

## Research Article

## Rights and responsibilities in research supervision

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## Abstract

Doctoral education in nursing and midwifery is expanding, placing higher demands on research supervision (RS). In this study, rights and responsibilities are examined, as well as academic supervisors' and postgraduate students' perceptions of important aspects of the RS process. A qualitative approach comprising 15 interviews and interpretative content analysis was employed. An overarching theme emerged: "the nature of the research supervisory relationship", describing the creation of a caring, constructive, supportive, and empowering relationship. In addition, two categories were identified: "taking responsibility for engaging in transformational learning, creating a research culture, and contributing to knowledge development" and "taking responsibility for safeguarding rights, as well as for enhancing awareness of research ethics and codes of practice". The findings suggest that a dynamic trusting supervisory relationship is a prerequisite for excellence in the RS process. In conclusion, this study provides evidence of the need for conceptualization of the RS process, and that it can be facilitated by a better understanding of how various ethical issues impact on research development.

## Key words

codes of practice, interpretative content analysis, nursing, research supervision, responsibilities, rights.

## INTRODUCTION

The postgraduate education of nurses and midwives has been identified as a critical factor for leadership in practice, scholarship, research, policy, and education (Ketefian *et al.*, 2005). Research supervision (RS) is an important component of the overall effectiveness of research in nursing and midwifery. It can be argued that RS is a prerequisite for quality research, because it includes contextualizing, as well as elements of evaluation and recommendation. Moreover, feedback is provided by means of advice, assessment, and counterstatements (Vehviläinen, 2009) related to the supervisory style and student needs (Deuchar, 2008).

The nursing and midwifery doctoral education is international (Ketefian & McKenna, 2005), although variation exists between countries. Despite the fact that RS is necessary in order to achieve change in clinical and community health care, this aspect of teaching and learning has been overlooked (Armstrong, 2004). Although there have been several studies of clinical supervision in nursing and midwifery, less attention has been paid to the RS process.

Socialization and the disciplinary culture in the university department determine the degree to which postgraduate students are given freedom and treated as colleagues (Hakala, 2009). This is an important aspect, as research integrity depends on decisions made by the researcher in her/his work as an academic leader. Postgraduate students are socialized

into an academic culture where they acquire the norms, standards, values, knowledge, skills, and behavior patterns associated with particular positions and roles (Hakala, 2009). The fostering of research integrity and honesty toward oneself and others (Beisiegel, 2010) is also important, and a basic principle related to the professional conduct of science.

Methodologies in published studies of RS are qualitative, sometimes combined with quantitative approaches (Severinsson, 2012). When considering key aspects of the relationship between the academic supervisor and postgraduate student, very few studies explore ethical issues. In a study of supervisory style and quality in RS, Kam (1997) highlighted the dependency factor in the relationship, and revealed that students are dependent on their supervisors in a range of research-related tasks, thus affecting the RS process. The dependency dimensions are related to work organization and problem solving, research preparation, and communication.

The relationship between the academic supervisor and postgraduate student is decisive for the success of the latter's master thesis and/or PhD (Deuchar, 2008). However, problems have been reported, such as postgraduate students' dissatisfaction with feedback on their manuscripts (Vehviläinen, 2009). Additional problems concern the supervisor's role, and the fact that individual differences influence self-perceptions and perceptions of others, which can have a positive or negative impact on aspects of ethical decision-making (Berggren & Severinsson, 2002; Lee, 2007).

Ethics in RS is not only related to the formality of obtaining approval and taking account of ethical considerations, but is a stance that involves reflection, thoughtfulness, and

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commitment (Berggren, 2014). There are four core ethical concepts that characterize the values of supervision: caring, dignity, responsibility, and virtue (Berggren *et al.*, 2005). It is assumed in the present study that the quality of RS can be enhanced by improving the relationship between postgraduate students and their supervisor. The quality of RS depends equally on academic supervisor–postgraduate student interaction and the outcome of the supervision process. The level of satisfaction with a supervision process depends on how much responsibility a student assumes, that is, an understanding of role expectations (Kam, 1997).

