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Giving and receiving written feedback on research reports: A narrative review and guidance for supervisors and students

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Abstract

Purpose: *Written feedback on research-related writing is an important educational component of novice researcher development. Limited evidence exists to inform effective written feedback, particularly in relation to research reports by novice researchers. The aim of this narrative literature review was to explore supervisor and novice researcher perspectives on the provision of written feedback, particularly in the context of their evolving supervisory relationship.*

Methods: *A systematic search of peer-reviewed journals in educational and health databases was undertaken for the terms 'written feedback' and 'research report', from January 2001 to August 2020. Identified literature was critiqued for methodological quality. Findings were coded, grouped and described as themes. Next, the themes and their parts were applied to the development of a two-part written feedback checklist that includes separate but related recommendations for supervisors and novice researchers.*

Findings: *From 35 included papers, the four main themes that related to written feedback on research reports by novice researchers were: the emotional impact of receiving or giving written feedback; written feedback in the supervisory power dynamic; communicating written feedback; and the content and structure of written feedback. The changing nature and complexity of factors associated with written feedback from research supervisors reflected the transition from a supervisory relationship to a peer relationship. The checklist developed from the synthesised data is intended to provide guidance for supervisors and students about their respective and shared responsibilities within a supervisory relationship.*

Implications: *Increased awareness of the characteristics, roles and impact of written feedback will assist supervisors of novice researchers to provide effective written feedback, and for students to effectively utilise written feedback. Progression of written feedback throughout the supervisory period is proposed as a means of transitioning from a teacher-student to a peer researcher relationship.*

Keywords: written feedback, supervisor, research, report, thesis

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Terminology:

The term 'research report' will be used in this paper to refer to clinician research reports, capstone undergraduate research honours projects and postgraduate master's and doctoral dissertations and theses. The term 'novice researcher' was used to describe postgraduate or research honours students who were conducting research for the first time, and not as part of a subject with a coursework component.

INTRODUCTION

Written feedback from research supervisors is an essential instructional communication method in academic practice (Can and Walker, 2011), particularly when a research report is used to assess a student researchers analytical skills and scientific proficiency (Matthews and Mercer-Mapstone, 2016). The quality of written feedback, and how it is received and used by the student, influence the standard of the resulting written document. Effective application and use of written feedback can enhance a report or thesis to an acceptable standard for the attainment of a research specific qualification or outcome.

Definitions of feedback vary widely, and there is a lack of agreement about what constitutes 'good' feedback (Li and Barnard, 2011). The understanding of the components of feedback vary between professions and between individuals (Bitchener et al., 2010). A useful definition by Archer (2009, p. 101) described effective feedback as 'feedback in which information about previous performance is used to promote positive and desirable development'. In a survey of university graduates, Carless (2006) described written feedback as more than simply 'the annotations and comments on drafts or on finalised assignments' but an active dialogue that encompasses written or verbal conversations that occur in relation to any stage of the body of work.

Written feedback can be formative or summative, with formative feedback intending to guide learning and progress and summative feedback used to reinforce learning and as justification for a report mark or course outcome (Houston and Thompson, 2017). Formative feedback is considered useful for learning when it is timely, provides information about the quality of the contents, offers some guidance and direction, is clear and unambiguous without being autocratic (invites opinion, 'argument' or debate), is clear to the recipient, and favours reflection (Heitink et al., 2016). Appropriate formative feedback can support a student's transition towards self-reflection, reworking and self-regulation of learning. (Hattie, 2012).

A key role of feedback is to encourage growth and learning (Donnelly and Kirk, 2010), with a corresponding performance improvement (Heylings and Tariq, 2001). One of the desired growth areas is in the skill of academic writing (Kumar and Stracke, 2011, Parboteeah and Anwar, 2009). Stracke and Kumar (2010) reported that written feedback can be effective in improving confidence in research and writing abilities. Written feedback can be used to aide reflection, with constructive feedback enabling the learner to reflect on their academic performance (Donnelly and Kirk, 2010). The ability to reflect assists the researcher in assuming a habit of self-directed and self-regulated learning, which is an essential step in moving from a novice to an expert (Kumar and Stracke, 2011). Written feedback can also suit the purposes of the educational institute, with an analysis of feedback for recurrent themes potentially identifying gaps in the teaching curriculum (Archer, 2009).

Written feedback on research-related writing influences the supervisory relationship. The process of providing and receiving written feedback can be challenging for both the supervisor and researcher (Kumar and Stracke, 2011). The high level of personal investment associated with the submission of a report or thesis that represents the culmination of many years of supervised research intensifies the pressure on the supervisory relationship (Kumar and Stracke, 2011), as well as the role of written feedback within the relationship. The evolving nature of the supervisory relationship adds a layer of complexity to the feedback dynamic and process (Li and Seale, 2007). An understanding of the benefits and risks inherent in the feedback process can assist research supervisors and their students in navigating these challenges (Kumar and Stracke, 2007).

Within the tertiary sector, the ability to provide effective written feedback is considered a skill central to the development of effective learning (Donnelly and Kirk, 2010). It is also described as 'an area for concern for universities' (Parboteeah and Anwar, 2009). Despite this recognition of the importance of capability for effective feedback, the skill of providing feedback is relatively under-researched (Callaham et al., 2002, Carless, 2006). A discrepancy exists between the concerns of students about the quality of guidance and feedback on academic writing by supervisors (Cotterall, 2011) and the feedback providers (supervisors) assuming their feedback as being effective (Parboteeah and Anwar, 2009). This may be due to the variability between supervisors and the quality of written feedback to students, and on the professional identities and perceived supervision-related stress experienced by the supervisors themselves (Wisker and Robinson, 2016).

It is reported that supervisors commonly assume that feedback will be embraced and adopted to a greater or lesser extent by the student (Parboteeah and Anwar, 2009), leading to behaviour change and academic growth. This assumption remains equivocal since there is little research into the thought processes and priorities of supervisors or assessors concerning written feedback (Bitchener et al., 2010). A qualitative study by Paltridge (2013) reported that reviewers learn to review manuscripts through their own experience of receiving feedback. Also, 'learning by doing' improved their feedback skills when conducting peer reviews for journals (Paltridge, 2013). Conversely, providing feedback has also been described as challenging, with a higher degree of supervisors reporting struggles to articulate implicit and acquired knowledge (Pare, 2011). While they may have learned by doing, describing this process to others may be challenging.

