REVISTA ENFERMAGEM ATUAL IN DERME

MOTIVATIONS FOR DROPPING OUT OF UNDERGRADUATE AND GRADUATE NURSING STUDENTS: SCOPING REVIEW PROTOCOL

MOTIVACIONES PARA DESERCIÓN DE ESTUDIANTES DE GRADUACIÓN Y POSGRADO EN ENFERMERÍA: PROTOCOLO DE SCOPING REVIEW

MOTIVAÇÕES PARA EVASÃO DE ESTUDANTES DA GRADUAÇÃO E PÓS-GRADUAÇÃO EM ENFERMAGEM: PROTOCOLO DE *SCOPING REVIEW*

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ABSTRACT

Objective: to map the evidence on the main motivations associated with university dropout of undergraduate and graduate students in nursing. **Methods:** This is a scoping review protocol that will be built based on the methodological framework proposed by the Joanna Briggs Institute for scoping reviews. The protocol was registered with the Open Science Framework. The development steps will follow the items in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews checklist. The guiding question was elaborated based on the PCC mnemonic: Population (undergraduate and graduate students in nursing), Concept (reasons related to higher education dropout) and Context (university dropout). The data search will be carried out in the Online databases of the System of Analysis and Retrieval of Medical Literature via PubMed, Cumulative Index to Nursing and Allied Health Literature, PsycINFO, Web of Science, Scopus and Educational Resources Information Center, in addition to the bibliographic index of Latin American and Caribbean Literature in Health Sciences and Nursing Database, from the Virtual Health Library. Two independent reviewers will screen and select articles through the reference manager Rayyan programs, following the established eligibility criteria.
Keywords: Student Dropouts; Motivation; Intention; Students, Nursing; Education, Nursing, Graduate.

RESUMEN

Objetivo: mapear la evidencia sobre las principales motivaciones asociadas a la deserción universitaria de estudiantes de pregrado y posgrado en enfermería. **Métodos:** Este es un protocolo de revisión de alcance que se basará en el marco metodológico propuesto por el Instituto Joanna Briggs para las revisiones de alcance. El protocolo está registrado en el *Open Science Framework*. Los pasos de desarrollo seguirán los elementos de la lista de verificación Elementos de informe preferidos para revisiones sistemáticas y metaanálisis para revisiones de alcance. La pregunta orientadora fue elaborada a partir de la mnemotécnica del PCC: Población (estudiantes de graduación y posgrado en enfermería), Concepto (motivos relacionados con la deserción universitaria) y Contexto (deserción de la universidad). La búsqueda de datos se realizará en las bases de datos en línea del *Medical Literature Analysis and Retrieval System* vía PubMed, *Cumulative Index to Nursing and Allied Health Literature*, PsycINFO, *Web of Science*, Scopus y *Educational Resources Information Center*, además del índice bibliográfico de Literatura Latinoamericana y del Caribe en Ciencias de la Salud y Base de Datos de Enfermería, de la Biblioteca Virtual en Salud. Dos revisores independientes examinarán y seleccionarán los artículos a través de lo gerente de referencia Rayyan, siguiendo los criterios de elegibilidad establecidos.
Palabras clave: Abandono Escolar; Motivación; Intención; Estudiantes de Enfermería; Educación de Postgrado en Enfermería.

RESUMO

Objetivo: mapear as evidências sobre as principais motivações associadas à evasão universitária de estudantes da graduação e pós-graduação em enfermagem. **Métodos**: Trata-se de um protocolo de revisão de escopo que será construído com base na estrutura metodológica proposta pelo Joanna Briggs Institute para *scoping reviews*. O protocolo está registrado na *Open Science Framework*. As etapas de desenvolvimento seguirão os itens do checklist *Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews*. A questão norteadora foi elaborada com base no mnemônico PCC: População (estudantes de graduação e pós-graduação em enfermagem), Conceito (motivações associadas à evasão universitária) e Contexto (evasão universitária). A busca de dados será realizada nas bases *Medical Literature Analysis and Retrievel System Online* via PubMed, *Cumulative Index to Nursing and Allied Health Literature*, PsycINFO, Web of Science, Scopus e *Educational Resources Information Centre*, além dos índices bibliográficos da Literatura Latino-Americana e do Caribe em Ciências da Saúde e Base de Dados de Enfermagem, a partir da Biblioteca Virtual em Saúde. Dois revisores independentes realizarão a triagem e seleção dos artigos utilizando o gerenciador de referências Rayyan, seguindo os critérios de elegibilidade estabelecidos.
Palavras-chave: Evasão Escolar; Motivação; Intenção; Estudantes de Enfermagem. Educação de Pós-Graduação em Enfermagem.