An analysis of the research literature provides evidence of inherent ethical problems in RS (Berggren & Severinsson, 2011). Goodyear *et al.* (1992) revealed several categories; for example, incompetent supervision, inadequate supervision, intrusion of supervisor values, abusive supervision, and authorship issues (i.e. plagiarism, failure to provide credit).

The consensus in the literature is that it is essential to study the quality of the supervisory style (Armstrong, 2004) and how to become an effective supervisor (Milne & James, 2002). The need to improve the quality of RS, build knowledge assets (i.e. theses, intellectual property), and develop access to empirical knowledge (by means of knowledge technologies and networks, such as advanced information technology tools and methods) is also highlighted (Zhao, 2003). Problem solving, research preparation, communication, and interaction are key aspects of the supervisory style (Severinsson, 2012; Severinsson, 2013). Despite the available empirical quantitative studies, minimal attention has been paid to the impact of various ethical aspects of RS. Therefore, the present study examines some of the individual factors that have an impact on academic supervisors' and students' rights and responsibilities in RS.

In this study, rights and responsibilities are examined, as well as academic supervisors' and postgraduate students' perceptions of important aspects of the RS process.

## METHODS

This research was designed based on qualitative research principles (Polit & Beck, 2012). The characteristics of the qualitative approach adopted in this are: striving for an understanding of the whole, as well as the researchers' capacity to be open, involved, and focused on individual experiences.

### Participants

Eligible participants were invited to take part in the study when attending various research activities at the university. The inclusion criteria were: acting as an academic supervisor and a minimum of two years' experience of RS at different postgraduate levels. Postgraduate students should have undergone two years of RS at a higher educational level and/or have submitted their thesis. Those who volunteered to participate contacted the researcher by phone or email to arrange a convenient time for an individual interview. Fifteen participants were included, aged 37–59 years ( $48.3 \pm 8.2$ ).

### Data collection

An audio-taped, semistructured interview lasting 50–90 min was conducted to cover the research questions: “What are the rights and responsibilities in RS?” and “In your opinion, what is most important in the supervisory process?”. Nine academic supervisors and six postgraduate students (14 females and 1 male) were interviewed at the university. They were invited to talk freely about their experiences of ethical issues in RS, as well as their rights and responsibilities in the supervision process. Examples of interview questions are: “What do you think is the responsibility of an academic supervisor compared to that of a postgraduate student?” and “What are your rights?”.

### Data analysis

The transcribed text was analyzed in a series of steps using interpretative content analysis inspired by Baxter (1991) and Graneheim and Lundman (2004). The text was first read in order to gain an overview and understanding of the content. Thereafter, structural qualitative content analysis was conducted sentence by sentence guided by the aim, and the main points mentioned by the participants were identified. The second step involved analyzing experiences of rights and responsibilities in RS from two perspectives (academic supervisor and postgraduate student). These two perspectives were reflected on in order to identify differences in and similarities of the interpreted themes. The nuances were identified by moving back and forth between the formulated themes and the whole text. Finally, the underlying meaning, that is, the latent content, was formulated in an overarching theme, the interpretation of which was reflected on in the light of the literature on specific ethical issues in the context of supervision (Table 1).

### Establishing trustworthiness

According to Lincoln and Guba (1985), qualitative researchers enhance the trustworthiness of the data by means of discussion and reflection on the concepts of credibility, dependability, confirmability, and transferability. Trustworthiness was established by using items on the checklist presented by Elo *et al.* (2014), and involved three phases: preparation, organization, and reporting.

In the preparation phase, the data collection was based on the aim, research questions, as well as the researchers' pre-understanding and experience of the topic. The sampling strategy adhered to a clear set of criteria. Credibility was achieved by including direct quotations from the interview text. Dependability, that is, the stability of data over time and under different conditions (Elo *et al.*, 2014), was achieved by asking more questions when the responses varied.