Using educational philosophies in the context of written feedback also remains relatively unexplored. Written feedback on research reports is almost exclusively reported for higher degree theses, which have historically favoured teacher-student approaches (De Kleijn et al., 2013). Existing literature on adult learners' approaches to written feedback focus primarily on coursework material and written assignments (Bolton, 2006) but does emphasise the need for different styles of feedback, depending on the learners' career and life stage (De Kleijn et al., 2013) and requirements of the course or program of learning.

To date, the role of written feedback on research reports and the associated challenges and risks involved in providing and receiving written feedback have not been fully explored. The features of written feedback that provide a positive teaching and learning experience and optimal outcomes have not been described, particularly concerning novice researchers. Both supervisor and student perspectives on written feedback must be considered, particularly in light of the evolving nature of the student-supervisor relationship over candidature towards near peer status.

This narrative literature review aimed to investigate the context, features and potential impacts associated with the exchange of written feedback on research reports. In particular, the paper examines the role of written feedback in the evolving relationship between novice clinician-researchers and their supervisors. This research is expected to provide academic supervisors of novice researchers with strategies for optimal use and management of written feedback in the supervisory relationship and provide guidance for the supervisor and student to effectively manage the transition from learner to peer.

METHODS

LITERATURE SEARCH

A structured search strategy initially targeted databases containing scientific journals most commonly representing education and health research literature. The selected databases (ERIC, Emerald, Ovid, CINAHL, Science Direct, SAGE Research Online) were searched using the term 'written feedback' combined with 'research report' for a resultant Boolean search string ('written feedback' AND 'research report' OR 'thesis' OR 'theses'). For practical purposes, the literature was confined to publications in English. The search was limited to the period from January 2001 to August 2020 to ensure current literature.

Citations were initially screened for relevance in the title and abstract. Articles were selected for inclusion solely on subject matter relevance, and no research types were excluded (Table 1). Further relevant literature was identified using database linked recommendations and a snowballing strategy of designating key articles as 'citation pearls'. Ovid Pubmed was searched specifically for papers citing these articles.

Table 1: Inclusion and exclusion criteria in systematic search for narrative review on written feedback in research reports

Criteria	Include	Exclude
Study type / paper	Published 2000 or later English language (full text) Primary study/review/PhD thesis/commentary	Before 2000 Language other than English Same data on this topic as a previous study
Study population	Novice researchers (clinician-researcher, master's or PhD candidates)	Postdoctoral researcher Undergraduate coursework (other than research honours)
Study focus	Written feedback on thesis or major research report	Written feedback on assessments (not a research report) Cultural factors or language as the primary focus Supervisory relationships without written feedback component Student perspectives of supervision not related to written feedback on research reports

CRITICAL APPRAISAL

An examination of the retrieved literature used an approach informed by Parboteeah and Anwar (2009) in their systematic review of feedback on written assignments (Parboteeah and Anwar, 2009). All literature was critically appraised: review papers were assessed using the 'Complete Guides' proposed by Crombie (1996); the STROBE guidelines were used for cross-sectional studies (von Elm et al., 2007), the COREQ guidelines for qualitative works (Tong et al., 2007) and the Mixed-Method Appraisal Tool for mixed-methods studies (Hong et al., 2018). A single reviewer (DS) appraised all papers and a subjective rating of reporting quality (high, moderate, low) was allocated based on the completeness of responses to the key and detailed questions in each guide. A second reviewer (KD) checked this appraisal and no discrepancies were identified. Three descriptive or commentary papers (Danby and Lee, 2012, Heylings and Tariq, 2001, Chong, 2018) were papers and were, therefore, not appraised.

DATA COLLATION AND ANALYSIS

Data was consolidated and analysed using the step-wise process for the thematic analysis described by Braun and Clarke (2006). Two of the authors independently familiarised themselves with the data by reading and rereading the papers in the screening and appraisal phase before generating and collating initial codes across the entire dataset. Following this, the authors collated codes into potential themes before collectively reviewing, defining, describing and naming the themes. The authors developed a matrix of the four key themes and who is 'responsible' (supervisor, student or shared) to develop a checklist of points about written feedback for supervisors and students to consider. The matrix was progressively populated from the data, with source citations retained. The draft matrix was discussed, refined and finalised as a checklist by the authorship team.

RESULTS

Forty-nine full-text articles were retrieved for a comprehensive review. Of which, 35 related to written feedback on research reports and were included in this review (Table 2). Eighteen studies rated as 'high' quality, 10 as 'moderate' quality, three as 'low' quality and four were not rated (Table 2). Seventeen studies used a qualitative methodology, six used mixed methods, five were quantitative, three were systematic reviews and four were descriptive/commentary papers. Written feedback is particularly essential in guiding the learning experience in the context of major research reports like theses since the report is often the only assessed task for research students. This narrative review resulted in four main themes being identified in the thematic analysis:

- Emotional impact of receiving or giving written feedback
- Written feedback in the supervisory power dynamic
- Communicating written feedback
- Content and structure of written feedback

Table 2: Research type, reporting quality and description of data collection methods of papers included in written feedback narrative review

Research Type	Authors (Year)	Reporting (Checklist)	Quality	Data Collection Method
Systematic review	Inouye & McAlpine (2019)	High (Crombie's)		Systematic review
Systematic review	Silva & Marcuccio (2019)	High (Crombie's)		Systematic review
Systematic review	Parboteeah & Anwar (2009)	High (Crombie's)		Review of 18 papers including two meta-analyses
Quantitative pre-post intervention	Hey-Cunningham, Ward & Miller (2020)	High (SQUIRE)		Pre-post questionnaires with 13 doctoral students and nine supervisors
Quantitative cross-sectional	de Kleijn, Meijer & Brekelmans (2014)	High (STROBE)		Questionnaires (n= 1016) with master's students
Mixed methods	Bastola (2020)	High (Mixed-Methods Tool)	Appraisal	Survey with 30 supervisors and 50 master's students. Interviews five supervisors and five students
Mixed methods	Bastola & Hu (2020)	High (Mixed-Methods Tool)	Appraisal	Supervisory comments on thesis drafts (n=97). Interviews with 16 supervisors and 16 students
Mixed methods	Can & Walker (2011)	High (STROBE)		Doctoral students, interviews with 15 doctoral students and surveys with 276
Mixed methods	East, Bitchener & Basturkmen (2012)	High (STROBE)		Questionnaires (n= 53) and interviews (n= 22) with research students
Qualitative case study	Adams (2019)	High (COREQ)		Interview with one doctoral graduate
Qualitative	Basturkmen, East & Bitchener (2014)	High (COREQ)		Content analysis of 15 reports
Qualitative	Chamberlain (2016)	High (COREQ)		Interviews with 11 pairs of supervisors and HDR students, text examples of written feedback
Qualitative	Crossouard & Pryor (2009)	High (COREQ)		Interviews with 11 doctoral students
Qualitative	Inouye & McAlpine (2017)	High (COREQ)		Repeat interviews with two doctoral students
Qualitative case study	Li & Seale (2007)	High (COREQ)		Single case study, multiple written and recorded data sources
Qualitative case study	Ridgway (2017)	High (COREQ)		Single PhD candidate and supervisor
Qualitative	Wang & Li (2011)	High (COREQ)		Interviews with ten doctoral students

