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# Profile Analysis of Higher Education Students and Its Association to Students' Employability

## Marina Fiori & Antje Barabasch

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# What is employability?

- "A set of achievements – skills, understandings and personal attributes - that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy." (Yorke 2006).

- Successfully entering the job market after schooling requires having **clear ideas about what a certain job entails** as well as possessing a **professional attitude** combined with **good interpersonal skills.**

- Objective (e.g., institutional) vs. subjective employability (e.g., self-perceived).

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# Why is employability important?

- Employability as a fundamental student's **attribute for a successful career**

- Employability as one of the **metrics** employed to evaluate higher **institutions' quality**

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# Predictors of employability (1/3)

- **General cognitive ability** (e.g., Salgado, Anderson,Moscose, Bertua, De Fruyt & Rolland, 2003)

- **Personality traits**: agreeableness, conscientiousness and neuroticism linked to employability (Neneh, 2019)

- **Conscientiousness** was the best predictor of successful transition from secondary school to VET school on top of IQ and parents SES (Niessen, Danner, Spengler, & Lechner, 2020)

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# Predictors of employability (2/3)

- **Trait emotional intelligence (TEI)**, defined as individuals' self-efficacy perceptions regarding using and managing emotions (Cooper & Petrides, 2010).

  - TEI may reduce career decision-making difficulties by **lowering the emotional pressure of making a career decision** and by providing **emotional clarity** with respect to ambivalent emotions associated with the choice of a certain profession (Di Fabio and Saklosfke 2014).

  - TEI may provide the emotional foundation for **positive interpersonal relationships** (Petrovici and Dobrescu 2014).

# Predictors of employability (3/3)

- **Career adaptability,** defined as the ability to successfully manage one's career (Savickas, 1997). It is composed of four different career adapt-abilities (Savickas and Porfeli, 2012): **concern, curiosity, confidence, and control.**

  - It is associated with important career related outcomes, including **career indecision and career decision making.**

  - It represents the **personal resources** that allow individuals high in trait emotional intelligence to achieve a higher perceived employability (Usayar, Fiori, Thalmayer, & Rossier, 2018).

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# Study purpose

- Despite empirical evidence of the association between individual differences (in particular personality, emotional intelligence and intelligence) and employability, little is known about **whether and how the co-existence of such variables may foster higher employability.**

- We aimed to **identify different typologies of students based on the scores obtained on individual differences measures** and relate them to their level of employability.

- Ultimately, we were interested to have an overview regarding the percentage of **students who were lacking the necessary characteristics to succeed in the transition** to a job after graduation.

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# Study method

- From a larger sample of 400 students from three Swiss higher education institutions, we selected 115 students at the end of their Master and Bachelor degree.

- The variables employed in the study:
  - **Cognitive ability**, measured with the Raven's Standard Progressive Matrices (RPM; Raven 1938);
  - **Trait Emotional Intelligence**, which measures individuals' self-efficacy perceptions regarding using and managing emotions (TEIQue-SF; Cooper & Petrides, 2010),
  - **Personality traits** more strongly related to career success, namely Extraversion, Conscientiousness, and Emotionality (HEXACO; De Vries, 2013);
  - **Career Adaptability**, in particular the dimensions of concern, control, curiosity, and confidence (Savickas & Porfeli, 2012).
  - Students' level of **employability**, measured with the Self-Perceived Employability Scale for university students (Rothwell, Jewell, & Hardie, 2009).
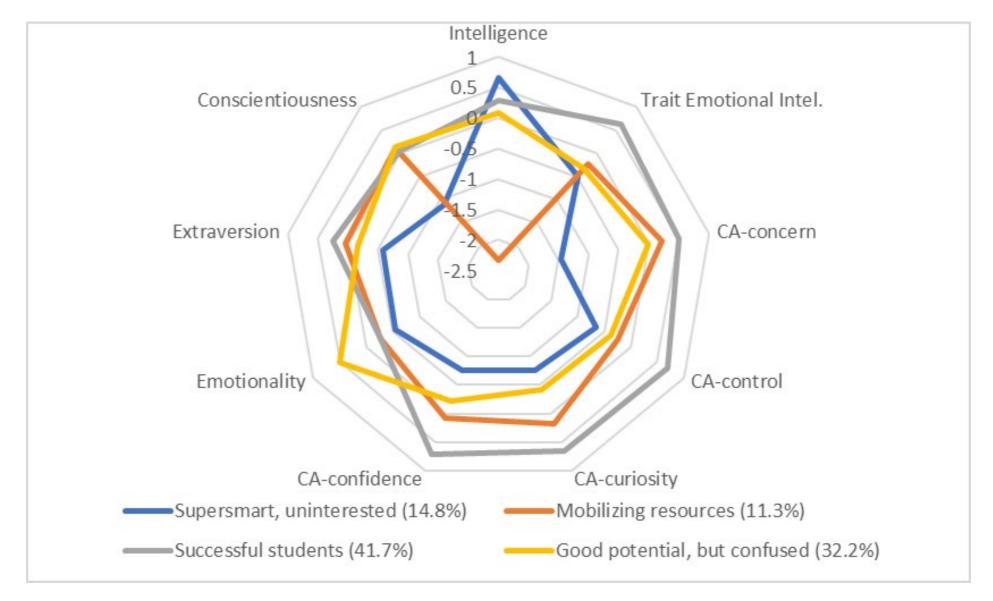
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# Analytical strategy

