

Entry

# How Supervisors Can Support Doctoral Students to Publish and Not Perish in Academia

James Marson <sup>1,\*</sup>  and Katy Ferris <sup>2</sup> <sup>1</sup> Department of Law and Criminology, Sheffield Hallam University, Sheffield S10 2BQ, UK<sup>2</sup> Nottingham University Business School, University of Nottingham, Nottingham NG7 2RD, UK; katy.ferris@nottingham.ac.uk

\* Correspondence: j.marson@shu.ac.uk; Tel.: +44-(0)1142-252380

**Definition:** “Publish or perish” is a term used for the culture adopted in universities, whereby academic members of staff, typically although not exclusively on research and teaching contracts, are required to publish research. Minimum levels of quantity and quality may apply and these may be included in key performance indicators and annual staff reviews to ensure compliance. Whilst this culture has been reported in universities for nearly a century, most recently it has cascaded down to doctoral students who are increasingly expected to publish and otherwise disseminate research during their studies (i.e., research outside of that which is to be submitted in their thesis). This entry relates primarily to doctoral students in a UK setting and studying a monograph route (rather than a published papers submission) in the humanities. It further explores the role played by supervisors to help doctoral students to publish, and in turn the help and guidance supervisors need to offer as support. Many of the findings explored in this entry apply equally beyond the parameters noted above, and, as demonstrated in the literature, international students and institutions are facing similar issues.

**Keywords:** early career researcher; dissemination; doctoral student; higher education institutions; PhD supervisors; publish or perish culture



**Citation:** Marson, J.; Ferris, K. How Supervisors Can Support Doctoral Students to Publish and Not Perish in Academia. *Encyclopedia* **2023**, *3*, 1358–1372. <https://doi.org/10.3390/encyclopedia3040097>

Academic Editors: Luis Machado, Fulvio Mazzocchi and Raffaele Barretta

Received: 31 August 2023

Revised: 20 October 2023

Accepted: 26 October 2023

Published: 30 October 2023



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## 1. Introduction

The university sector is an evolving entity, moving from “pure” scholarly endeavours as produced by academics in their “ivory towers” to research that has impact and influence in communities beyond academia [1]. Despite this shift in focus, and an awareness that research must have some function beyond the confines of academic journals and publishing houses [2], there remains an emphasis on the true mark of an academic, and they being judged, at least in part, by their publication record. Indeed, research exercises, including the Research Excellence Framework (REF) [3] used in the UK, rank publications on a scale from 0–4 [4]. Those rated at level 4 are deemed to be “world leading”, those at level 3 to be “internationally excellent” and all the way to level 1 which is deemed to be “nationally recognised”. One of the reasons for the significance of this ranking system is the submission of these outputs to the exercise, with only those rated at levels 3 and 4 attracting funding for their institutions [5]. Research-active academics know how this system operates, how intrinsic it is to successful funding bids, to promotions, to their standing in the academic community and so on [6]. As such, academia can be identified as being powerfully underscored by the pressing need for continuous publication in leading and high-impact journals [7]. The consequence being that those academics contracted in research and teaching live according to the dictum “publish or perish” [8].

Doctoral students embody numerous aims and objectives for completing their studies. Evidently, not all of them wish to pursue a career in academia [9], but the process of undertaking study which is designed to establish original research [10] which contributes to the existing body of knowledge [11] lends itself to a system whereby these findings will

be disseminated to as broad an audience as possible. In particular, those doctoral students who do intend to pursue a career in academia will find themselves very quickly drawn into the publish or perish environment, especially if they seek advancement in this sector [12]. Indeed, many such students experience the pressure of having to produce high-quality impactful research even before they submit their thesis for examination [13,14].

The focus of this entry is to explore the role of doctoral-student supervisors in providing the requisite support and assistance [15] to help develop doctoral students into academics that are producing, presenting and publishing work of a standard which is respected in academia [16]. The entry presents the contemporary academia [17], considering the process of doctoral training which has shifted in recent years from one which emphasises individual endeavour, to one of co-participation and shared responsibility between the student and the supervisory team [18]. In so doing, it recognises the pivotal role played by supervisors in shaping doctoral students' research trajectories. They influence their publication strategies and outcomes. Supervisors can also play a pivotal role in facilitating the transference of tacit knowledge of academia, its unspoken and unwritten rules, its norms and its rituals, in respect of publishing to their doctoral students [19]. Such explicit academic "know-how" is invaluable in helping the doctoral student to develop into a fully fledged publishing academic [20].