Quantitative cross-sectional	Gonzales-Ocampo (2017)	Moderate (STROBE)	Surveys with 61 doctoral supervisors
Quantitative cross-sectional	Nurie (2018)	Moderate (STROBE)	Survey with 51 doctoral candidates
Quantitative cross-sectional	Singh (2016)	Moderate (STROBE)	Questionnaire (n= 21) doctoral students
Mixed methods	Bitchener et al. (2010)	Moderate (COREQ)	Questionnaires (n= 35) and interviews (n= 22) with research supervisors
Mixed methods	Carter & Kumar (2017)	Moderate (COREQ)	Questionnaires (n= 266) and interviews (n= 11) with doctoral supervisors
Qualitative cross-sectional	Eyres et al. (2001)	Moderate (COREQ)	Interviews with 15 doctoral students
Qualitative case study	Schulze (2009)	Moderate (COREQ)	Action research examination of two learning modules
Qualitative case study	Zhang (2020)	Moderate (COREQ)	Text assessment of thesis drafts, supervisor feedback, and retrospective one-to-one interviews for 3 master's students
Qualitative	Kumar & Stracke (2011)	Moderate (COREQ)	Thematic analysis of six examiner reports on theses
Qualitative	Sankaran et al. (2005)	Moderate (COREQ)	Thematic analysis of three practitioner stories
Qualitative case series	Cotterell (2011)	Low (COREQ)	Narrative analysis of repeat interviews with two doctoral students
Qualitative descriptive	Kumar & Stracke (2007)	Low (COREQ)	Examination of feedback on a single thesis
Qualitative descriptive	Stracke & Kumar (2010)	Low (COREQ)	Examination of feedback from multiple sources on a single thesis
Discussion paper	Hodgson 2020	Not rated	Synthesis of existing literature
Commentary	Chong (2018)	Not rated	Development of a conceptual framework
Descriptive	Danby & Lee (2012)	Not rated	Described two alternate pedagogical approaches
Descriptive	Heylings & Tariq (2001)	Not rated	Focus groups, number of participants not stated

The student and supervisor perspectives were both described in some studies. Meanwhile, other studies focused specifically on either the student or supervisor perspective. The types of research reports where written feedback was provided were generally doctoral or master's theses, but also included reports from graduate courses in which a research report was the major assessment task. The themes we identified are somewhat consistent with three paradigms of written feedback conceptualised by Chong et al. (2018). They reported that the vast majority of studies on feedback focus on structural, 'product' type feedback. Meanwhile, 'interactive' factors, such as relationship dynamics and 'internal' responses of students, were less represented (Chong, 2018). Here we reflect on the intra- and inter-personal impact of receiving written feedback from the student perspective and the impact on supervisors of delivering written feedback, as well as collating and describing the structural and content components of written feedback on research reports.

EMOTIONAL IMPACT OF RECEIVING OR GIVING WRITTEN FEEDBACK

Carter and Kumar (2017) describe receiving feedback as 'an inherently emotional business' and believe that writing feedback 'must avoid breaking the fragile shell of success'. Feedback has been shown to have an affective influence, with negative feedback having an emotional impact (Can and Walker, 2011, Tuveesson, 2014, Carter and Kumar, 2017) that may lead to a loss of confidence and withdrawal from seeking further feedback (Can and Walker, 2011), thereby influencing future learning (Li and Barnard, 2011, Parboteeah and Anwar, 2009). Carter and Kumar (2017) recommend that all written feedback in research reports contains some praise, particularly early in candidature. Honest feedback is also possible through the balancing of critique and enablement (Carter and Kumar, 2017).

Students receiving feedback on a research report may include experienced clinicians, who are novice researchers, or high achieving undergraduates and graduates. Students who commence a higher degree immediately after their undergraduate studies are likely to have achieved high grades in their undergraduate courses and may mistake critical written feedback as criticism (Wei et al., 2019). Research students who are drawn to the practical aspects of research may need repeated iterations of a report to achieve high academic writing standards, especially if they do not have an aptitude or inclination for crafting text (Wei et al., 2019). There is a high degree of variability concerning skills, confidence and recent experience in academic writing, with more than half of higher degree research students (in Australia) aged over 30 years when they enrol (Hey-Cunningham et al., 2020). Therefore, life experience factors before enrolment have the potential to substantially impact on students' experience in a research course that has a written report as the major assessment item.

In a qualitative case series, Inouye et al. (2017) investigated how feedback interacts with agency (Inouye and McAlpine, 2017). They observed that critically engaging with feedback was linked to confidence in scholarly identity, which perpetuated ownership and agency. The rate and degree to which this forward cycling of confidence and agency progressed were determined by previous experiences of feedback (Inouye and McAlpine, 2017). Conversely, receiving highly critical feedback has been described by students as being a devastating experience (Stracke and Kumar, 2010). The emotional reaction reflected the degree of personal investment in a research report or the extent to which researchers (particularly novice researchers) personalised the critique of their work (Eyres et al., 2001). Receiving negative feedback in a written form is reported by students as preferable to verbal or face-to-face delivery since they can

absorb the feedback and reflect in private, thereby mitigating some of the emotional impact (Crossouard and Pryor, 2009).

In their 2005 paper, Sankaran, Swepson, and Hill reflected on their personal experiences of giving and receiving critical written feedback to emphasise the emotional investment involved in submitting research reports or theses (Sankaran et al., 2005). Many years later and all entrenched in academic careers, the authors still refer emotively to the feedback received, describing examiners who agreed with their report as 'open-minded' and using words like 'scary', 'angry' and 'frustrated' to describe responding to the critical feedback (Sankaran et al., 2005).