- To identify different typologies of students we employed **cluster analysis,** and the K-means procedure with a preset number of 4 clusters. The goal of cluster analysis is to identify groups of individuals that share common characteristics so as to **maximize the similarity** of individuals **within** the group and **maximize the dissimilarity** of individuals **among** the groups.

- The clusters emerging from the aggregation of personal characteristics (individual differences) were then related to students' level of employability with a one-way ANOVA.

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# Results: 4 typologies of students

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# Results: Students typologies predicting employability

- ANOVA Table

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 17.563 | 3 | 5.854 | 8.556 | 0.000 |
| Within Groups | 75.951 | 111 | 0.684 | | |
| Total | 93.515 | 114 | | | |

The means of employability for the 4 typologies are statistically different, $F$ (3, 111) = 8.56, $p$ < .000

- Results show that the typology **Successful students showed a significantly higher employability** (M = 5.43, SD = .78) than the other three clusters.

- These three clusters **did not significantly differ from each other** in their level of self-perceived employability.

- Findings highlight that **58.3%** of the sample comprising clusters 2 (M = 4.48, SD = .90), 3 (M = 4.59, SD = 1.04), and 4 ( M = 4.76, SD = .77) had employability lower than the benchmark of our larger N = 400 sample (M = 4.91 SD = 0.81).

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# Discussion

- Results show that individuals («**Successful students**») who possess good reasoning skills, who are confident about their capacity to handle emotional situations, and who deploy personal resources related to being curious about future possibilities, and eager to acquire new competences, are **associated with the highest level of employability**.

- Three out of four typologies of students show levels of **employability lower than the benchmark of the larger sample**. Hence, 58.3% of the sample concerned by an approaching career transition show **low levels of employability**.

- The three typologies with lower employability present **different patterns of personal charachteristics** and resources, highlighting the need for personalized interventions.

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# Limitations

- Sample representative of university students in the Lausanne area (**Swiss context**). University students in other countries (e.g., UK), might result in different typologies and/or higher percentage of high employability students.

- Employment of a **self-report scale** of employability, rather than **objective indicators of employability** (but self-perceived employability is linked to higher job satisfaction and job engagement (Ngo, Liu & Cheung, 2017)).

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# Implications and future directions

- Among the different typologies, particularly interesting is the case of those **who have potential to succeed, but are confused** («Good potential, but confused»). These individuals could strongly benefit from interventions (e.g., workshops, training sessions) targeted to improve their **capabilities and attitudes towards their future career** (→career adaptability).

- Overall, the institutions involved in the study would benefit from the introduction of **initiatives meant to improve students' employability.**

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# How can institutions foster students' employability? Implications for policy making

- **Assessment** of students employability in the last year of studies.

- **Identification** of the typologies of students that need support.

- **Introduction** of range of activities, such as workshops that would raise awareness about the approaching carrer transition, training session that would raise self-awareness and improve decision making.

- **Important**: activities should be targeted to the development areas emerging in each typology of students.

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# Thank you for your attention.

Dr. Marina Fiori
Marina.Fiori@sfuvet.swiss

Prof. Dr. Antje Barabasch
Antje.Barabasch@sfuvet.swiss

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