

Supervision of doctoral and master's students in the ODL context, field of tourism: an integrated review

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Abstract

The transformation of higher education brought about many changes in postgraduate research supervision, as the electronic media offered students all over the globe the opportunity to register for master's and doctoral degrees at the university of their choice. Fast growing industries such as the travel and tourism industry as well as shortages of health professionals contribute to the need for more masters and doctoral students both in practice and in training institutions. Both the greater number of students and institutional accountability for quality research outputs contribute to pressure on supervisors to produce more masters' and doctoral students. Research supervisors find themselves under immense pressure as a result of the demands and expectations of institutions, governments, students, their profession and the workplace. The aim of the study was so identify the gap in guidelines for supervisory practices in the education of post graduate tourism students within the Open and Distance Learning (ODL) context. An integrated review was conducted to provide evidence from literature regarding supervisory practices. The research findings obtained, did not provide evidence to allow for the development of best practice guidelines, but gaps identified from current published research is recognized and discussed. There is a dire need for the publication of narratives to ensure the sharing of best supervisory practices, specifically within the ODL context.

Keywords: open and distance learning, research supervision.

Introduction

International developments in higher education have brought about changes in the research education context (Albertyn, van Coller-Peter & Morrison, 2015), the emphasis being on developing researchers for life to ensure knowledge generation and theory development in all professions, as well as in the workplace. Managers in the travel and tourism industry should fully understand the industry in an international context and need to be highly skilled in many facets of operation. Professional development therefore became essential (Visagie, Poggenpoel & Myburgh, 2016). Globalization and the World Wide Web furthermore created the opportunity for more students to embark on postgraduate studies. This situation, fueled by the currency of knowledge, has led to credential inflation and the enrolment of increasing numbers of students for master's and doctoral degrees (Engebretson et al., 2008). These greater

student numbers have had a profound effect on open and distance learning (ODL) (Biao, 2012) and research supervision (Lee & Green, 2009) due to increased student/supervisor ratios. The market for postgraduate education has therefore changed, and research supervision must change accordingly (McCallin & Nayar, 2012).

Research supervision can take place effectively in an unsynchronized online environment to support students in the ODL context because an effective teaching presence can be established online (Gunter, 2007). Students and supervisors therefore do not need to be at the same time and at the same place to ensure quality supervision and feedback. The funding and subsidy regimens in higher education rely on student throughput, however important aspects, remain the quality of the supervision and pass rates of students (Halse & Malfroy, 2010). Higher institutional accountability for the production of quality research outputs has contributed to greater pressure on supervisors because they are held almost solely responsible for the retention and throughput rates of master's and doctoral students (Maritz & Prinsloo, 2015). In consequence, supervisors find themselves under immense pressure as a result of the demands and expectations of the institution, the government, the students, their profession and the workplace.

Problem statement

Many universities in Japan, China, the United Kingdom, Korea, Brazil, Finland and Norway, Australia, New Zealand, South Africa, Turkey, Spain and many other countries are moving towards ODL (Moore & Kearsley, 2012) to accommodate the large numbers of students who would normally not be able to study at postgraduate level (Westbrook, 2012). This has had a direct effect on the nature and quality of supervisory practices in the ODL context. The global transformation of higher education brought about many changes in education at doctoral and master's level, and the electronic media have created the opportunity for students all over the world to register at the University of their preferred choice. However, the literature dealing with how to supervise doctoral and master's students within the ODL context is scant. Despite the emphasis on, and interest in the pedagogy of research supervision in recent years, very few publications deal with how academic staff can successfully supervise students (Hammond et al, 2010). The available literature focuses on planning, organizing, writing and presenting theses and dissertations. An integrative review has the potential to contribute to identifying evidence, or the lack of evidence, of good supervision practices in ODL. It provides a summary of the literature by including evidence from a combination of diverse methodologies to improve understanding of the topic (Oermann & Hays, 2011; Whittemore & Knafl, 2005) and will play a vital role in evidence-based supervisory practice.

Aim

The aim of this integrated review was to identify gaps in practice guidelines for the supervision of students at doctoral and master's level in the ODL context in the field of tourism.

