Submissions Abstract Book - All Papers (Included Submissions)

0104

Are there key competencies for PhD completion? Perceptions of English and Portuguese supervisors.

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Abstract:

The training of PhD students has changed over the past decades to include stakeholders' demands for a highly qualified workforce with transferable skills. However, facing all the competencies that need to be developed, a student might find it hard to select and prioritize suitable training, which can lead to underdeveloping key competencies and compromise the PhD completion.

This qualitative study is part of a wider mixed-methods research aimed to identify those essential competencies. Targeting PhD supervisors in England and Portugal, 30 semi-structured interviews were conducted followed by a Thematic Analysis.

The results showed 26 competencies grouped into 5 domains representing knowledge, personal characteristics, working competencies, networking, and dissemination.

The main research intends to develop a framework of competencies aiming to assist students and supervisors in designing the most appropriate training, assuring the development of the essential competencies, hence expecting to contribute to increasing on-time completions.

Paper:

Introduction

Over the last decades, doctoral training has been adjusted to address the increased number of enrolments, the expectations of the labour market, and delayed on-time completion (Bernstein et al., 2014; Elmgren et al., 2016; Groenvynck et al., 2013; John & Denicolo, 2013; Vassil & Solvak, 2012).

Considering the importance of students' competencies in doctoral achievement (Durette et al., 2016; Wao & Onwuegbuzie, 2011), it seems likely that some may be indispensable for degree completion. However, the majority of research has approached them from a career development perspective, either by targeting the competencies being developed, the ones that students should develop, or the ones expected and valued by the labour market (Baptista & Huet, 2012; Borrell-Damian, 2009; Buckley et al., 2009; Durette et al., 2016; Mowbray & Halse, 2010).

Doctoral students have to develop several competencies with no clear guidelines about which are essential for PhD completion, and which are often more suited for post-doc scenarios. Therefore, students may struggle in prioritizing essential competencies during their doctoral training,

compromising progression or even completion.

This study is part of a mixed-methods research aiming to identify those essential competencies. It takes place in England, where PhD training is strongly supported by the Vitae RDF (Vitae, 2011, 2013), and in Portugal where is a lack of such a framework in universities.

The qualitative strand presented here aimed to investigate supervisors' perceptions on the essential competencies and obtain data for developing a survey to collect data widely in the quantitative strand.

Methodology

This study used semi-structured interviews, developed based on literature review and validated by two experts in the field. Participants were a convenience sample of 15 supervisors from England and 16 from Portugal (including directors of PhD programmes and doctoral schools), from STEM and Social Sciences fields.

Each face-to-face interview lasted approximately 30 minutes. The recorded interviews were transcribed using a clean verbatim and sent to respective respondents for validation. Data were analysed using a deductive semantic thematic analysis (Braun et al., 2019; Braun & Clarke, 2006), with the Vitae RDF (Vitae, 2011) as the theoretical framework.

Results

Results revealed 26 competencies grouped into 5 domains: knowledge, personal characteristics, working competencies, networking, and dissemination.

The "knowledge" embraces competencies related to the different types of knowledge. The mentioned competencies were awareness about the meaning of a PhD, knowledge about research methodology, theoretical knowledge, and technical skills.

The "personal characteristics" relates to students' cognitive abilities, emotional and personality characteristics. The competencies found in this domain were intellectual capacity, critical thinking, critical analysis, research curiosity, passion for the topic, self-confidence, self-motivation, perseverance, and resilience.

The "working competencies" refers to the ones necessary to complete the different tasks of the project. In this domain, supervisors mentioned autonomy, resourcefulness, commitment and hardworking, self-discipline, time management, self-organization, information search, ethical behaviour, and obtain funding.

The "networking" relates to competencies to interact and work with others. The two mentioned competencies were team-working and networking skills.

The "dissemination" includes the competencies required to disseminate the study results to different audiences and using different formats. Supervisors have mentioned 3 competencies related to dissemination: writing skills, oral communication skills and English language skills.

Overall, these competencies were mentioned in both countries and referred by supervisors from STEM and Social Sciences fields.

As no new competence emerged over the last 10 interviews it seems plausible that saturation has been reached.

Discussion

These results allowed to obtain a shortlist of competencies described as essential for PhD completion, which seems to sustain the hypothesis of existing a set of competencies a student needs to possess for being able to complete the PhD, while others can be linked to post-doc professional development.

Furthermore, by finding 3 competencies not covered by the Vitae RDF, this study also highlighted the importance of looking into competencies related only to PhD completion, which may be receiving less attention due to the current focus on employability related skills.

The majority of the competencies were mentioned by supervisors in both countries. This may suggest that, although the differences in the PhD training between these countries, supervisors seem to share similar opinions about the essential competencies for PhD completion.

These are promising results that allowed to shed light on this topic. However, findings should be analysed taking into account some limitations such as the sample representativity. The qualitative strand was designed to extend data collection to all supervisors in both countries, using an online survey developed on this study's findings.

The main research intends to develop a referential for helping to identify and prioritize the development of the essential competencies for PhD achieving, hence contributing to on-time completion by assuring they are available when needed.

Acknowledgements

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