There is some evidence that emotional responses to negative feedback decrease with experience (Can and Walker, 2011). Chong (2018) suggests that trust in the student-teacher relationship can facilitate resilience and that self-efficacy and self-regulation are critical at a personal level for the student (Chong, 2018).

However, resilience to feedback may not apply for novice researchers, who are particularly vulnerable to negative feedback and report feeling abused by the experience (Eyres et al., 2001). Therefore, novice researchers, particularly those who enter from a successful academic or work career, must be well prepared for the vulnerability and possibility of 'failure' that research can bring (Carter and Kumar, 2017). Supervisors also report that it is challenging to deliver negative written feedback without risking the student's confidence or supervisory relationship (Li and Seale, 2007). The consequences of negative written feedback are reported to be more pronounced when the supervisor has a directive feedback style (Stracke and Kumar, 2010).

WRITTEN FEEDBACK WITHIN THE SUPERVISORY POWER DYNAMIC

Written feedback is provided within the context of an existing power relationship (Can and Walker, 2011, Crossouard and Pryor, 2009). However, opinions vary about the role of feedback in power dynamics. Bitchener et al. (2010, p 10) describe the relationship as being 'more consistent with a pedagogy, where critique or advice is provided by the supervisor or supervisory team who is (are) regarded as the "expert(s)". Alternately, Kumar and Stracke (2007) describe the feedback relationship on research reports, particularly at a doctoral level, as more consistent with a peer relationship (Kumar and Stracke, 2007). East et al. (2012) report that while students realised they were ultimately responsible for their work, a sense of partnership and equality in the relationship and genuine interest by supervisors helped them to optimise performance and output (East et al., 2012).

The power relationship between the student and supervisor should progress from an apprenticeship towards power equality through the course of the research project (Li and Seale, 2007). This changing dynamic sees the research student progress from a passive role by gradually increasing their expertise and capacity for self-reflection and self-regulation and relying less on supervisory expertise (Wang and Li, 2011). This transformational process is consistent with doctoral pedagogic practices described by Danby and Lee (2012) as 'a flexible construct which allowed for changing relationships'. The potential for the research student to become a 'full member of the disciplinary community' depends on the research supervisor recognising and being responsive to the changing needs of the researcher (Cotterall, 2011).

The student's confidence in their academic writing and associated research skills contribute to shifting the power dynamic towards a peer relationship. Inouye et al. (2019) reported that the experience of preparing written work and exchanging

feedback in peer writing groups contributed to a growth in their confidence and capacity for self-reflection, both of which contribute to transitioning of the student-supervisor power relationship.

Wang and Li (2011) indicated that directive feedback is preferred by those in a more dependent relationship (Wang and Li, 2011). Students with a more equal relationship prefer guidance or more goal-oriented feedback (De Kleijn et al., 2013). Notably, while not the focus of this review, cultural factors influence preferences and perceptions concerning power dynamics. Negative feedback can bring power dynamics to the forefront, with students being more likely to question the motives behind the feedback provided (Can and Walker, 2011) and interpret critique as being directed at the individual rather than the written work (Eyes et al., 2001).

A supervisor's professional identity and personal perceptions of stress influence the power dynamics in the supervisory relationship (Wisker and Robinson, 2016). Students' research progress is positively influenced if supervisors have minimised their stress and isolation, developed personal coping strategies and perceive themselves as having institutional support (Wisker and Robinson, 2016).

COMMUNICATING WRITTEN FEEDBACK

Written feedback is an important communication method that can be effective for engagement and stimulating critical thought (Can and Walker, 2011). Single episodes of feedback may be part of an ongoing dialogue (Bitchener et al., 2010) in which supervisors respond to the ideas raised within the research report (Stracke and Kumar, 2010) while continuing to teach and train academic writing (Kumar and Stracke, 2007). Eyes et al. (2001) postulated that feedback is most effective if it leads the recipient towards pushing boundaries, encouraging thinking and creating a dialogue (Eyes et al., 2001). Similarly, Adams (2019) conceptualises feedback as dialogic and transformational, with the research student taking increasing responsibility during their candidature for orchestrating the communication by actively participating in the feedback process and engaging with the development of academic relationships and practice (Adams, 2019).

In a small-scale study, Stracke and Kumar (2010) reported expressive feedback (e.g., praise, criticism and opinion) as most useful in engaging the researcher in reflection and dialogue (Stracke and Kumar, 2010). This is consistent with the statements of other authors who see feedback as being effective when it is suggestive rather than directive (Can and Walker, 2011) and creates a dialogue that encourages reflection (Stracke and Kumar, 2010). One study reported effective feedback should include justification for the comments provided and present an alternate perspective or suggestion (Stracke and Kumar, 2010). In another study by East et al. (2012), students suggested that supervisors project feedback into 'feedforward' towards constructive, future progress and that supervisors incorporate feedback within the relationship rather than as a discrete interaction (e.g., incorporating feedback discussion as an agenda item in a meeting) (East et al., 2012).

Written feedback can hinder the development of dialogue, particularly if the feedback is delivered at an inappropriate level to the recipient (Parboteeah and Anwar, 2009), such as providing feedback at an academic level if the recipient is a novice researcher. Similarly, if there is more than one individual providing feedback, a lack of communication between feedback providers can lead to confusion and inconsistency (Sankaran et al., 2005). Students need to be well versed and well prepared by supervisors to consider a range of viewpoints and value this as part of their reflexive and critical thinking development.

Wei et al. (2019) specifically highlight the need for overt, explicit discussions between supervisors and students to clarify expectations about the writing process, feedback process and academic culture (Wei et al., 2019). Although early agreement of feedback terms seems to be a common-sense, routine approach, Wei reports that more than half of the 80 doctoral students in their study would have benefitted from clarity and direction around expectations early in their candidature.

STRUCTURE AND CONTENT OF WRITTEN FEEDBACK

Although feedback structure and content were rarely the primary focus of the included studies, issues related to the amount, nature, format and (in)consistency of feedback; how it informed future report iterations (feedforward); and the relationship between written and verbal feedback was frequently cited. Proposed models for structuring feedback included the use of a framework (Ridgway, 2017, Sankaran et al., 2005) by complexity (Chamberlain, 2016), sequential (from general to specific) or cumulative (building on previous feedback) approaches (Stracke and Kumar, 2010).