Terminology

Distance education: The theory of transactional distance defines distance education. It can be seen as the interplay between people, in this context master's

and doctoral students and their supervisors, in an environment in which they are separated from one another. Transactional distance, however, relates not only to geographical distance, but also to distance as a pedagogical phenomenon (Moore & Kearsley, 2012). The important factor is how geographical distance influences learning, and in this case, how geographical distance influences the “distance” between the doctoral or master’s student, as a novice in conducting research, and the supervisor, who has to provide research supervision. The distance depends on whether students are left alone or are able to communicate with their supervisors (Peters, 2001). This gap or distance in communication between student and supervisor must be overcome by means of constructive feedback through electronic communication and online support.

Methods

The integrated review was utilized to systematically collect, classify and analyze the body of literature (IEEE, 2014) on research supervision of doctoral and master’s degree students in the ODL education context.

Search methods

Multiple words were used to search for literature on supervision of doctoral and master’s students in the ODL context published over the past six years (2009–2014). The following words were used either individually or in combination to search the online indexes: research supervision, postgraduate research supervision, research supervision and distance education, research supervision and open and distance learning, mentoring and distance education, and open and distance learning. The inclusion criteria were publications (1) with a focus on research supervision of doctoral and master’s students and (2) in the English language.

Search results

The search was carried out by a librarian in CINAHL 2010–2012, ERIC 2009–2012, Academic Search Premier 2009–2014, Africa Host 2013, Psyc INFO 2012–2014, SocioINDEX, MEDLINE, PubMed and Google Scholar. In order to illustrate the rigor with which the search was conducted, the process followed is shown in Figure 1.

