ASSESSING THE STUDENTS’ PROSPECTIVE PERCEPTIONS OF THE FINAL MASTER PROJECT IN ACTUARIAL SCIENCE

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PROS:

- Final master project (FMP) plays a key role in the curriculum design of the Actuarial Science Master degree (MScAC) at the Universidad de Málga (UMA).
- Requires the combination of a wide range of skills: analytical, technical, professional, soft skills.
- Opportunity to experiment with real tasks of the actuarial profession before entering the labour market.
- Working actuary as a second supervisor.
- Simulating or working with real problems.
- Integrate the contents of different courses of the study program.
CONS:

- Quick transition of our students to the professional market.
- Hurdle to properly finish the FMP in the scheduled academic calendar.
AIM:
- Explore image FMP among first-year students of the MScAC prior to its completion including subjective aspects.
- Evaluate:
  - Usefulness of FMP for a future successful career.
  - Importance of carefully planning FMP.
  - Synergies among FMP and courses and activities planned in MScAC.
  - Usefulness of a professional second supervisor.
- Improve the satisfaction and success rates.
We carried out a survey delivered to first course students at the end of the second semester.

The questionnaire includes two groups of questions:
- Related to main features of the subjective image of the FMP (T1-T5),
- General questions (S, T, C).

All the answers were coded with a 1-5 Likert scale.

We conduct an analysis of the survey:
- Univariate: descriptive statistics.
- Multivariate: biplot and clustering.
**Table 1: Univariate survey’s results**

<table>
<thead>
<tr>
<th>Question</th>
<th>Avg. sc.</th>
<th>Std. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 Benefits of courses and activities for the FMP completion</td>
<td>4.0</td>
<td>1.0</td>
</tr>
<tr>
<td>T2 Importance of carefully planning the FMP</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>T3 Usefulness for a future successful career</td>
<td>3.8</td>
<td>1.2</td>
</tr>
<tr>
<td>T4 Usefulness of a professional second supervisor</td>
<td>3.2</td>
<td>1.0</td>
</tr>
<tr>
<td>T5 Usefulness for the professional labour market entry</td>
<td>3.6</td>
<td>1.1</td>
</tr>
<tr>
<td>S  Simulating real situations related to professional skills and tasks</td>
<td>4.8</td>
<td>0.4</td>
</tr>
<tr>
<td>T  Allowing transfer of academic knowledge to businesses</td>
<td>4.8</td>
<td>0.6</td>
</tr>
<tr>
<td>C  Stimulating academic collaboration with firms</td>
<td>4.7</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Figure 1: Biplot and clustering.
Variables:
- T1, T2, T3, T5
- T4, S, T, C

Heterogeneity between the students’ opinions

Clusters:
- Cluster 1:
  - C, T, S, T1, T2, T4, T5
  - T3
- Cluster 2:
  - C, T, S, T1, T4, T5
  - T2, T3
- Cluster 3:
  - C, T, S, T1, T4, T5
  - T2, T3
FMP is compulsory and requires a significant amount of effort by students MScAC at the UMA.

To know the subjective perceptions of our students is important to improve their satisfaction and to get successful graduation rates.

Univariate statistical analysis shows that students give a highest score to T1 to design and choose their FMP and the lowest to T2 and T4.

Multivariate statistical analysis shows that students do not have a homogenous image of FMP and there are three clusters of students with substantial differences between them.

There is little association between the perceptions of the FMP (T1-T5) and the general concepts (S, T, C).
Thank you for your attention