In the organization phase, that is, categorization and abstraction, the process of checking the analysis and interpretation of the data comprised discussion with two supervision research experts. The different themes and categories are provided in Table 1 and illustrate how the concepts and categories were created, thus allowing the reader to evaluate

**Table 1.** Example of a theme, categories, subcategories, and codes from the content analysis of the academic supervisors (AS) and postgraduate research students (S) in the supervisory process

Theme	Nature of the research supervisory relationship			
Categories	Taking responsibility for engaging in transformational learning, creating a research culture, and contributing to knowledge development		Taking responsibility for safeguarding rights, as well as for enhancing awareness of research ethics and codes of practice	
Subcategories	Transformational learning and evidence-based knowledge development	Creating a research culture	Awareness of rights and research ethics	Codes of practice
Examples of codes	Being prepared by sending manuscript to the supervisor before supervision (S) Learning by listening (S) Enabling students to perform and if they fail to do so, helping them to find out why (AS) Learning how to take notes at meetings with supervisors (S) Taking responsibility for learning (S)	Regular attendance at meetings (S) Acting as a resource person (AS) Posing questions to increase research capacity (AS) Taking responsibility for supporting students and providing access to the resources they need (AS) Helping them to become more competent, increasing their autonomy and professional growth, not too much “handholding” (AS) Guiding them through the system, fair and honest feedback (AS)	Right to intellectual property (AS) Right to refuse to take on students (AS) Right to a response on manuscripts (S) Right to select research topic (S) Right to choose and change academic supervisor (S) Right to interpret findings and develop critical thinking (S)	Right to discuss ethical research codes (S) Right to knowledge of existing requirements and what students are expected to achieve (S) Taking responsibility for ensuring that students conduct their research in an ethical way (AS)

the trustworthiness. The themes mirrored original research on the topic and were based on the literature review performed in the preparation phase, in addition to the empirical and theoretical knowledge of the two supervision research experts mentioned above. In order to determine confirmability, we considered alternative labels for the themes and categories. Transferability was discussed, as stated in the Limitations section.

Finally, in the reporting phase, that is, the systematic and logical development of the results, quotations were included to highlight the similarities and differences within and between categories.

### Research ethics

The human research ethics committee at the university granted formal ethical approval for the research project (no. 2007-32A). The participants received an information leaflet explaining the aims and design of the study. All text data from the interviews were rendered anonymous, and were only accessible to the researcher for the purpose of this study. The existence of a relationship with the participants was considered prior to the start of the research. The author was a visiting fellow at the university, and some participants knew her professionally due to international research

collaboration in nursing and midwifery. The researcher had no personal or academic responsibility for the participants, nor was she involved in assessing them. Participation in the study was voluntary. No pressure was exerted, and the participants were free to withdraw at any time. All participants opted to be interviewed individually.

This project was considered sensitive (Sieber, 1993), as it concerned the participants' private sphere, such as their integrity, ethical stance, and right to and responsibility for quality RS, all of which were core topics of the interviews (Liamputtong, 2007). Risk and harm were considered in the application to the human research ethics committee. Although it was possible that participants could have felt embarrassed when talking about their relationship with the supervisor, especially in cases where it was poor and they changed to another supervisor, this problem did not appear to have occurred. The text data and tapes were locked in a fireproof filing cabinet.

### RESULTS

All participants ( $n = 15$ ) had acted as a supervisor, eight were postgraduate students, and two were both supervisors and postgraduate students. Their own experience of the quality of supervision was rather poor (2), good (5), and excellent (8). Eight had changed supervisor during their research studies.

An overarching theme and two categories describing supervisors' and students' perceptions of RS were formulated by means of an interpretative approach that illuminated dimensions of awareness of their rights and responsibilities in the context of RS.

The overarching theme: "the nature of the research supervisory relationship" was interpreted as the creation of a caring, constructive, supportive, and empowering relationship. All participants stressed the importance of the supervisory relationship, and almost everyone agreed that it was necessary for the research process. No difference was reported between the supervisor and research student, and there seemed to be more expectations of engagement than of diversity prior to the supervision process.

