</td>
<td>1.3</td>
<td>7.2</td>
<td>100</td>
</tr>
<tr>
<td>grade</td>
<td>-</td>
<td>37.0</td>
<td>6.0</td>
<td>57.0</td>
<td>19.0</td>
<td>1.0</td>
<td>20.0</td>
<td>2.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>
mechanical, computational, scientific, persuasive-personal contact, aesthetic, literary, musical, social service, clerical, practical, medical). It is structured in nine sets of 12 jobs, representing the previously mentioned 12 work fields. In each set, there is a representative job from every one of the 12 work fields. The participants rank the jobs in each set from 1 to 12, the 12th preference being their least preferred. Guidelines explain that a job’s classification in each set should be done according to the preference for the type of work. The student is not supposed to co-examine questions having to do with salary, possibilities of success, or required qualifications and training. The sequence of the sets is the same in the 12 work fields. The participants rank the jobs in each set from 1 to 12, the 12th preference being their least preferred. Guidelines explain that a job’s classification in each set should be done according to the preference for the type of work. The student is not supposed to co-examine questions having to do with salary, possibilities of success, or required qualifications and training. The sequence of the sets is the same in the 12 work fields. In set A, first is the field outdoor activities; in set B, first is the field mechanical, and so on. Students’ assessment took place in groups.

Results
School achievement
To determine if the differences in general school achievement can influence the vocational interests of the students, an Analysis of Variance (ANOVA) was used. School achievement was considered to be an independent variable with four categories: low (10-13.4), middle (13.5-16.4), high (16.5-18.4), and excellent (18.5-20). Students’ assessments in the 12 fields of vocational interests, were considered the dependent variable. The following statistically important differences were observed.

1. The students with excellent general achievement ($M = 70.48$) tended to reject the jobs in the field outdoor activities more than the students with medium general achievement ($M = 63.29$) [$F(3.151) = 4.59; p = 0.0042$].

2. Students with low general achievement ($M = 67$) tended to choose jobs in the field outdoor activities more than students with high ($M = 48.26$) and excellent ($M = 48.1$) achievement, who tend to reject them [$F(3.154) = 3.07; p = 0.0294$].

3. Students with medium general achievement ($M = 78.08$) tended to choose jobs in the practical field more than students with high achievement, who tend to reject them ($M = 86.73$) [$F(3.154) = 3.97; p = 0.0093$].
Gender
ANOVA was used to determine if there were any differences between the two genders in relation to vocational interests. Gender was considered the independent variable with two levels, boys and girls; whereas students’ assessments for the 12 fields of vocational interests were considered as the dependent variable. The following statistically important differences were observed.
1. Boys \((M = 42.05)\) tended to choose more jobs in the mechanical field than girls \((M = 61.32)\), who tended to reject them \([F(1.154) = 40.42; p = 0.0000]\).
2. Girls tended to reject jobs in the computational field, whereas boys tended to choose them \([F(1.154) = 13.35; p = 0.0004]\).
3. Girls tended to choose jobs in the aesthetic field and boys tended to reject them \([F(1.154) = 19.21; p < 0.0001]\).
4. Boys tended to choose jobs in the literary field more than girls \([F(1.154) = 25.23; p = 0.0001]\).
5. Girls tended to select jobs in the social service field more than boys, who tended to reject those types of jobs \([F(1.154) = 46.35; p < 0.0001]\).

Grades
Using ANOVA, it was determined that the students of two senior high school grades were differentiated regarding the choice of outdoor activities \([F(1.154) = 9.95; p = 0.0019]\). Students in the first grade tended to reject outdoor activities \((M = 64.24; SD = 10.42)\) whereas students in the second grade tended to choose outdoor activities \((M = 69.7; SD = 11.11)\).

Parental occupation
To ascertain if the occupation of parents can affect the vocational interests of students, ANOVA was used. The independent variable was the eight categories of fathers’ occupation, and the dependent variable was the students’ assessments for the various work fields. The control of individual differences between the groups was done using Tukey’s method (it considers all possible pairwise differences of means at the same time). The jobs in the outdoor activities field were chosen more by the group of students whose parents were unemployed than the groups – in order of priority – whose parents were retired/deceased/other, in the military, in jobs with no or low specialisation, in ‘learned’ jobs without high educative level, in jobs with medium or higher specialisation/technical training. The group of students whose parents had jobs with high specialisation and university studies; had jobs in the public sector; in industry; in services; tended to reject jobs in the outdoor activities field. It should be noted that the difference is marginal \(F(7.152) = 2.06; p = 0.0509\). Using ANOVA to determine the effect of mother’s occupation established no statistically important differences.

Discussion
The results show that the vocational interests of students are affected to an important degree by their achievement, gender and grade level and to a minor degree by their parent’s job.

- The influence of achievement in school affects the work fields outdoor activities and practical. The students with excellent general achievement reject the outdoor activities more than the students with medium general achievement. In addition, students with medium achievement tend to choose the practical field more than their classmates with high achievement, which may be attributed to the fact
that the other job fields require high intellectual skills.

- The influence of gender is statistically significant. The boys tended to choose jobs in the mechanical and calculating fields, whereas the girls tended to reject them. The girls tended to choose the aesthetic field more than the boys.
- The students in the first grade tended to reject jobs in the outdoor activities field, whereas the students in the second grade tended to choose them. Greek adolescents appear to not have shaped constant vocational preferences and seem to be in an initial stage of their career development.
- The influence of parent’s occupation was marginal. Students of unemployed parents tended to choose jobs in the field outdoor activities, rather than any in the other work fields, which tended to be rejected by the parents.

**Implications for school counsellors**

In Greece, despite the progress that has been noticed during the last few years, prejudices by both parents and teachers seem to prevail, and through generations influence which professions are ‘male’ and which are ‘female’. The vocational career of every student is a matter for careful planning, and school counsellors have a critical role to play in restricting career stereotyping.

It is worthwhile mentioning the changes that have been observed in Greek society during the last two decades. Well-off citizens seem to have better social status and recognition in comparison with educated but lowly-paid citizens. The more affluent group has high expectations for their children’s school and career goal achievement. They support their children’s academic endeavours and provide more choices according to their interests (reinforcing teaching, study in colleges and abroad). More systematic work by school counsellors is needed with teachers and the students and parents who come from economically poorer families. This work should be focused on the advancement of these students’ learning and academic achievement.

In the process of growing up from adolescence to adulthood, young people need rules, limits and emotional control, but at the same time they also need caring and understanding. Research has shown that teachers can improve students’ achievement (Darling-Hammond, 2000), but there is low affective involvement of students and teachers in school (Freiberg, 1999). Teachers communicate their attitudes, practices and expectations through their daily interaction with students, but in many cases, their relationships are not good. In these difficult situations, the task of the school counsellors should be to create the appropriate conditions in which both teachers and students can develop and evaluate their feelings for themselves. In addition, the counsellors may organise, on a regular basis, meetings between students and their teachers where they can freely communicate. The aims should be to limit social inequalities by encouraging and providing reinforcement for low-achievement students, and improve students’ relationships with their teachers.

The study was conducted in an urban area of Greece. Based on the data analysis, and in order to gain more understanding of this issue, more research is needed replicating this study. This new research should involve students in rural and islander regions as well as pupils from private senior secondary schools.
References