A study by Ridgway (2017) investigated the effect of using a linguistics-based framework for feedback on a thesis chapter of a postgraduate student. The supervisor provided feedback on whole text, paragraph and sentence levels, so the student could systematically address each aspect of the feedback separately (Ridgway, 2017). A similar approach is reported in a PhD thesis about writing-centred supervision in higher degrees (Chamberlain, 2016). Chamberlain (2016) proposes interconnected levels of feedback along a continuum from 'big picture feedback' for complex tasks around writing cohesion, clarity and flow through 'mixed feedback' at a paragraph and sentence level to 'surface-level feedback' relating to layout, spelling and grammar (Chamberlain, 2016). Although guidelines for postgraduate supervision indicate that 'aspects of language and style are not the responsibility of the supervisor', Chamberlain (2016) reports that most supervisors contribute 'surface-level' feedback on spelling and grammar since they feel responsible for the final document's quality.

Sankaran et al. (2005) also advocated for working to a structure when providing feedback and providing the researcher with a copy of the structure to ensure transparency (Sankaran et al., 2005). The concepts described by Sankaran et al. (2005) form the basis of the checklist for supervisory feedback developed to complement this review (Table 3). Other examples of structuring feedback include an initial focus on the strengths of the report before offering constructive criticism or from general comments before offering more specific feedback (Donnelly and Kirk, 2010, Stracke and Kumar, 2010). The overall feedback may relate to the academic merits of the report as a whole (Stracke and Kumar, 2010) or be more general and comment on aspects of writing and analytical skills (Callaham et al., 2002, Parboteeah and Anwar, 2009). Specific feedback may include comments on content and the structure, organisation and flow of the report (Can and Walker, 2011, Parboteeah and Anwar, 2009). Kumar and Stracke (2007) have further stratified written feedback as referential (structure and organisation), directive (instructions and questions) and expressive (critique and praise) (Kumar and Stracke, 2007).

The ongoing process of providing formative feedback as a structure that 'scaffold(s) the learning' (Schulze, 2009, Stracke and Kumar, 2010) was mentioned often in the included papers. This structure assists in providing direction to the development of active learning processes and for the research report or thesis (Heylings and Tariq, 2001). Carter and Kumar (2015) also recommend scaffolding of writing and feedback to allow for and facilitate learning throughout candidature. For example, if a supervisor knows they have addressed grammar in one feedback cycle, they can

reference this in the next cycle and make recommendations for further skill development where required (Carter and Kumar, 2017). Conversely, students report that a lack of timely formative feedback leaves them feeling directionless (Heylings and Tariq, 2001).

Doctoral supervisors consistently report that students seem to ignore their feedback (Carter and Kumar, 2017, Neupane Bastola and Hu, 2020, Parboteeah and Anwar, 2009). Conversely, students report that they sometimes choose not to enact feedback after careful consideration. (Carter and Kumar, 2017, Neupane Bastola, 2020) This process of 'active inaction' may be perceived by supervisors as a disregard for their feedback. A suggestion made by doctoral supervisors to overcome this incongruity was to request that the student responds to feedback similarly to responding to journal reviewers (Carter and Kumar, 2017). This process provides an avenue and platform for the student to argue a different opinion or theory than their supervisors, but it is clear to the supervisor that the student is actively doing so, rather than ignoring the feedback. This process simultaneously allows the supervisor to check feedback efficiently and the student to practice responding to the reviewer's comments (Carter and Kumar, 2017). Reading and considering structured feedback responses provides supervisors with the opportunity to learn from the student and advance ideas within the area of a scientific enquiry being explored, both of which contribute to progress along the relationship transition continuum.

Other authors focused on the amount and quality of feedback to be higher priorities than the structure of the feedback while acknowledging that feedback should incorporate both specific and general aspects (Parboteeah and Anwar, 2009). Similarly, a quantitative study involving 21 graduate students showed that students valued regular feedback on academic writing, and preferred clear, instructive and specific feedback (Singh, 2016).

The content of written feedback was not mentioned as often as the structure in the included papers. This finding is consistent with a study that interrogated feedback comments in 15 draft dissertations and identified more comments on structural elements (such as linguistic accuracy and appropriateness) than content (Basturkmen et al., 2014). Although not mentioned as often in the included studies, a strong preference for content feedback over linguistic and genre-related feedback is highlighted by Nurie (2019) in a survey-based study involving 51 doctoral students (Nurie, 2019).

A recent review by Hodgson et al. (2020) collated information from a range of sources about examiners expectations of higher degree research reports. The common elements described were mainly content-related and included: mastery/command (evidence of a thorough understanding of the subject matter); argument (the main point is clearly explained and defended); coherence (consistent with clear links between parts and the whole); independence (originality, autonomy and ownership); criticality (contextualise own work in the existing knowledge base); depth/breadth (thorough and complete); and clarity/accuracy (description, citation and interpretation). Understanding what assessors are looking for when marking a thesis can provide students with useful benchmarking discussion points for both peer and supervisory written feedback (Hodgson, 2020).

Although the concept of supervisors 'testing' student's responsiveness and engagement with their research through the feedback process is expected, research students have also shown interest in the type and amount of feedback provided by supervisors. Students report that too little feedback can indicate supervisor disinterest, unclear feedback and incompetence in fostering writing development.

Meanwhile, too much feedback may indicate a disconnection of supervisors from the emotional impact and pressures of research report writing (Wei et al., 2019).

There is an opportunity for technology to play a role in improving the understanding and communication of the requirements or agreed expectations of supervisors and students about the structure and content of research reports. As teaching increasingly moves 'online', this technology can add value by increasing the 'feedback literacy' of postgraduate research students and supervisors via online programs (Hey-Cunningham et al., 2020) or using communication technology (such as email) as a means of 'micro-mentoring' to communicate feedback (Crossouard and Pryor, 2009). Electronic forms can be used to scaffold academic writing is feasible if the supervisor and student have identified this formally as a feedback mechanism (Silva and Marcuccio, 2019).

Table 3: Supervisor, student and shared responsibilities in written feedback on research reports

This checklist can be used early in the supervisory relationship to establish guidelines and boundaries for written feedback (Part A). As the relationship matures, it may guide the formative feedback process and ensure that summative feedback is comprehensive (Part B). The checklist also contains guidance on the structure and content elements of feedback (Part C).