The category "taking responsibility for engaging in transformational learning, creating a research culture, and contributing to knowledge development" revealed the importance of the supervisors building a research culture by engaging in transformational learning and promoting knowledge development. They created a research culture in which the students and academic supervisors were motivated in their roles. Different strategies were used to develop a mutual relationship with shared rights and responsibilities. The supervisors expected the students to take care of their fellow students. One supervisor stated that students had "responsibility for one another". A supportive relationship facilitated student emancipation and empowerment. Words, such as "structure", "continuity", "respectfulness", and "empathy", were used both by the postgraduate students and the supervisors to describe the culture of RS. One issue that was frequently raised in the interviews was the sense of becoming a person with academic skills. One supervisor commented: "The students can look after each other better than the supervisor can", referring to the development of research in the organization, as well as the university culture that helps clarify the boundary of the RS process. The contract with the university signed at the beginning of RS was part of the learning process. Although the development of the research was described as stressful, most of the students seemed to adapt fairly well.

Other dimensions in this theme were related to goal commitment and problem solving. The theme was also associated with the independency-dependency continuum in the relationship between the postgraduate student and academic supervisor, as well as supervision for the supervisors provided by another senior academic supervisor. The academic supervisors were aware of the students' role ambiguity and feelings of uncertainty, which were very evident at the beginning. They wanted to assume responsibility for creating a professional relationship based on trust.

The students' responsibilities were related to the process of preparing for examinations and developing theses. One academic supervisor stated: "They have to take responsibility for ensuring that they meet their coursework obligations in the agreed timeframe, participate in faculty research activities, such as faculty research week and group supervision. I'm responsible for advising them to ensure that their research is carried out in an ethically-correct manner".

The postgraduate students who participated in this study placed high expectations on themselves and on their academic supervisors in terms of knowledge development and the learning of academic skills. Their ambition was to conduct high standard research and develop their identity as a researcher. They wanted teaching, guidance, constructive and critical assessment, to be questioned, and have an opportunity to communicate, as well as interact with other students and academic staff. The supervisors acted as role models, explaining their own academic supervision experiences as part of the education. They also evaluated their supervision strategies in order to increase their competence. The supervisors appreciated the supervision of their supervisory styles provided by the university team.

The category "taking responsibility for safeguarding rights, as well as for enhancing awareness of research ethics and codes of practice" described the students' rights and obligations in accordance with the regulations of the University of Technology (2002). A student is entitled to receive the help she/he needs, which is regulated in the contract signed by the student and her/his academic supervisor. The student has a right to select her/his own research topic. However, if she/he is part of a wider research program, the topic can be decided prior to the start of the research, which is usually the case if the project is funded externally. Most of the students in the present study stated that they were permitted to choose their research questions and methodological approach. With regard to rights, one student stated: "I want to learn, be treated with respect, and do a good job". Another student expressed: "I appreciate the critical evaluation, as it enables me to improve, do the right things, and make the correct decisions in my research". Continuity was deemed important. The students and supervisors were in no doubt about the necessity of regular contact in order to discuss the work and any associated problems.

Some students were unhappy with the supervisory relationship because of difficulty communicating. Two students reported that they decided to change supervisor, in one case due to lack of accessibility (long-term sick leave), and in the other as a result of a problematic relationship and lack of "personal chemistry". These students were offered support and advice by the responsible academic officer and the supervisory team at the university.

The supervisors' rights in relation to their supervisory work included the right to refuse students who appeared to have no interest in the research topic. Most of the students selected their supervisor by contacting the director of research or the director of the master/doctoral program. They also visited the university website and contacted various academics.

They had all, in different ways, become familiar with the university system and code of practice. The students placed high expectations on their academic supervisors. They wanted to have an active part in the research process and wished that the supervisor would clearly articulate requirements and what was expected of them. This issue is set out in the code of practice for supervisors, advisors, and research degree candidates. One ethical dilemma was reported pertaining to the incongruence between students' ability to work and the outcome of the supervision.

## DISCUSSION

The most important part of the RS process was the research supervisory relationship. This theme mirrored the ethical issues: responsibility, rights, awareness of ethical stance (including codes of practice and ethical dilemmas), as well as learning about and developing new knowledge of the research process. This study contributes evidence of the importance of a supervisor who encourages and motivates students to develop research, which is not only essential for the postgraduate students' development as academic researchers, but also for the academic staff and research in general. The ability to provide stimulating supervisory leadership is dependent on the supervisors' knowledge of and interest in the topic. This finding is in accordance with previous research by Armstrong (2004), who reported on the importance of supervisors having an analytical cognitive style. The quality of research supervision is dependent on interactions and communication skills, characterized as mutual trust, respect, and obligation (Armstrong, 2004).

