The factorial structure of the supervisor’s core competencies scale

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Introduction

Problem Statement: The Core Competencies Scale (CoreCPS) of Cunha & Albuquerque’s (2017) was designed to assess the ideal skills that college students expect their mentor teacher to master. The development of educational pedagogic and academic research in this field is of greater importance considering the lack of updated background knowledge of this topic.

Research Questions: What is the Supervisor Competency Core Scale internal consistency quality?

Purpose of the Study: Evaluate the psychometric properties, namely the factorial structure and the internal consistency of the Core Competency Scale of the Supervisor.
Methodology

Research Methods: This methodological study aims to assess the psychometric qualities of the Supervisor’s Core Competencies Scale (CoreCPS), in order to assess the competencies that polytechnic higher education students think a good mentor teachers should possess. The cross-sectional study obtained a favourable opinion (Nº 3/2017) issued by the Ethics Committee and is part of the project "Supervisão e Mentorado no Ensino Superior: Dinâmicas de Sucesso (SuperES)", Reference: PROJ/CI&DETS/CGD/0005)- supervision and mentoring in Higher Education: Successful Dynamics- developed by the Escola Superior de Saúde de Viseu (Viseu’s School of Public Health), a branch of the Polytechnic Institute of Viseu, Portugal.

Participants
The non-probability sampling for convenience was formed by 306 higher education students attending a medical school. The majority of the participants were female (81.7%). The youngest participants were 18 and the eldest were 42 and the average age was 21.15 years (± 3.54 SD). Male participants were on average older (Mean = 22.28 years ± 4.21 SD) than women (Mean ± 3.32 SD) with statistically significant differences (z =-3,058; p = 0.002).
Results

The CoreCPS Scale internal consistency study revealed the existence of three (3) factors/subscales: 1-Personal Factors (α=0.979); 2-Interpersonal/Communication Factors (α=0.946); and 3-Performance Factors (α=0.936). Cronbach's alpha coefficient found for the global 21-questions CoreCPS Scale of 0.972. Female students value more the supervisor’s personal competencies, while male students prefer the interpersonal competencies. There were statistically significant differences between the values. The youngest students (≤19) are the ones who value all different kinds of competencies. These values express statistically significant differences when compared to the other age groups.
Conclusion

This research constitutes the first step in the evaluation of the psychometric quality of the Supervisor’s Core Competencies Scale(CoreCPS), based on a sample of the Portuguese population. The study proves that the internal consistency values in the three different subscales and in the global score are strong. The CoreCPS scale revealed the existence of three (3) factors/subscales: 1 – Core Personal Factors ($\alpha = 0.979$); 2 – Core Interpersonal/communication Factors ($\alpha = 0.946$) and 3 – Core Performance Factors ($\alpha = 0.936$). The Cronbach’s alpha value found for the global CoreCPS scale was 0.972. The results clearly suggest that the identification of personal, interpersonal/communication and performance competencies evidenced by the supervisor should be considered during the assessment of the teachers’ pedagogical practices. They also seem foster the development of future research that will support pedagogical supervision and in which innovation will play an important role.

The empirical results prove the following:

- Higher education students consider that the mentor teacher’s most important features are his core personal factors, and value above all the others his ethics and the way he interacts with the others.
- Female students value more the mentor’s personal competencies, while male students prefer his interpersonal competencies. These positions have statistical significant differences. Younger students ($\leq 19$) value any type of competencies and show statistically significant differences when compared to other age groups.

As a contribution to the pedagogical practice carried out in higher education, the results show that it is of crucial importance that we identify the impact that the mentor teacher’s existence has on the students’ failure/school dropout. This knowledge is very important since it fosters the development and implementation of pedagogical strategies that will promote students’ academic success and that will surely contribute to the development of academic practices that will foster a more personal and student-focused pedagogical relationship that is more and more relevant in modern didactics.
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