The entry first explores the "publish or perish" phenomenon, its origins and implications for academia, particularly in doctoral education. Further, the benefits and potential negative effects this may have for doctoral students are identified.

The entry continues with an exploration of the culture of publishing and the broader systemic changes that are required in higher education to alleviate the pressures of the publish or perish culture. This includes the role of the doctoral supervisor and strategies that supervisors can adopt to better support their doctoral students. These include fostering a culture of early and regular publication, integrating the students into their academic networks, providing critical feedback on writing and presentation skills, and creating an environment conducive to resilience for coping with the potential for rejection in the academic-publishing sphere.

By focusing on the role of supervisors in supporting doctoral students to disseminate their research, the entry provides valuable insights into the literature and associated practical strategies that can be adopted to promote a more nurturing and supportive academic-publishing culture. Thus, a holistic understanding of the supervisor's role, not just as gatekeepers, but as facilitators of knowledge dissemination in the realm of doctoral education is presented.

This entry is important to the existing scholarship as it focuses specifically on how the publish or perish culture impacts on, and guides, the supervision strategy for doctoral students. Much of the existing literature considers the phenomenon's generalities or applies it to more established researchers. Yet, a growing literature is based on the phenomenon's impact on doctoral students who, by their nature, are at a crucial and vulnerable stage in their academic career. This includes not just the doctoral students' understanding of the concept of publish or perish in academia, but, and perhaps more importantly, the role of the supervisor in helping students navigate this culture.

## 2. Publish or Perish?

The concept of publish or perish, in its widest sense and as used in academia may be attributed to a mid-20th century [21] notion of the increasing pressures applied to, or experienced by, academics to continuously disseminate (publish) their research findings [22]. Moosa [23], who incidentally attributed the term to Kimball Atwood, a geneticist at Columbia University, attempted (albeit inconclusively) to discover the first published use of the term. Rewat and Meena [8] later explained that scholars typically accepted its use as coined by Coolidge in 1932 [24], yet whichever person is attributed to the creation of a phrase (if such a task could be completed), the literature establishes the history of this culture as an embedded norm in international academia for almost a century.

Academics must publish as many papers as possible, in as high-quality journals as possible, as this is the single metric which explains their worth as a researcher [25]. Not only must early-career and established researchers continuously publish papers to raise the profile of themselves and of their institutions, but also, an oft-used response to doctoral students' enquiries about developing academic careers is for them to "just keep writing papers" [26]. Thus, academics are trapped in a model to which many disagree (although the views appear to be equally divided on the issue) [27], but equally feel powerless to change [26].

The truly disagreeable position with this entrenched system must be how it is now becoming a norm for doctoral students [28]. Yet, support for doctoral students' publication strategies and success rates has shown to differ between students in the humanities (the soft sciences) and those in engineering disciplines (hard science) [29]. It was Moosa [23] who noted the function of publishing as an assessment of scholarly merit [30], whereby the number and the quality of the academics' publications are objective indicators of performance and potential [31]. These are coupled with the impact which the outputs may have and, thus, the acknowledgment of expertise in an area. It is founded upon a need for "continuous" generation and dissemination of knowledge [32] and the visibility of the early-career researcher which will impact on their career prospects [33] and subsequent ability to secure external funding for their research [34]. Whilst the primary goal of doctoral study is the generation of new findings/theories/insights which advance the existing body of knowledge [11], dissemination strategies can ensure the doctoral work reaches a broad audience—often beyond the confines of the academic community [35]. This aspect of dissemination and impact also provides the opportunity for public engagement and for the fostering of a greater understanding and appreciation for matters in a particular field of research [36].

### 3. Are There Benefits for Doctoral Students in Publishing Whilst a Student?

Publish or perish as a culture can have very negative effects (as will be discussed later in the entry), and indeed it is not uncommon for widely published academics to still perish in the sector [37]. Yet for students who can be trained to cope, and perhaps even thrive in this environment, many benefits are available [38]. The broader the dissemination attempted, the more encompassing is the research skills set developed by the doctoral student [39]. Through a process of wide-ranging engagement, the student will be exposed to speaking and disseminating their findings to a range of expert and non-expert audiences [40], public speaking (a skill which often requires much experience to master), and the ability to communicate complex ideas with clarity and effectiveness [41]. Further, as a student's publishing experience grows so do their writing skills, which can lead to outputs in top-tier specialist and generalist journals, and the ability to engage publishers and audiences of social [42] and more mainstream media [43,44]. Further, and underpinning the entire thesis, is project management which is a skill that is transferable to any number of professions and will be used throughout the student's career [45].

