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NUMERACY: differences by gender and disciplines in university students from Argentina

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NUMERACY:

- *ability to process, communicate, and interpret numerical information in a variety of contexts* (Askew et al., 1997, p.6).
- Involves solving a problem or managing a situation in a real context and differs widely across the countries and subnational entities (OECD, 2013).
- Is one of the most important factors impacting on economic prosperity in industrialized countries (Hunt & Wittmann, 2008).

Aim of the study: Analyze the effects of non-cognitive variables on "statistical numeracy" (SN) among university students.

SAMPLE: 382 university students, both gender (Male: 58.2%), between 19 to 48 years old (*M*= 24.49; *SD*= 4.9), from different disciplines (Management: 48%; Engineering: 28%; Social Sciences: 23%; Design: 1%).
INSTRUMENT: Berlin Numeracy Test (Cokely et al., 2012)

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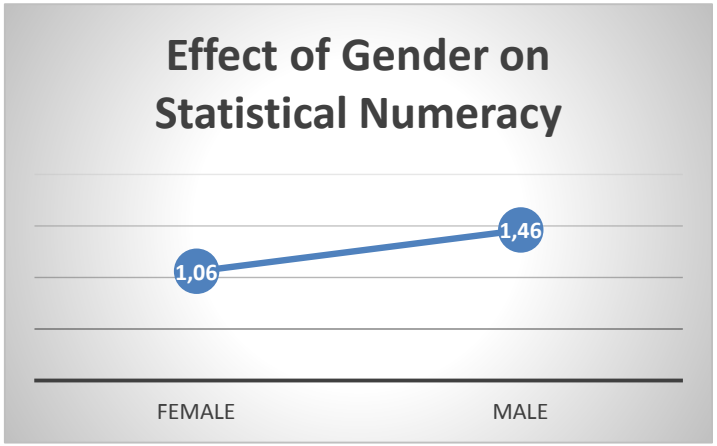
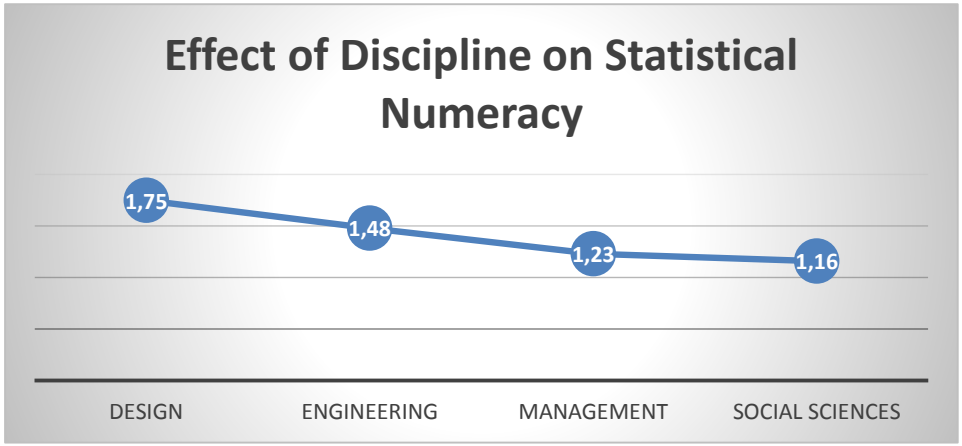
RESULTS

Effect of Gender



ANOVA: F= 19.982; *p*= .000

Effect of Discipline



ANOVA: F= 2.862; *p*= .037

NUMERACY: Effects of gender and disciplines

- Males scored significantly higher than women. Previous studies emphasize the effect of gender on numeracy: Else-Quest, Hyde & Linn (2010); Frederick (2005); Galesic & García-Retamero (2010); Murata & Musso (2012); Stoet & Geary, (2013).
- Design and Engineering students outperformed Social Sciences students. This result complement those of Tariq & Durrani (2012) who found that Health and Social Care students informed lower levels of numeracy skills compared to students of Science, Technology and Management. Differences in curriculum and opportunities to practice numeracy skills could be factors underlying the differences in numeracy between disciplines.

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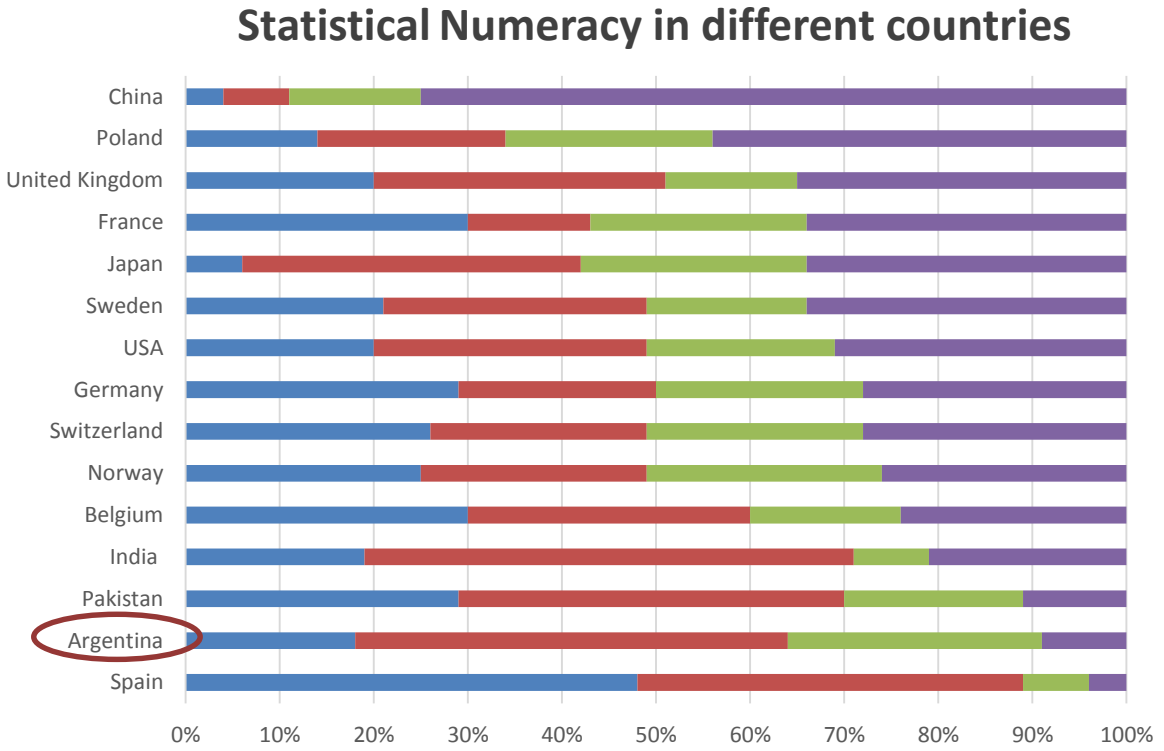
COMPARATIVE RESULTS



NUMERACY: Comparative results

- Comparative results on performance on statistical numeracy with other countries allow to locate Argentinian students with the lowest level of numeracy (Cokely et al., 2012; Murata & Musso, 2012)
- This result are in line with other findings related to performance in international tests of mathematics (PISA)

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