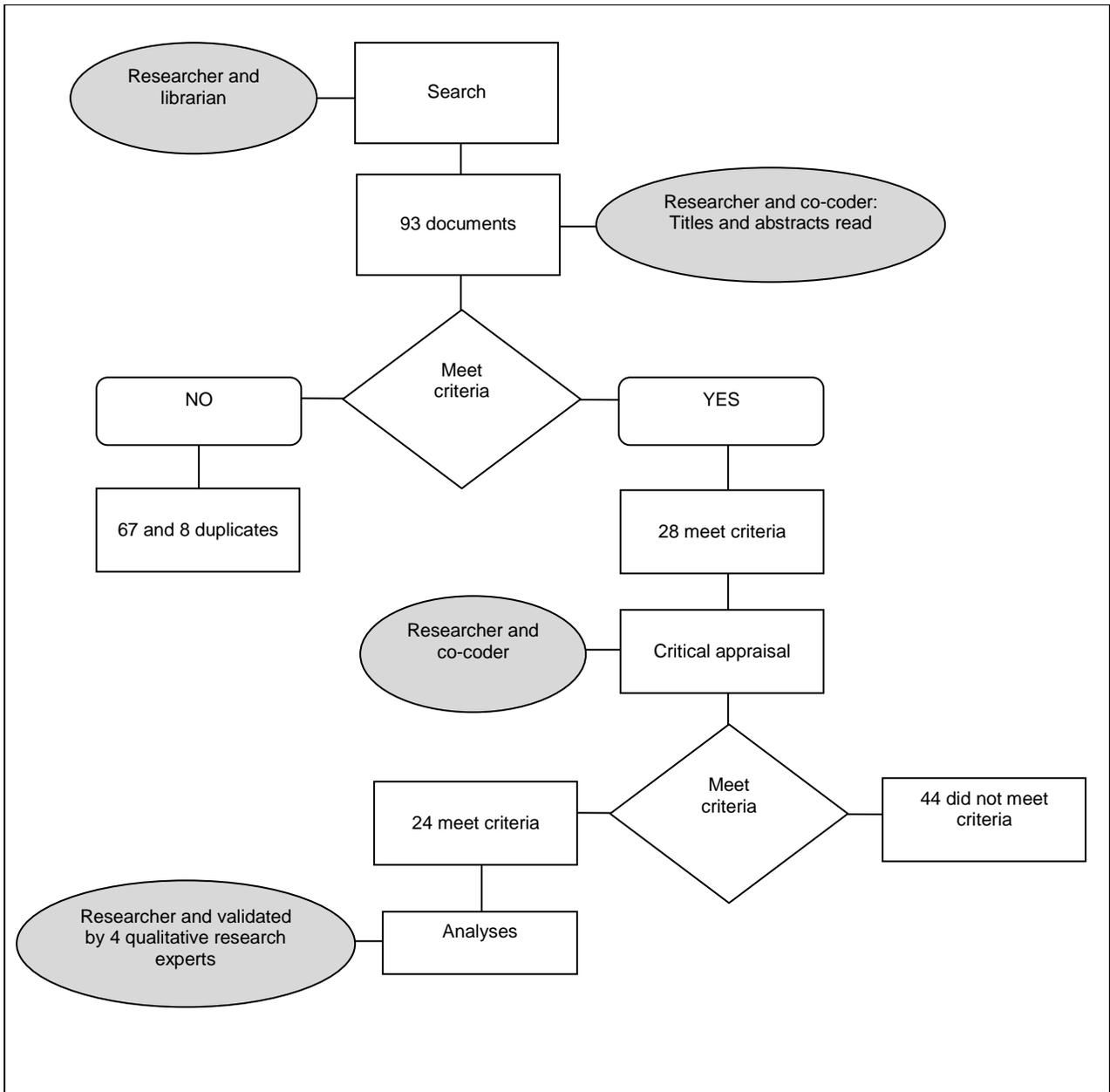


Figure 1. The research process (Authors own)

Ninety-three results were found and a strategy, indicated in Table 1, was utilized to select the applicable publications for inclusion. The titles and abstracts of all 93 publications were read by both the researcher and an independent co-coder experienced in qualitative research. Twenty eight were found to be suitable for critical appraisal for possible inclusion, while 67 were not suitable and 8 were duplicates.

Table 1. Search strategy

Read titles (include or exclude)	Include	Exclude
Read abstract if uncertain (include or exclude)		
Read full text if uncertain (include or exclude)		

The 28 publications selected were then comprehensively reviewed by the researcher and co-coder (Figure 1) and the Johns Hopkins appraisal instruments for research and non-research (Johns Hopkins University, 2014) were applied to decide which articles should be included in the integrated review. The suitability of each of the publications for inclusion was assessed during the critical appraisal phase. The criteria used for critical appraisal were:

- publications demonstrating methodology of good quality
- publications that included a population of either research supervisors or doctoral or master’s students
- review articles with a focus on the supervision of postgraduate students
- publications with a focus on ODL

The strength of the evidence as indicated in Table 2 was quantified as follows:

- 1 Experimental research or a meta-analysis of randomized control trials was conducted.
- 11 Quasi-experimental research was conducted.
- 111 Non-experimental, qualitative and meta-synthesis studies were conducted.

The quality of the publications as reflected in Table 2 was graded as follows:

- A. High: expertise was evident, sample size was sufficient and definite conclusions and recommendations (based on an extensive literature review) were made.
- B. Good quality: the expertise appeared to be credible, the sample size was sufficiently large and conclusions and recommendations were made based on a comprehensive literature review.
- C. Low quality.

Results of critical appraisal

Following the critical appraisal, 28 publications were found to be suitable for inclusion in the integrated review. Of these, only 6 dealt specifically with master’s and doctoral students in an ODL context. The results of the critical appraisal are indicated in Table

Table 2. Critical appraisal of publications

	Authors	Applicable population	Strength of evidence	Quality of evidence	Included	Excluded
1	Borders et al. (2012)	Yes	111	B	x	
2	Mutula (2011)	No				X
3	Gonzalez (2009)	No				X
4	Kiley (2011)	Yes	11	A	x	
5	Severinsson (2012)	Yes	111	B	x	
6	Samkange (2012)	No				X
7	Wolff (2010)	Yes	11	A	x	
8	Lee (2010)	Yes	111	B	x	
9	Mapolisa (2012)	Yes	11	A	x	
10	Kiani & Jumani (2010)	Yes	11	B	x	
11	Westbrook (2012)	No				X
12	McCallin & Nayar (review) (2012)	Yes	11	B	x	
13	Nulty, Kiley & Meyers (2009)	Yes	11	B	x	
14	Drennan & Clarke (2009)	Yes	111	A	x	
15	Calma (2011)	Yes	11	A	x	
16	Roets (2013)	Yes	111	A	x	
17	Powers & Swick (2012)	Yes	11	B	x	
18	Severinsson (2010)	Yes	111	C	x	
19	Maxwell & Smyth (2010)	Yes	11	B	x	
20	Franke & Arvidsson (2011)	Yes	11	B	x	
21	Roets & Maritz (2013)	Yes	111	A	x	
22	Manathunga (2012)	Yes	11	A	x	
23	Siddiqui & Jonas-Dwyer (2012)	Yes	11	B	x	
24	Murnan, Cottrell & Rojas-Guyler (2009)	Yes	11	A	x	
25	Wang & Li (2011)	Yes	11	B	x	
26	Yim & Waters (2013)	Yes	11	B	x	
27	De Beer & Mason (2009)	Yes	11	B		
28	Ellis & Peckover (2003)	Review				X