The expectation to publish whilst still a doctoral student can be found to be individual motivations for success and to engage in the testing of ideas prior to the completion and assessment of the thesis at viva [46]. This skill development can be especially valuable for doctoral students as part of the process of preparing research for publication and examination. In addition to critical thinking, the ability to deal with feedback and criticism [47], the ability to convey complex ideas succinctly, and an understanding of the publishing process' complexities [48] are all skills which may feature in a viva voce. Having prior experience of these can help the student understand the life of an academic, and even help them better understand whether this is the career they wish to pursue.

The publication of research also promotes accountability and transparency in the research process [49]. It allows others to scrutinise the work for accuracy, integrity and ethical issues through the presentation of the author's methods, data and findings to the public. Success here can be an important factor in the advancement of a doctoral student's

career. As already identified, publications are crucial for tenure, academic reputation, funding and collaboration opportunities in academia [50].

The publishing mandate may also derive from societal factors, with a desire to engage with the community and for students to want to share their research findings, to show the world their work and its “real-world” importance [51]. In a UK context, such knowledge exchange is an increasingly important dimension of research activities [52].

Thus, as a further dimension for publishing to survive in academia, dissemination of research with impact ensures that the findings from the doctoral students’ work are accessible to people outside of their immediate academic circles, such as practitioners, policymakers and industry professionals [52]. Through this transfer of knowledge, policies can be shaped, practices can be informed and innovation can be stimulated.

However, it is necessary to issue caution towards an idea that dissemination beyond academia will either automatically happen or, even if it does occur, it will generate positivity [53]. Problems may exist with researchers’ failure to communicate successfully with practitioners; therefore, training here is advantageous [54].

Thus, with foresight, taking the following considerations into account can assist with effective research and dissemination, and the realisation of the benefits noted above. The research outputs must ensure accessibility [55], the students’ openness to engagement [56], their adherence to ethics and ethical standards [57], and respect of intellectual property rights [58], all of which should form part of the training for doctoral students in the humanities. This begins with establishing a culture in universities (see Section 5) which is conducive to developing the supervisory team with the understanding and the skills to be mentors [59] that the doctoral students need.

#### **4. Benefits Exist, but There Are Potential Negatives Too**

With this push for early publications at the doctoral-student level, important potential negative effects may exist for some students [60]. It is important to note from the outset of this section that the negative effects of this culture refers to doctoral students publishing papers during the course of their studies rather than “from” their thesis. There exists a school of thought that doctoral students are still training during their studies and are not yet ready to publish papers in academic journals [61]. However, it is clear from the literature that doctoral students are being expected to publish, and this has consequences for their academic career.

The first potential negative of the publish or perish culture is that it may incentivise quantity at the expense of quality (even the trustworthiness of outputs) [62]; it may result in stress and burnout being experienced by students [63] who (often) have yet to obtain a paid academic post; and the student who has to publish or perish may exclude other important academic activities such as teaching or general academic service to adhere to this particular performance metric [64].

Thus, perhaps the primary negative effect on doctoral students will almost certainly be on the broad topic of their mental health [65]. This is a subject which has received much academic scrutiny (for obvious reasons) and is a matter which can go beyond the mere pressure experienced by academics [66], or indeed any professional, and imposes numerous societal [67] and legal concerns for institutions which adopt a policy without the adequate safeguards for its staff and students [68]. Without doubt, publishing pressure can lead to high levels of stress among doctoral students [69]. These are people who are already having to contend with a demanding academic schedule, and administrative or perhaps even pastoral responsibilities for undergraduate tutees. The consequences of these can have a significant negative impact on mental health. Thankfully, studies have identified strategies for universities [70] to adopt to help mitigate against the worst problems that may derive from stress being placed onto students [71].

Any policy, formal or not, which insists on publication during a doctoral student’s study may create problems often faced by early-career researchers which are where to publish [72], at what level of quality [73] and how much is expected of an academic. It is

quite common for a minimum number of publications [74] to be established by institutions which can sometimes lead to publication quantity at the expense of quality [75]. The result may be rushed research [70], diluted findings [76] and a proliferation of superficial or non-novel studies [77].