INTRODUCTION

Economic and racial inclusion policies have made it possible to break down some historical and socioeconomic barriers in access to Brazilian higher education, which has allowed students to enter more equitably in recent years. However, the dynamics of student training at universities encompass a series of other contexts that may pose risks to the completion of their academic careers and influence whether they remain or, potentially, abandon teaching [1].

University dropout is understood as the definitive withdrawal of a student from a higher-level course, for any reason other than its completion. Furthermore, student dropout is also observed in postgraduate studies and affects public and private higher education institutions (HEIs), and has substantial implications in the social, financial and educational spheres [2].

The different contexts and factors associated with student dropout belong to multidimensional axes that can combine and enhance their resulting effects. When investigating theoretical references on the subject, it is observed that studies that analyze the motivational factors for university dropout are, for the most part, directed at social and economic contexts. However, factors related to work, mental health and psycho-emotional well-being must also be widely discussed and evaluated, as they can directly influence student retention [3].

In postgraduate education, the indicators show a scenario of attention. In a cohort from 2001 and 2010, in the United States, a 22.7% dropout rate among doctoral nursing students was identified. Furthermore, it was detected that the majority of dropouts occurred before the second year, which may suggest that there is a critical period of greater vulnerability in relation to students' academic and social adjustment to institutions [4].

In order to understand the topic, paradigms were proposed to understand the factors that may be related to students dropping out and remaining at universities. Thus, the so-called "Retention Models" approach the subject from different perspectives associated with the prevailing motivations for student retention [5].

In this sense, the "Student Integration Model" [6] by Vincent Tinto, a notable theoretician in the field of research on student learning and retention in higher education, characterizes higher education institutions as social systems that can influence retention. from the students. This model suggests that students with greater social and academic integration are less likely to break this bond, which leads to the consideration that contact between students and institutions can influence student dropout behavior. The author, in the course of updating his theory, remodeled his conclusions and also brought as influential conditions issues related to the family, the individual himself, the student's previous education and other external factors [5-8].

Even though academic evasion brings significant impacts on university dynamics, the number of higher education institutions that have activities and programs aimed directly at monitoring and amplifying discussions about the motivations related to student evasion is reduced, considering psychosocial, economic and vocational factors. Understanding the multidimensionality of motivations and factors associated with student dropout in higher education and postgraduate nursing is fundamental for implementing actions and strategies aimed at strengthening student retention in undergraduate and postgraduate courses [9].

Thus, the national and international conceptual and knowledge gap regarding the multifactorial motivations for the dropout of undergraduate and postgraduate nursing students is notable. Therefore, this scoping review protocol is relevant, as evidence about the motivations for university dropout among undergraduate and postgraduate nursing students may contribute to the structuring and implementation of policies aimed at student retention, reducing the number of evasion, contributing to the improvement of human resources training.

Given this, this scoping review protocol aims to map the evidence on the motivations for dropping out of undergraduate and postgraduate nursing students.

METHODS

Kind of study

This is a scoping review of the literature to be developed based on the methodological structure proposed by the Joanna Briggs Institute (JBI) for scoping reviews, Reviewers Manual 2020, and the checklist Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) [10]. This framework delimits five fundamental steps to support the process of constructing scoping reviews: (1) identification of the research question; (2) identification of relevant studies; (3) selection of studies; (4) data mapping and analysis; and (5) grouping, synthesis and presentation of results.

To limit the occurrence of reporting bias and determine the quality of the evidence produced, this scoping review protocol was registered on the Open Science Framework platform (https://osf.io/r8k7x), with the DOI: www.doi.org /10.17605/OSF.IO/R8K7X.

Location and period of study

This scope review will be conducted in the municipality of Teresina-Piauí, Brazil, between the months of June and September 2023.

Guiding question

To formulate the guiding question of this study, the mnemonic PCC (Population, Concept

and Context) will be used, in which the population will be composed of undergraduate and postgraduate nursing students, the concept will be delimited by the associated motivations and the context will be evasion. Therefore, the following guiding question was asked: "What is the evidence about the motivations associated with the dropout of undergraduate and postgraduate nursing students?"

The "Scale of Reasons for Evasion in Higher Education (M-ES)", constructed by Ambiel, will be used to delimit the concept, as it assesses the strength of potential reasons for student evasion in higher education, through from the analysis of seven main domains: institutional, vocational, interpersonal reasons, related to lack of support, academic performance, career and autonomy [11].