Rigor

The researcher conducted the integrated review with the assistance of a librarian and co-coder, as illustrated in Figure 1. The researcher carried out a thematic analysis, following the eight steps described by Tesch (in Creswell, 2014). A group of four qualitative research experts then assisted with the validation of the thematic analysis. The findings, set out as themes that emerged from the selected publications, are illustrated in Table 3.

Findings

Although the growing interest throughout the world in the pedagogy of research supervision has given rise to numerous publications, these yield little information on exactly how to supervise (Hammond *et al.*, 2010) a master's or doctoral student. Even less information dealing specifically with open and distance education supervisory practices was obtainable. However, the categories and themes (indicated in table 3) pertaining to research supervision in general can be made applicable, as what applies in face-to-face teaching also applies to distance education (Holmberg, Moore & Peters, 2007), as it is assumed that the online environment supports as much

construction and sharing of knowledge as the traditional face-to-face encounter (Westbrook, 2012) .

In student–supervisor interaction, whether it be face-to-face or via electronic media, the key to success is the commitment to support students (Holmberg, 2008). In analyzing the content of the publications included in the integrated review, an important limitation was identified: the literature revealed a pressing need for detailed guidelines for research supervision (Borders et al., 2012). It was mentioned in 17 publications that supervisors should be trained, but specifics were not supplied. A summary of the thematic analysis of all the data available from the 24 articles is presented in Table 3. Two categories emerged, namely the needs of supervisors and the needs of students.

Table 3. Themes and categories and themes

THEMES	CATEGORIES	SUBTHEMES
Supervisors' needs	Training Borders et al. (2012); McCallin & Nayar (2012); Kiley (2011); Hammond (2010); Nulty et al. 2009 Siddiqui & Jonas-Dwyer (2012); Wolff (2010); Murnan et al. (2009); Maxwell & Smyth (2010); Franke & Arvidsson (2011); Calma (2011); Drennan & Clarke (2009); Lee (2010); Mapolisa (2012); Yim & Young (2013) and Wang & Li (2011)	Communication skills (including the electronic media); Feedback (constructive; supportive; electronic); Program management; Monitoring principles; Methodology expertise; Academic research skills; Learning styles; Copyright; Intellectual property
	Experience Murnan et al. (2009); Franke & Arvidsson (2011); Powers & Swick (2012) and Mapolisa (2012)	Years of experience; Number of students passed; Number of publications; Certified to supervise
	Knowledge and competency Severinsson (2012); Murnan et al. (2009); Drennan & Clarke (2009); Lee (2010) and Mapolisa (2012)	Expertise; Research methodology; Knowledge about topic
	Mentoring Borders et al. (2012); Nulty et al. (2009); Kiley (2011); Hammond <i>et al.</i> , (2010); Siddiqui & Jonas-Dwyer (2012); Franke & Arvidsson (2011); Kiani & Jumani (2010)	Appointed mentors; Co-supervising
	Realistic workload Murnan et al. (2009); De Beer & Mason (2009)	Reduced teaching load; Time available
	Support Calma (2011); Mapolisa (2012)	Resources
	Supervisor–student relationship De Beer & Mason (2009); Franke & Arvidsson (2011); Lee 2010	Working relationship; Culturally sensitive; Level of support; Complex interaction; Equilibrium; Nurturing; Two-way relationship
	Student selection and allocation Kiley (2011); Franke & Arvidsson (2011); Lee (2010)	Type of student; Good health; Emotionally stable; Financial support; Common interest; Informed choices
	Students' supervisory needs	Supervisor support Drennan & Clarke (2009); Kiani & Jumani (2010); Wang & Li (2011)
Peer support De Beer & Mason (2009); Powers & Swick (2012)		Informal support from peers
Fiscal support Calma (2011)		Electronic media; Internet connectivity; Technical support
Skills development Powers & Swick (2012); Calma (2011)		Time management; Academic writing; Self- management
Student–supervisor relationship Franke & Arvidsson (2011); De Beer & Mason (2009); Lee (2010)		Working relationship; Role clarification; Complex interaction; Culture sensitive; Level of support
How to use feedback Powers & Swick (2012); Wang & Li (2011)		Interpretation of feedback; Constructive feedback; Electronic feedback; Online discussions; Honesty; Structured communication
Selection of a supervisor Severinsson (2010); Franke & Arvidsson (2011); Lee (2010)		Learning styles; Compatible personalities; Common interest