PART A: Early candidate feedback parameters and considerations

Supervisor	Student
Have I clarified expectations about academic writing and feedback processes early in candidature?	Am I learning to take responsibility for initiating communication and actively participating in the feedback process?
Have I considered the student's skills, confidence and experience in academic writing?	Have I considered the strengths and preferences I bring to research and writing? What are my areas for growth?
Have I included praise and encouragement (particularly early in candidature)?	Have I considered that receiving critical feedback on written work may be challenging?
Have I responded in a way that will build trust and facilitate resilience?	Am I using feedback to help me develop self-efficacy and self-regulation skills?
Have I prepared the student to separate feedback about writing from criticism of self/person?	Have I received feedback about my writing without taking it personally? Is my ability to receive critical feedback changing as I become more experienced?
Have I prepared the student for the repeated exchange of drafts required for research reports?	Am I prepared to submit many report drafts for feedback to achieve high academic writing standards?
Have I considered the type of relationship I have (and want to have) with this student?	Have I critically engaged with the feedback to increase my scholarly identity, ownership and agency?
Have we discussed that the student is responsible for their performance and output but also experiencing partnership with the supervisor?	
Have we discussed preferences for 'directive' feedback or more 'goal-oriented' feedback?	
Have we discussed previous experiences, level of confidence and future expectations of written feedback early in candidature?	
Have we discussed whether feedback (including formative feedback) is given face-to-face as well as written?	
Have we discussed the emotional impact of feedback, including timing and delivery?	

PART B: Ongoing candidate feedback parameters and considerations

Supervisor	Student
Have I encouraged the student, contributed as a peer and showed genuine interest?	Have I taken responsibility for my performance and output and welcomed interest from my supervisors?
Have I considered that negative feedback is more likely to bring power dynamics to the fore?	Have I sought experience by exchanging feedback in peer writing groups or attending writing courses?
Have I articulated negative feedback in a way that can be absorbed and reflected on in private?	Have I allowed time to read and consider the feedback before responding?
Is the feedback appropriate for the evolving maturity of the student?	Have I considered the individual supervisor and thought about their cues, preferences and needs?
Have I provided ongoing feedback about academic writing expectations?	As I gain experience, am I taking more responsibility for initiating communication and actively participating in the feedback process? Am

	I actively engaging in academic relationships and practice development?
Have I revisited critical feedback with the student as their candidature progresses?	Is my ability to receive critical feedback changing as I become more experienced?
Have I written feedback in a way that is engaging and stimulates critical thought?	Have I used feedback to think critically, push boundaries and create a dialogue?
Has my feedback been suggestive rather than directive? Have I included justification? Presented an alternate perspective? Will it constructively contribute to future progress?	Have I informed my supervisor on whether the level of feedback is appropriate to my stage of learning and development?
Have we used feedback to create a valued dialogue and develop reflexive, critical thinking?	
Have we discussed emotional responses to feedback and the development of resilience?	

PART C: Content and structure of written feedback

Supervisor	Student
Have I provided formative feedback in a way that fosters learning incrementally?	Have I actively used the information from one feedback cycle for skill development in the next cycle?
Have I requested that the student respond to feedback similarly to responses to journal reviewers?	Have I actively engaged with feedback and chosen which feedback to act on and defended with an academic argument for those I have chosen not to act on?
Have I been transparent with the structure of my feedback?	Have I asked my supervisor for input on structure and content?
Have I considered the most appropriate feedback for this task? 'Big picture' for complex tasks (cohesion, clarity, flow) through 'mixed feedback' (paragraph and sentence level) to 'surface-level feedback' (layout, spelling, grammar)	Have I discussed structural components of writing with peers, and then negotiated terms around written feedback with supervisor(s)?
Have I considered how students perceive feedback from supervisors? Too little feedback as supervisor disinterest, unclear feedback as indicative of incompetence, and too much feedback indicating disconnection of supervisors from the emotional impact and pressures of research report writing?	Have I been proactive in asking for feedback, particularly parts of the report that need more input, stage of the draft, whether a full review or 'level' and 'type' of feedback requested?
Have we discussed and agreed on the frequency, timing and extent of formative feedback?	
Have we agreed on whether language, grammar, spelling and style are a shared or student responsibility?	

Have we mutually agreed that feedback may relate to any of the following content or structural elements in written work?

Lens: a well-developed argument for an approach (including a theoretical perspective or hypothesis) that indicates originality, autonomy and ownership

Literature/locating: contextualising in an existing knowledge base (what is known and the gap this research seeks to fill) with your argument/main point clearly explained and defended (suitable depth and breadth)

Logical flow: the congruence of research components from the 'gap', research question, aims, methods with the results, discussion and conclusions (the ingredients work together)

Linkage: an extension of logical flow –coherence in reporting/describing the research, clear links between parts and the whole, sequential (the recipe works)

Lost themes (avoid): check that themes raised in background or results are addressed in the discussion or findings section

Length: fits criteria, concise and readable, but of adequate depth for the subject area

Locking it up (conclusion): summarise answer/contribution to the research question and the relevance of these findings and learnings (see below)

Learning/mastery/command: discuss the contribution of knowledge about the issue or practice, investigation methodology chosen or future research; show evidence of a thorough understanding of the subject matter

Lucidity: clarity and accuracy in descriptions, interpretations and citations; rigour in spelling, grammar, punctuation, tense and consistency of citation and bibliography; follow rules provided in the journal style guide or from supervisor for presenting numbers, numerical precision, representing statistics

List for reporting requirements: use a reporting requirements checklist that matches the study's methodology

DISCUSSION

This narrative review focused on the content, context and potential impacts of receiving and giving written feedback on research reports and feedback's role in the evolving relationship between novice clinician-researchers and their supervisors. Written feedback was considered as a particularly important instructional communication method when a research report is a principal method of assessing scientific proficiency (Can and Walker, 2011, Matthews and Mercer-Mapstone, 2016). It was evident that the quality of written feedback and how it is received and used by the student influence much more than the standard of the resulting written document. We perceived written feedback to be akin to a 'threshold concept' in the research learning process. Further, once this threshold is achieved a supervisory relationship transitions into a peer relationship that endures.

The quantitative data from surveys, content analysis of reports and from qualitative data from interviews and focus groups revealed that structure and content was a dominant feature in written feedback. Although this was expected, the need for more a more holistic approach to giving and receiving written feedback was strongly represented in the data. Consistent with the theory that students' reaction to feedback fit into the interrelated components of discourse, power and emotion (Higgins et al., 2002), the other three themes we identified all related to the human impact of interactions around the structure and content of written feedback. Our review highlighted that the process of communicating written feedback, the emotional impact of receiving or giving feedback, and how these factors then influence the supervisory power dynamic are as vital as the structure and content of the feedback.

Our findings about formative and summative feedback extend on the existing literature, particularly regarding the unique features of writing a research report.