Based on these propositions, the results presented at the end of the review will be organized through two possible axes of analysis: (1) Motivations/internal factors related to school dropout of undergraduate and postgraduate nursing students; and (2) Motivations/external factors related to school dropout among undergraduate and postgraduate nursing students.

Elegibility criteria

The scope of this review will include quantitative or qualitative primary studies, without time or language limitations. Editorials, expert opinions, course completion works,

dissertations, theses and studies that do not answer the guiding question will be excluded.

Bibliographic survey and search strategies

The bibliographic survey will be carried out in the databases Medical Literature Analysis and Retrievel System Online (MEDLINE), via PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), via EBSCO, PsycINFO, Web of Science, Scopus and Educational Resources Information Center (ERIC), Nursing Database (BDENF) and bibliographic index Latin American and Caribbean Literature in Health Sciences (LILACS), via the Virtual Health Library (VHL). Access to the databases and bibliographic index will be through the Periodicals Portal of the Coordination for the Improvement of Higher Education Personnel (CAPES), through login through the Federated Academic Community (CAFe) of the Federal University of Piauí (UFPI).

Descriptors and keywords will be combined using the Boolean operators OR and AND. The keywords will be used based on suggestions from controlled vocabularies and through an expanded prior search on the topic.

It should be noted that, in accordance with the specifications of the descriptors specific to the selected databases, the following controlled vocabularies will be used: Medical Subject Headings (MeSH) for MEDLINE via

PubMed, Scopus and Web of Science; CINAHL subject headings for searching CINAHL; Specific thesaurus in the ERIC database; APA Thesaurus of Psychological Index Terms for PsycINFO and Health Sciences Descriptors (DeCS) for BDENF and LILACS via VHL. Table 1, below, presents the descriptors and keywords used.

Chart 1 - Vocabularies used to construct the PCC strategy (Population, Concept and Context). Teresina, Piauí, Brazil, 2023.

Health Sciences Descriptors (DeCS)		
	Descritptors	**Keywords/Alternative terms**
Population	nursing students; postgraduate education; postgraduate nursing education	nursing student; nursing students; postgraduate nursing education; nursing postgraduate students; stricto sensu
Concept	motivation; intention	disincentives; expectation; expectations; incentive; incentives; motivations; reason
Context	truancy	school dropout; school dropouts
Medical Subject Headings (MeSH)		
	Descritptors	**Keywords/Alternative terms**
Population	students, nursing; education, nursing, graduate; education, graduate.	student, nursing; nursing student; nursing students; nursing education postgraduate; education graduate nursing; graduate education
Concept	motivation; intention	motivations; disincentives; disincentive; expectation; expectations; incentives; incentive; intentions
Context	student dropouts	dropout, student; dropouts, student; student dropout

Source: Prepared by the authors (2023).

Search strategies will be structured according to the specificities of each database and bibliographic index. In order to cover the gray literature, the list of final references of the included studies will be read, aiming to find important studies to be added. The search syntax is described in Chart 2.

Chart 2 - Search strategies adopted in the databases. Teresina, Piauí, Brazil, 2023.

Database	Search strategies*	Identified Studies
MEDLINE/ Pubmed	(((((((((("students, nursing"[MeSH Terms]) OR ("student, nursing")) OR ("nursing student")) OR ("nursing students")) OR (("education, graduate"[MeSH Terms]) OR ("graduate education"))) OR ((("education, nursing, graduate"[MeSH Terms]) OR ("Nursing Education, Postgraduate")) OR ("Education, Graduate Nursing")))) AND ((((((((((("intention"[MeSH Terms]) OR (Intentions)) OR ("motivation"[MeSH Terms])) OR (Motivations)) OR (Disincentives)) OR (Disincentive)) OR (Expectations)) OR (Expectation)) OR (Incentives)) OR (Incentive))) AND ((((("student dropouts"[MeSH Terms]) OR ("Dropout, Student")) OR ("Dropouts, Student")) OR ("Student Dropout")))	108
PsycINFO	Index Terms: {Nursing Students} OR {College Students} OR {Graduate Students} OR {Postgraduate Students} *AND* Index Terms: {Motivation} OR {Intention} OR {Incentives} *AND* Index Terms: {Dropouts} OR {College Dropout} OR {Potential Dropouts}	32
Scopus	(ALL ("students, nursing" OR "student, nursing" OR "nursing student" OR "nursing students" OR "nursing education postgraduate" OR "education graduate nursing" OR "graduate education") AND ALL ("motivation" OR "motivations" OR "disincentives" OR "disincentive" OR "incentives" OR "incentive" OR "intention" OR "intentions") AND ALL ("student dropouts" OR "dropout, student" OR "dropouts, student" OR "student dropout"))	215