Discussion

There is growing evidence that research supervision, referred to in some publications as mentoring, makes a definite contribution to student success and research productivity (Borders et al., 2012). However, there is little evidence that any specific model of research supervision was successful (McCallin & Nayer, 2012). Supervisors and students nevertheless have pressing needs that need to be satisfied in order for supervisors to give quality supervision. Unfortunately, despite the original intention, following the completion of the integrated review it was not possible to identify specific practice guidelines. Although the importance of training of supervisors was mentioned in 16 of the publications, the what, where, how and when of training were not discussed in any of them; instead, general recommendations such as, “supervisors need training in communication skills” and “supervisors need to give constructive feedback to their students” were made.

The research results of the studies conducted led to general suggestions and recommendations pertaining to, for example the need for training (Franke & Arvidsson, 2011); a realistic workload (De Beer & Mason, 2009); mentoring (Siddiqui & Jonas-Dwyer, 2012) and many more. However no specific plan or framework for implementing them was furnished. It was not possible to develop best practice guidelines for training or any of the other themes that were identified during the analyses of these publications. Of the publications reviewed, 4 emphasized the importance of experienced supervisors and 5 referred to knowledge and competencies that supervisors need to have. In 7 publications researchers were of the opinion that supervisors need mentoring to assist with the transition from novice to experienced supervisor. In 3 publications it was stated that supervisors’ workload should be realistic, and it was stated in 2 that supervisors need support in order to supervise successfully. The student–supervisor relationship was identified in 3 publications as being a very important aspect of successful supervision, and in 3 publications it was stated that this can be influenced through student selection and allocation to a specific supervisor. Student needs also influence supervisory practices. It was stated in 3 publications that students need support from supervisors, and in 2 that they need support from their peers. Fiscal support was also mentioned in 2 publications. It was mentioned in 2 publications that just as supervisors need to have specific skills and competencies, students need to develop certain skills, including how to work with the feedback that they receive.

The review left the researcher uncertain as to the where, when, how and the like of supervisory practice, or what to include in training programs. To aid the researcher and others, the following information needs to be published in peer reviewed journals:

1. Supervisors’ requirements regarding the content of training programs that will support them in their supervisory practice
2. Reflection and reflective reports on best supervisory practices regarding:
 - Online communication skills
 - Online etiquette in communicating with students (netiquette)
 - Empathetic dialogue in the online environment
 - Principles and practice of constructive feedback
3. Best practices to gain supervisory experience
4. Best practices to manage cultural and language diversity
5. Affective relationships
6. Student allocation (the ideal fit)

The training and development of supervisory skills and practices must become a priority, but currently receive very little support and input from institutions and management (Drennan & Clarke, 2009). ODL universities and supervisors at institutions with high numbers of masters' and doctoral students have a particular challenge and best practice needs to be described in the literature to support supervisors, who are usually held solely responsible (Prinsloo & Maritz, 2015) for the academic success of large numbers of master's and doctoral students as well as producing and disseminating new knowledge through research (Anderson & McGreal, 2012). Postgraduate students and supervisors need to be encouraged to disseminate results in peer reviewed journals and ensure that the recommendations provide clear and concise answers to the important questions pertaining to the where, what, by whom and how of supervision so that implementation of specific guidelines is possible. Supervisors need to reflect on their own best practices and ensure dissemination of these reflective reports in peer reviewed journals to assist in defining best supervisory practices. Dissemination good supervisory practices in peer review journals can contribute to the enhancement of good supervisory practices in similar context.

Limitation of the study

A limitation of this study is the exclusion of the term 'advising' that is used in the United States of America (USA) for supervising students. This excluded the possible contributions from this continent.

Conclusion

Despite the evidence that the quality of research supervision contributes to student success and that further training of supervisors is needed, the research findings obtained from the integrated review, did not provide evidence to allow for the development of best practice guidelines, but very important gaps were identified such as content specific training programs for supervisors as well as the dissemination of good supervisory practices in peer review journals. There is a dire need for the publication of narratives to ensure the sharing of best supervisory practices, specifically within the ODL context.

