Explanatory Variables of Dropout in Postgraduate Education: A Scope Review

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Review question / Objective: To identify the individual, academic, socioeconomic, and institutional variables that influence student dropout at the postgraduate level (master’s and doctoral), through a scope review. The following guiding questions were established:

• RQ 1: What has been the bibliometric behavior of dropout publications in postgraduate students (master’s and doctoral)?
• RQ 2: What variables explain the dropout of postgraduate students (master’s and doctoral) based on their categorization in individual, socioeconomic, academic, and institutional determinants?
• RQ 3: What are the future research directions that should be addressed by academia in the study of dropout at the postgraduate level (master’s and doctoral)?

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 03 June 2023 and was last updated on 03 June 2023 (registration number INPLASY202360011).

INTRODUCTION

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**Background:** Education is considered a fundamental factor for the progress of nations due to the individual and social benefits it entails. Recently, states, especially those in the West, have promoted postgraduate education in order to maximize these benefits, in addition to the potential of this type of education to generate scientific, technological, and social advancements. Although the importance of postgraduate education is clear, addressing student dropout at this level becomes relevant, as this phenomenon has the potential to limit the benefits of education and create various problems for the stakeholders in the system, specifically the students, higher education institutions, and the state itself. Considering the aforementioned context, it is crucial to highlight that research related to dropout in the field of postgraduate education is scarce and presents fragmented evidence. Therefore, a comprehensive review is necessary to initiate the process of consolidating findings, especially regarding the individual, academic, socioeconomic, and institutional variables that influence the early completion of postgraduate education. So far, previous reviews on dropout in higher education have mainly focused on undergraduate education, leaving a significant gap in understanding the factors that contribute to dropout at the postgraduate level.

**Rationale:** The lack of reviews and aggregated evidence on postgraduate dropout hinders informed decision-making by higher education institutions and policymakers. By conducting this scope review, we aim to fill this knowledge gap and provide a solid evidence base that serves as a starting point for future research and the implementation of effective strategies related to the prevention and mitigation of postgraduate dropout.

It is expected that the results of this scope review will contribute to the design and implementation of interventions aimed at preventing student dropout in postgraduate education, improving student retention, and maximizing the benefits of postgraduate education for individuals and society as a whole.

**METHODS**

**Strategy of data synthesis:** To identify potentially relevant documents, the SCOPUS database will be used due to its comprehensive coverage, diverse sources, quality, and rigorous selection of indexed journals. The search will be conducted using truncated symbols and boolean operators to maximize the inclusion of relevant terms. The search terms have been formulated based on previous literature reviews and selected to ensure coverage of the synonyms used by scholars to refer to dropout in English. These terms include: "dropout," "drop out," "drop-out," "desertion," "attrition," and "withdrawal." Appropriate truncation will be applied to capture all variations of each term. In order to limit the search to higher education and avoid results related to previous educational levels, the terms "higher education" and "tertiary education" will be used. Furthermore, the search will be restricted to master's and doctoral programs to specifically focus on postgraduate education. The search strategy will be implemented in SCOPUS using the mentioned terms and the necessary boolean operators to effectively combine them. A thorough review of the obtained results will be conducted, eliminating duplicates and selecting relevant documents for further analysis and data synthesis.

**Eligibility criteria:** This review will include peer-reviewed documents focused on postgraduate dropout, specifically master's and doctoral programs, as these types of education are the most common in the international education system. The selected documents should have an empirical nature, employing quantitative, qualitative, or mixed methodologies, in
order to consider which explanatory variables of dropout at the individual, socioeconomic, academic, and institutional levels have been studied. Only documents written in English or Spanish were included. Studies that mixed undergraduate and postgraduate students without conducting distinctive analyses for student populations were not included, and literature reviews were also excluded.

**Source of evidence screening and selection:** For document selection, and since the search is limited to a single database, the phase of removing duplicate records will not be carried out. Thus, the title, abstract, and keywords of the found documents will be reviewed by two reviewers to determine which ones will be excluded from the review and which ones will continue with the full-text reading process. In cases of discrepancies, an external reviewer from the research team will be consulted, following their recommendation. The full-text review will be conducted independently, and in cases where there is incongruity regarding the potential inclusion of a document, an external review will be conducted.

**Data management:** For this stage, the reviewers will jointly create an Excel form to determine which variables should be extracted from the documents, thereby generating a standardized abstraction tool. The Excel form will be independently filled out by the reviewers, and the results will be discussed and updated through an iterative process. In this phase, an external pair will not be used to resolve differences. In case of discrepancies in the cells corresponding to explanatory variables of dropout, previous studies will be consulted to determine their categorization.

**Language restriction:** English and Spanish.

**Country(ies) involved:** Colombia.

**Keywords:** dropout; higher education; postgraduate; master; doctoral programs.

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