Linked to this necessity to publish may be students being targeted by so-called “predatory publishers” [78,79] and, more recently, those in the “Grey” publishing market [80]. More senior academics will likely be familiar with such unsolicited approaches and understand the implications of publishing papers in these journals. However, students under increased pressure to publish may become more susceptible to predatory publishers who charge exorbitant fees and provide little to no editorial services.

Doctoral students can also face the problem of attempting to find outlets which are willing to publish their research [81]. In the broader field of humanities research, academics have experienced bias in publishing towards positive results [82]. This approach may discourage students from submitting or even conducting studies that have negative or null results, and a continuation of this approach might even lead to an inaccurate view of the research landscape due to this skewed perspective [83].

The nature of doctoral research involves very specific examination of a subject. It is the level of detail and nuance required which establishes the originality of research and which is the test of doctoral-level theses [11]. Yet, such specialisms can create problems for students attempting to find “a home” for their research due to it being considered too specialised, which can become a distraction from the core research when too much emphasis is placed on it [84].

A final point regarding publishing requirements and the pressure they may instil on the student, comes in the form of the (not atypical) problem of academic misconduct. As doctoral students feel compelled to publish at all costs, there may be an increased risk of plagiarism of the work of others and the increasing problem of the use of Artificial Intelligence software including ChatGPT (acknowledging that many more are being developed and increasingly so in academia) to produce work [85]. Without training on how such software can be used to complement the work of academics [86], it may be tempting for under-pressure doctoral students to use this software inappropriately to produce research, generate findings and even to write the paper itself. The potential implications for students who engage with these activities should not be ignored by supervisors or by institutions applying pressure for publications from this group [87].

The reasons for negativity around publish or perish perceptions may be plentiful, but the publishing process, academic pressure and the structures at play within each institution are factors which exist in modern academia. Addressing these potential negatives requires a careful and balanced approach to encouraging publication. In order to assist doctoral students in navigating the publishing environment, institutions should provide robust educational resources that foster a supportive environment that values quality and ethical practices over mere quantity of publications [88].

## 5. How Should the Culture in Universities Be Developed?

So far, this entry has identified what the publish or perish dictum means [89], how it might be of benefit to doctoral students, but also acknowledging its potentially negative consequences. The review of the literature has also demonstrated that this is a mindset which has existed for nearly a century and is increasingly a global feature seen across academia [28]. If this is a concept which has become quite mainstream, the review of the literature has identified that whilst academics have acknowledged the need for training of supervisors [90] and for work to be undertaken by institutions, especially in respect of resource allocation and an awareness of the financial, human and associated costs, the training for supervisors or identification of the expectations of them are underdeveloped [91]. This issue is addressed through the research culture in a university setting. This includes training of supervisors [92] and how this strategy complements and helps achieve the knowledge exchange and transfer between academia and the outside world.

If universities are inclined to create a culture of publish or perish and cascade such a policy to research students, it is incumbent on them to ensure that students are in a position to achieve in this competitive environment [93]. Institutional policies and support structures can ensure students are protected from damage to their well-being, establish systems to facilitate a supportive, diverse and inclusive environment through which the students can publish [94], and provide the resources to ensure students can succeed [95]. Research institutions and universities play a critical role in shaping doctoral-students' research experiences. An institutional policy and support structure that is effective can make a significant contribution to the publication of research through its research culture [96].

As a starting point, institutions should provide clear guidance regarding publication expectations for doctoral students [45]. Among the details included are the recommended number of publications, the preferred publication formats (e.g., journal articles, book chapters, and conference proceedings), and the weight of being assigned to publications in doctoral evaluations [45]. The second recommendation is for universities to establish robust research-training programs [97]. In addition to writing workshops, workshops on understanding the publication process and how to respond effectively to peer reviews could be offered [98]. A course like this can provide students with the skills and confidence they need to publish. Such a mentorship program [99] can facilitate the transition from being a consumer to being a producer of research [100]. Students may benefit from regular meetings with experienced academics for feedback, allowing them to improve their writing as well as learn about the nuances of academic publishing [45].

Furthermore, universities can provide financial support for publication-related costs, such as open access fees, and reward doctoral researchers for their publications with awards and recognition [45,101]. Additionally, institutions should strive to create a research culture that emphasises quality over quantity, encourages ethical research practices, and encourages open and supportive communication among researchers. Given that organisational culture is shaped by its values, artifacts and underlying assumptions [102], these help with an understanding of the current culture (such as publish or perish) and how the culture can be transformed positively.