Acknowledgements: The researcher acknowledges and thanks the librarian, Mrs Talana Erasmus and the co-coder, Dr Irene Lubbe, who assisted to enhance the rigor of the study.

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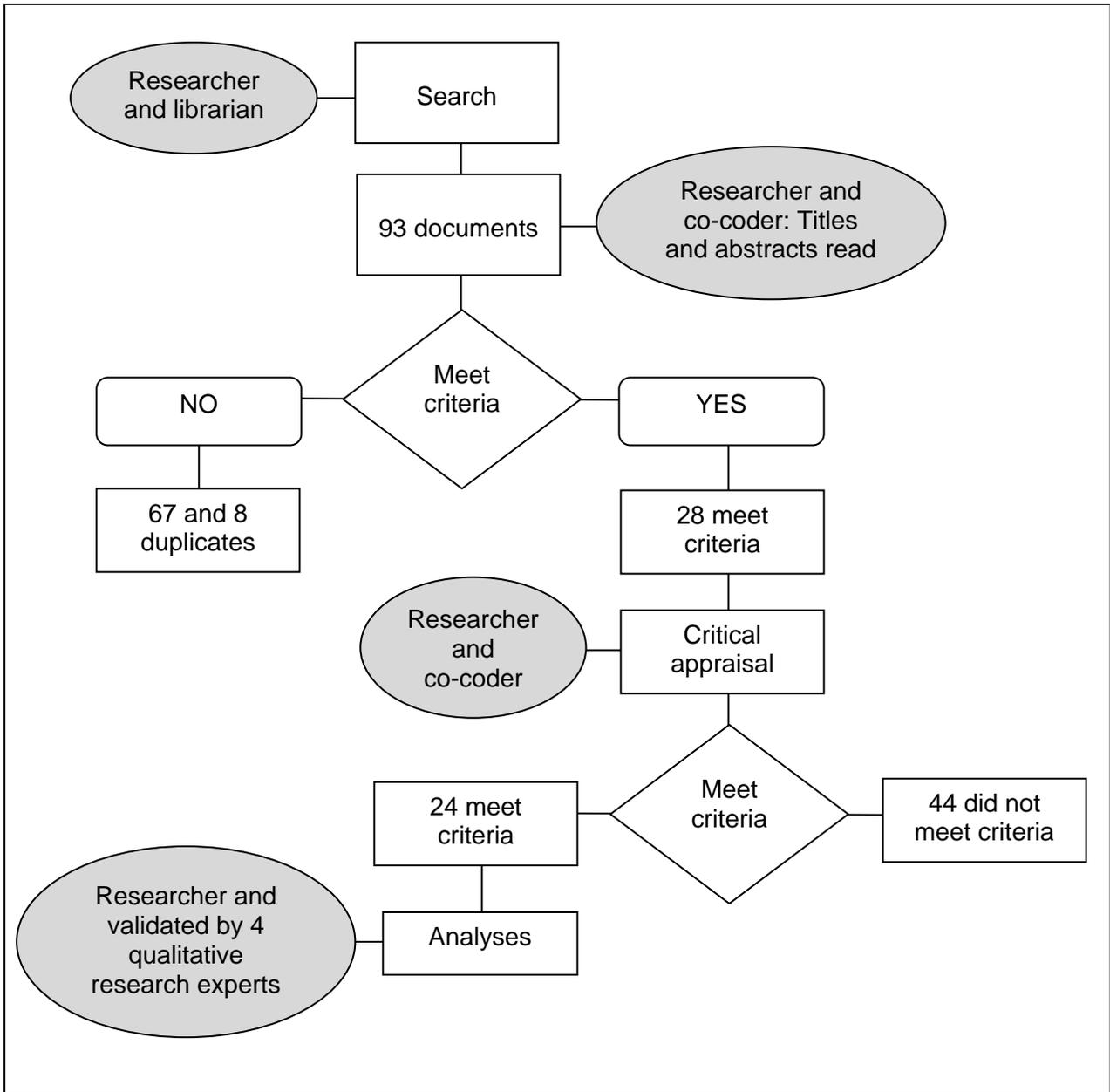


Figure 1. The research process