CINAHL	(((MH "Students, Nursing") OR "students, nursing" OR "student, nursing" OR "nursing student" OR "nursing students" OR (MH "Education, Nursing, Graduate") OR "education, nursing, graduate" OR "Nursing Education, Postgraduate" OR "Education, Graduate Nursing" OR (MH "Education, Graduate") OR "education, graduate" OR "graduate education")) AND (((MH "Motivation") OR "motivation" OR "motivations" OR "disincentives" OR "disincentive" OR "incentives" OR "incentive" OR (MH "Intention") OR "intentions")) AND (((MH "Student Dropouts") OR "student dropouts" OR "dropout, student"))	42
ERIC *(Peer reviewed only)*	descriptor:("Nursing Education" OR "Nursing Students" OR "Graduate Students" OR "College Students" OR "Higher Education") AND descriptor:("Motivation" OR" Student Motivation" OR "Incentives" OR "Intention" OR "Incentives") AND descriptor:("Dropouts" OR "Potential Dropouts")	123
LILACS/ BVS	((mh:("Estudantes de enfermagem")) OR ("Estudante de Enfermagem") OR ("Alunos de Enfermagem") OR (mh:("Educação de Pós-Graduação")) OR (mh:("Educação de Pós-Graduação em Enfermagem")) OR ("Educação em Enfermagem de Pós-Graduação") OR ("Pós-graduandos de Enfermagem") OR ("Stricto sensu")) AND ((mh:(motivação)) OR (desincentivos) OR (expectativa) OR (expectativas) OR (incentivo) OR (incentivos) OR (motivações) OR (motivo) OR (mh:(intenção))) AND ((mh:("Evasão escolar")) OR ("abandono escolar") OR ("desistentes escolares")) AND (db:("LILACS"))	1
BDENF/ BVS	((mh:("Estudantes de enfermagem")) OR ("Estudante de Enfermagem") OR ("Alunos de Enfermagem") OR (mh:("Educação de Pós-Graduação")) OR (mh:("Educação de Pós-Graduação em Enfermagem")) OR ("Educação em Enfermagem de Pós-Graduação") OR ("Pós-graduandos de Enfermagem") OR ("Stricto sensu")) AND ((mh:(motivação))	2

	OR (desincentivos) OR (expectativa) OR (expectativas) OR (incentivo) OR (incentivos) OR (motivações) OR (motivo) OR (mh:(intenção))) AND ((mh:("Evasão escolar")) OR ("abandono escolar") OR ("desistentes escolares")) AND (db:("BDENF"))	
Web Of Science	ALL=("students, nursing" OR "student, nursing" OR "nursing student" OR "nursing students" OR "education, graduate" OR "graduate education" OR "education, nursing, graduate" OR "Nursing Education, Postgraduate" OR "Education, Graduate Nursing") AND ALL=("intention" OR "intentions" OR "motivation" OR "Motivations" OR "Disincentives" OR "disincentives" OR "Expectations" OR "Expectation" OR "Incentives" OR "Incentive") AND ALL=("student dropouts" OR "Dropout, Student" OR "Dropouts, Student" OR "Student Dropout")	4

*Note: The surveys were carried out on July 9, 2023.

Source: Prepared by the authors (2023).

The selection of studies will be developed, initially, by two reviewers, independently and blindly, through the steps of the adapted flowchart Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 statement: identification, screening and inclusion, a since there are still no models for a flowchart intended only for scope review [12]. In the screening stage, the title and summary of the studies will first be read. In this sense, after applying the inclusion and exclusion criteria, studies that will proceed to the next stage, which will consist of reading the text in full, will be eligible. Then, the inclusion and exclusion criteria will be applied to arrive at the sample for this scoping review. It should be noted that, if there is no consensus between the two reviewers regarding the inclusion of articles, a third reviewer will be called.

Subsequently, a manual search will be carried out for the final references of the included studies. The results will be exported to the free version of the EndNote Web software [13], which is a bibliographic reference manager and will be used to remove duplicate studies. After this step, the studies will be exported to the Rayyan application, developed by the Qatar Computing Research Institute (QCRI) [14], which will be used to store, organize and blindly select the studies. It is noteworthy that the team of

reviewers underwent prior training to learn how to use these tools to remove duplicates and select studies.