Notably, research students who transition from an undergraduate background are used to receiving summative feedback as a justification of a course mark (Houston and Thompson, 2017). However, they are less familiar with critically analysing formative feedback (Carless, 2006) to differentiate the potential of feedback that provides information into future tasks. Consistent with the equity theory proposed by Adams (2005) as a conceptual basis for interpreting feedback, research students are familiar with benchmarking their efforts and grades against peers and course standards (Adams, 2005). Therefore, learning to conceptualise written feedback as a contribution to the learning process and constructively use the feedback to progress their report is an important aspect of the researcher development process. In the included studies, students clearly and consistently reported characteristics of helpful formative feedback. These characteristics are consistent with those described by Heitink et al. (2016) and have been consolidated in the supervisor and student checklist developed from key instructional points in this review (Table 3) (Heitink et al., 2016).

This review supports the notion that appropriate formative feedback can support a student's transition towards self-reflection and self-regulation of learning (Donnelly and Kirk, 2010, Hattie, 2012, Kumar and Stracke, 2011). It also can contribute positively towards academic growth and learning, performance and confidence in research and academic writing abilities (Donnelly and Kirk, 2010, Heylings and Tariq, 2001, Kumar and Stracke, 2011, Parboteeah and Anwar, 2009). However, in synthesising data about all aspects of written feedback from the included studies, it is equally evident that inappropriate feedback can be damaging to a student's confidence and detrimental to their research progress.

The authors believe this work contributes a new dimension in the understanding of the impact of research-related written feedback on the supervisory relationship, describing both the student and supervisory perspectives concerning emotional impacts, communication and power dynamics. While the student perspective had been well-described, it had not been linked to the supervisor perspective or operationalised into actionable strategies as we have done. The key points for supervisors and students to discuss about giving and receiving feedback are outlined in Table 3. We envisage that this versatile tool could be used in a range of settings, scholarly relationships and formats to trigger discussions and assist in role delineation. It could also be used as a formal feedback checklist.

Although written feedback capability continues to be recognised as a priority skill (Donnelly and Kirk, 2010, Parboteeah and Anwar, 2009), there continues to be minimal research into the development of supervisors' feedback provision skills, their perceptions about the emotional impact of providing written feedback and research supervision-related stress. For example, it would be useful to learn more about strategies supervisors could employ to ensure they provide equitable type and amount of written feedback in response to their commitments and stressors. Another aspect of feedback that was not explored was whether supervisors consider the effect on students' emotion concerning the time of day or stage of the week when providing written feedback.

Paradoxically, the process of giving and receiving written feedback seemed to be accompanied by a set of 'unwritten rules' to each supervisory relationship. These 'rules' are somewhat assumed by supervisors, not necessarily articulated through the supervisory process, and become clear to the student as they emerge from candidature by comparing their experience to others or when they take on supervisory roles themselves. Although supervisors' experience as research students was the focus of one included study, this topic warrants further exploration (Sankaran et al., 2005).

Another aspect that was not fully elucidated is the perception of supervisors that students ignore feedback (Carter and Kumar, 2017) compared to 'active inaction' reported by the students themselves (Neupane Bastola, 2020). We question whether this conflict arises from different perceptions of ownership of the written report. If the supervisor believes the student 'owns' the research report, then it would be the student's decision of whether to make changes recommended in written feedback.

The application of the educational theory is another aspect of written feedback where new information was limited. The only reference to learning theories related to using blended learning in an online writing skills program to develop writing confidence and capability (Hey-Cunningham et al., 2020). This is likely related to the strong focus on the structure and content of feedback compared to the emotional, power relationship and communication aspects. We expect that future research on written feedback will focus on the impacts of written feedback on both student and supervisor more extensively and be increasingly grounded in the educational theory. A more detailed exploration of individual student and supervisor perspectives of written feedback depending on their academic, career and life experiences would be particularly useful to differentiate the impacts of personality and life experience on responses to written feedback. With research higher degrees and clinician research programs becoming regular progressions within academic and career pathways, this field of research would benefit from interventions that implement and evaluate written feedback models.

In an attempt to represent the scope of the literature about written feedback on research reports, we chose not to exclude review articles. Although the authors were careful not to repeat or duplicate findings that were from the same papers, this process may have led to bias by amplifying some points in the data. While the focus on novice researchers may be perceived as a limitation, there is potential for an application of the findings and associated checklists by more experienced research students and their supervisors and written feedback on topics other than research.

CONCLUSION

While written feedback is seen as an effective learning tool, there is little experimental evidence to support this claim, particularly concerning research reports by novice researchers. There are inherent risks with providing feedback, including potentially negative emotional impacts and a threat to the supervisory relationship. Written feedback can assist researchers with reflection and be a valuable learning tool for novice researchers if it is part of an ongoing dialogue and provided in a structured, transparent format, and a timely, considered manner. The progression of written feedback throughout the supervisory period using the checklist developed from this review is proposed as a means of transitioning from teacher-student to peer researcher relationships.

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REFERENCES

Adams, G. 2019. A narrative study of the experience of feedback on a professional doctorate: 'a kind of flowing conversation'. *Studies in Continuing Education*, 41, 191-206.