From the students' perspective, systematic feedback is critical, thus feedback and evaluation strategies must be clearly stated (Maor & Herrington, 2011). Academic supervisors are dedicated to postgraduate students' pursuit of learning; guiding, helping, and supporting those for whom they are responsible (Maxwell & Smyth, 2011).

"Taking responsibility for engaging in transformational learning, creating a research culture, and contributing to knowledge development" took the form of arranging a systematic seminar, workshops, and leading the research group. These strategies eliminated the risk of isolation during the research process. According to Nulty *et al.* (2009), supervision supports each individual's progress, irrespective of the model adopted. Thus, the supervisors' ability to be flexible and adapt the process is one of the hallmarks of supervisory excellence (Nulty *et al.*, 2009, p. 3). New research-related strategies also motivate students to conduct their own research. The relationship with others reflects the continuum of autonomy and dependency (Kam, 1997; Lee, 2008; 2009). The role of student always implies a high degree of dependency. In order to create a trusting relationship, clear communication, as well as awareness of individual goals and expectations, is essential (Severinsson, 2010a,b). The supervisors' academic knowledge of the research topic and previous experience of supervising on different educational levels require reflection to prevent role ambiguity in terms of students' expectations and development of autonomy as researchers. Thus, education for supervisors of postgraduate students is necessary (Majcher & Daniluk, 2009).

"Taking responsibility for safeguarding rights, as well as for enhancing awareness of research ethics and codes of practice" demonstrates the complexity of the academic supervisory role. In this study, the students' rights and obligations were stated in the regulations of the university. It is interesting to note that the ethical dilemma found was related to the student-supervisor relationship (Severinsson, 1999; 2012). This is in accordance with Thompson *et al.* (2005), who reported that increased academic accountability ensures that

good supervision is an integral component of quality RS, and should therefore be funded accordingly.

There is a need for greater emphasis on professional leadership in research education (Hammond *et al.*, 2010). In addition, research development enhances the quality of patient care (Akerjordet *et al.*, 2012a,b). If academic supervisors take an active interest in evidence-based knowledge and available models for implementing it in practice, the result will be a higher level of change that will help to transform the education of clinical and/or academic research students. However, not all team members need to be experts in the area of clinical practice, but could serve as an expert in the methodology of the study. Evidence-based knowledge development enhances the quality of patient care. Nurse managers who are responsible for quality of care can ensure that research is utilized conscientiously and effectively.

## Limitations

The strength of this study was the opportunity to report ethical issues related to RS by means of interpretative analysis. The integration of the literature, with the study findings based on the presentation of quotations and meaning units, was performed by experienced qualitative researchers (Dixon-Woods *et al.*, 2004). A limitation of this study is transferability (Elo *et al.*, 2014), as the results are only valid for the study group. An additional limitation is that the study included only two disciplines (nursing and midwifery), which could have influenced the trustworthiness of the results. A multidisciplinary approach might have revealed other aspects of the phenomenon. Different research methods, such as explorative interpretative analysis and case studies, are needed to determine the key concepts of various supervisory models; for example, creating a research culture in nursing practice and becoming a member of the research discipline.

## Conclusion

In conclusion, the impact of the RS relationship is decisive for facilitating learning, as well as professional and research development. A trusting relationship with a senior researcher who is respectful and supportive influences the quality of the research. Recommendations for future studies are the benefits of RS, the autonomy and role ambiguity inherent in the roles of academic supervisor and postgraduate student, as well as core phenomena in supervisor training. In addition, it is essential to evaluate RS. Awareness of critical issues, such as dissatisfaction with RS and lack of development, can be improved by education and supervisory panels that afford an opportunity to discuss the strengths and weaknesses of these roles. In order to bridge the gap between high-quality research and nursing practice, it is necessary to strengthen the links between theory, evidence, and practice.

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## CONTRIBUTIONS

Study Design: ES.

Data Collection and Analysis: ES.

Manuscript Writing: ES.

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