Data extraction

Data extraction from the included studies will be carried out using an instrument developed by the reviewers (Table 3), based on the model provided by the JBI Manual [10], in which the following variables will be extracted: title, main author, year, country, educational level, sample, protective variables, predictor variables and type of institution. This form will be evaluated by the team of reviewers at the beginning of the mapping process and, if there is a need to add information, it may undergo changes that will be recorded in the scope review report. Data extraction will be carried out by two reviewers, independently. At the end, the results found will be evaluated and possible points of disagreement will be analyzed by a third reviewer, in order to eliminate any mistakes.

Chart 3 - Data extraction instrument for details of the source, characteristics and extraction of results. Teresina, Piauí, Brazil, 2023.

Title	Main Author	Year	Country	Educational level and sample	Protective variables	Predictor variables	Type of Institution

Source: Prepared by the authors (2023).

Analysis of the evidence

The mapping of evidence will be carried out in a descriptive way, regardless of the methodological quality or risk of bias of the eligible studies, without the analytical perspective of evaluation. The extracted data will be presented in tables, charts and/or flowcharts, and the discussion will be developed in a narrative manner. Furthermore, the results can be categorized according to the factors and motivations associated with student dropout identified in this review.

Financing

REFERENCES

1. Araújo JS, Santos RA, Carvalho JFC, Castro NJC. Public policy for social inclusion in higher education and extension practices with ethnic groups. Rev Bras Enferm. 2022; (75):e20210970. doi: https://doi.org/10.1590/0034-7167-2021-0970

2. Ambiel RAM, Barros LO. Relations between dropout, satisfaction with professional choice, income and adaptation of university students. Psicol. Teor. Prat. 2018; 20(2):254-67. doi: http://dx.doi.org/10.5935/1980-6906/psicologia.v20n2p254-267

3. Palavezzini J, Alves JM. Vulnerabilidade Educacional e Vulnerabilidade Acadêmica: Aspectos conceituas e empíricos. Textos & Contextos (Porto Alegre). 2020; 19(2):e37292. doi: http://dx.doi.org/10.15448/1677-9509.2020.2.37292

4. Fang D, Zhan L. Completion and attrition of nursing PhD students of the 2001 to 2010 matriculating cohorts. Nurs. Outlook. 2021; 69(3):340-49. doi: https://doi-org.ez17.periodicos.capes.gov.br/10.1016/j.outlook.2020.12.014

5. Costa OS, Gouveia LB. Modelos de retenção de estudantes: abordagens e perspectivas. REAd. Rev. Eletrôn. Adm. (Porto Alegre). 2018; 24(3):155-82. doi: http://dx.doi.org/10.1590/1413-2311.226.85489

6. Tinto V. Dropout from higher education: A theoretical synthesis of recent research. Rev. Educ. Res. 1975; 45(1):89-125. doi: https://doi.org/10.3102/00346543045001089

7. Tinto V. Leaving college: rethinking the causes and cures of student attrition. 2nd ed. Chicago: IL; 1993. University of Chicago Press. doi: https://doi.org/10.7208/chicago/9780226922461.001.0001

8. Tinto V. Universities as Learning Organizations. About Campus. 1997; 1(6):2-4. doi: https://doi.org/10.1177/108648229700100602

9. Branco UVC. Ensino superior público e privado na Paraíba nos últimos 15 anos: reflexões sobre o acesso, a permanência e a conclusão. Avaliação (Campinas; Sorocaba). 2020; 25(1):52-72. doi: https://doi.org/10.1590/s1414-40772020000100004

10. Peters MDJ, Godfrey C, Mcinerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: Scoping Reviews (2020 version). In: Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis, JBI, 2020. p. 406-451. doi: https://doi.org/10.46658/JBIMES-20-12

11. Ambiel RAM. Construção da escala de motivos para evasão no ensino superior. Avaliação Psicol. 2015; 14(1):41-52. doi: http://dx.doi.org/10.15689/ap.2015.1401.05

12. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021; 372(71):1-9. doi: https://doi.org/10.1136/bmj.n71

13. Reuters T. Endnote web Clarivate Analytics. Thomson Reuters inc. 2020 [cited 5 Jul 2023]. Available from: https://access.clarivate.com/login?app=endnote

14. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan-a web and mobile app for systematic reviews. Syst Rev. 2016; 5(1):1-10. doi: https://doi.org/10.1186/s13643-016-0384-4

Authors' contributions

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