- Adams, J. B. 2005. What makes the grade? Faculty and student perceptions. *Teaching of Psychology*, 32, 21-24.
- Basturkmen, H., East, M. & Bitchener, J. 2014. Supervisors' on-script feedback comments on drafts of dissertations: socialising students into the academic discourse community. *Teaching in Higher Education*, 19, 432-445.
- Bitchener, J., Basturkmen, H. & East, M. 2010. The focus of supervisor written feedback to thesis/dissertation students. *International Journal of English Studies*, 10, 79-97.
- Callaham, M. L., Knopp, R. K. & Gallagher, E. J. 2002. Effect of written feedback by editors on quality of reviews: two randomized trials. *JAMA*, 287, 2781-2783.
- Can, G. & Walker, A. 2011. A model for doctoral students' perceptions and attitudes toward written feedback for academic writing. *Research in Higher Education*, 52, 508-536.
- Carless, D. 2006. Differing perceptions in the feedback process. *Studies in Higher Education* 31, 219-233.
- Carter, S. & Kumar, V. 2017. 'Ignoring me is part of learning': Supervisory feedback on doctoral writing. *Innovations in Education and Teaching International*, 54, 68-75.
- Chamberlain, C. 2016. *Writing-centred supervision for postgraduate students*. PhD dissertation. University of Witwatersrand, 119-120.
- Chong, I. 2018. Interplay among technical, socio-emotional and personal factors in written feedback research. *Assessment & Evaluation in Higher Education*, 43, 185-196.
- Cotterall, S. 2011. Doctoral students writing: where's the pedagogy? . *Teaching in Higher Education*, 16, 413-425.
- Crossouard, B. & Pryor, J. 2009. Using email for formative assessment with professional doctorate students. *Assessment and Evaluation in Higher Education*, 34, 377-388.
- De Kleijn, R. A. M., Mainhard, T. M., Meijer, P. C., Brekelmens, M. & Pilot, A. 2013. Master's thesis projects: student perceptions of supervisor feedback. *Assessment and Evaluation in Higher Education*, 38.
- Donnelly, P. & Kirk, P. 2010. How to... give effective feedback. *Education for Primary Care*, 21.
- East, M., Bitchener, J. & Basturkmen, H. 2012. What constitutes effective feedback to postgraduate research students? The students' perspective. . *Journal of University Teaching & Learning Practice*, 9.
- Eyres, S. J., Hatch, D. H., Turner, S. B. & West, M. 2001. Doctoral students' responses to writing critique: Messages for teachers. . *Journal of Nursing Education*, 40, 149-155.
- Hattie, J. 2012. *Feedback in schools*. From Sutton, R., Hornsey, M.J., & Douglas, K.M. (Eds., 2011), *Feedback: The communication of praise, criticism, and advice*. Peter Lang Publishing: New York.
- Heitink, M. C., Van Der Kleij, F. M., Veldkamp, B. P., Schildkamp, K. & Kippers, W. B. 2016. A systematic review of prerequisites for implementing assessment for learning in classroom practice. *Educational research review*, 17, 50-62.
- Hey-Cunningham, A. J., Ward, M.-H. & Miller, E. J. 2020. Making the most of feedback for academic writing development in postgraduate research: Pilot of a combined programme for students and supervisors. *Innovations in Education and Teaching International*, 1-13.

- Heylings, D. & Tariq, V. 2001. Reflection and feedback on learning: a strategy for undergraduate research project work. *Assessment and Evaluation in Higher Education*, 26, 153-164.
- Higgins, R., Hartley, P. & Skelton, A. 2002. The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in higher education*, 27, 53-64.
- Hodgson, D. 2020. Helping doctoral students understand PhD thesis examination expectations: A framework and a tool for supervision. *Active Learning in Higher Education*, 21, 51-63.
- Houston, D. & Thompson, J. N. 2017. Blending Formative and Summative Assessment in a Capstone Subject: 'It's not your tools, it's how you use them'. *Journal of University Teaching & Learning Practice*, 14, 2.
- Inouye, K. S. & McAlpine, L. 2017. Developing scholarly identity: Variation in agentive responses to supervisor feedback. *Journal of University Teaching and Learning Practice*, 14, 3.
- Kumar, V. & Stracke, E. 2007. An analysis of written feedback on a PhD thesis. *Teaching in Higher Education*, 12, 461-470.
- Kumar, V. & Stracke, E. 2011. Examiners' reports on theses: Feedback or assessment? *Journal of English for Academic Purposes*, 10 211-222.
- Li, J. & Barnard, R. 2011. Academic tutors' beliefs about and practices of giving feedback on students' written assignments: A New Zealand case study. *Assessing Writing*, 16, 137-148.
- Li, S. & Seale, C. 2007. Managing criticism in Ph.D. supervision: a qualitative case study *Studies in Higher Education*, 32, 511-526.
- Matthews, K. E. & Mercer-Mapstone, L. D. 2016. Toward curriculum convergence for graduate learning outcomes: academic intentions and student experiences. *Studies in Higher Education*, 1-16.
- Neupane Bastola, M. 2020. Engagement and Challenges in Supervisory Feedback: Supervisors' and Students' Perceptions. *RELC Journal*, 0033688220912547.
- Neupane Bastola, M. & Hu, G. 2020. Supervisory feedback across disciplines: does it meet students' expectations? *Assessment & Evaluation in Higher Education*, 1-17.
- Nurie, Y. 2019. Doctoral Students' Perceived Needs and Preferences for Supervisors' Written Feedback. *PASAA: Journal of Language Teaching and Learning in Thailand*, 56, 112-144.
- Pare, A. 2011. Speaking of writing: Supervisory feedback and the Dissertation. In: SPRINGER (ed.) *Doctoral education: research-based strategies for doctoral students, supervisors and administrators*. New York, USA: Springer, 59-74.
- Parboteeah, S. & Anwar, M. 2009. Thematic analysis of written assignment feedback: Implications for nurse education. *Nurse Education Today*, 29, 753-757.
- Ridgway, G. D. 2017. Modeling higher degree by research student writing feedback based on Systemic Functional Linguistics: A collaboration of student, supervisor and academic language and learning adviser. *Journal of Academic Language and Learning*, 11, A174-A187.
- Sankaran, S., Swepson, P. & Hill, G. 2005. Do research thesis examiners need training?: practitioner stories *The Qualitative Report*, 10, 817-835.
- Schulze, S. 2009. Teaching research methods in a distance education context: concerns and challenges. *South African Journal of Higher Education*, 23, 992-1008.

- Silva, L. & Marcuccio, M. 2019. Advisor's Feedback as assessment practices in Doctoral Programs: a scoping review of empirical research. *Form@ re-Open Journal per la formazione in rete*, 19, 26-47.
- Singh, M. K. M. 2016. Graduate Students' Needs and Preferences for Written Feedback on Academic Writing. *English Language Teaching*, 9, 79-88.
- Stracke, E. & Kumar, V. 2010. Feedback and self-regulated learning: insights from supervisors' and PhD examiners' reports. *Reflective Practice*, 11, 19-32.
- Tu vesson, H., And Borglin, G. 2014. The challenge of giving written thesis feedback to nursing students. *Nurse Education Today*, 34, 1343.
- Wang, T. & Li, L. Y. 2011. 'Tell me what to do' vs. 'guide me through it': Feedback experiences of international doctoral students. *Active Learning in Higher Education*, , 12.
- Wei, J., Carter, S. & Laurs, D. 2019. Handling the loss of innocence: first-time exchange of writing and feedback in doctoral supervision. *Higher Education Research & Development*, 38, 157-169.
- Wisker, G. & Robinson, G. 2016. Supervisor wellbeing and identity: challenges and strategies. *International Journal for Researcher Development*, 7(2), 123 – 140, 7, 123-140.