Developing a strong research culture [95] within universities is essential for doctoral students to have a productive, innovative and enjoyable academic experience [103]. A variety of factors contribute to the overall research climate, and supervisors, research department heads, library managers [104,105] and colleagues each have a role to play. This can include collaboration (especially with supervisors) [106], openness of the research experience and opportunities for collaborative work, inclusivity to undertake research in teams [107], mentoring by supervisors and more experienced colleagues, and workload balance—a key issue in which departmental heads and those in research leadership roles play a crucial role. Key aspects to consider in creating a positive research culture for doctoral students include ensuring supervisors provide effective guidance and offer mentoring [108], which offer significantly positive enhancements to doctoral-students' experiences. In order to achieve this, it is necessary to provide clear expectations, constructive feedback, and regular communication [109]. It is also important that supervisors are active researchers, in this way they can speak with authority and gain the credibility of the students to provide direction for publishing and dissemination strategies [110]. Supervisors are also instrumental in advising on ethics, academic integrity and the publishing/presentation of papers and development of theses [111].

The university must also establish a vibrant and inclusive research culture, based on collaborative research where ideas can be enhanced through the diversity of its staff and student population [107]. This includes professional development with, for example, workshops on writing for publication [112] and methods for securing external funding. The importance of this aspect cannot be overstated for the purpose of preparing doctoral students for the challenges associated with a publish or perish culture.

## 6. How Supervisors Can Help Doctoral Students Succeed

Several strategies can help doctoral students successfully disseminate their research. The first is to ascertain the career aspirations of the individual student [113]. Knowing the students and their needs [114] allows for a tailored approach which is based on a balance between quality research, effective writing [115], and strategic dissemination [91]. These skills are transferable between a number of careers beyond academia [116], and even though a majority of doctoral students may wish to continue with an academic career and believe the attainment of a doctorate can help with this [117], for those who choose to pursue another career, their development can help achieve this goal [118].

For those doctoral students who wish to continue their careers in academia, and especially as researchers—which seems natural given the nature of the research degree they are studying—they must be provided with guidance as to the academic publishing process, selecting the correct journal and impact/citation scores when relevant for their discipline, and how to respond to the peer-review system (which is likely to be alien to them) [16]. As with supervisors and their need for training, it can be beneficial for students to attend workshops, webinars, and mentoring sessions regarding academic publishing. Hanafizadeh and Shaikh [48] discovered that one of the primary reasons for doctoral students having manuscripts and papers rejected was due to common errors and pitfalls reviewers identify in novice authors' submissions. Effective training and mentoring by supervisors can help to mitigate against this. In the early stages of a publishing career, collaborative articles with supervisors or colleagues are often a good way to get started. Kamler [106] explains that most doctoral students do not receive adequate mentoring or structural support to publish from their research. Kandlbinder and Peseta [119] reported that supervisors understood their position to be, primarily, as mentors, guiding students through the research process and facilitating the students' development as academics. Yet, little mention was made of publishing during their tenure as doctoral students and of what training needs students may have in this regard. This may not be unfair. In the UK, and as noted in the UK Quality Code for Higher Education (2015), in respect of students' publishing, supervisors should, where appropriate, give encouragement and guidance to the research students on the submission of conference papers and articles to refereed journals. Kamler [106] continues that there is a need to rethink co-authorship more explicitly as a pedagogic practice, with an emphasis on deliberate structures in subject disciplines to scaffold doctoral publication.

Students should also be encouraged to consider writing and dissemination at as early a stage as practicable and to practice writing. This is a skill which is honed through practice, once the student has been taught how to write for publication [120]. Such an opportunity to practice the art of publishing articles has also been identified as an indicator of a continued pattern of publishing [121]. Kwan [13] continues that for students to be able to publish internationally, the competencies of scholarly communication, strategic research conception and strategic management of publishing must be instilled/developed. Such a framework consists of the following components: discursive skills, strategic research planning and strategic management of a research project in progress. She continues that the publishing of research itself is a complex task that requires mastery of a range of discursive and rhetorical skills. This not only includes a mastery of one's own subject area, and perhaps a specific nuanced aspect of this, but also discipline-specific citation language to advance rhetorical goals and metadiscourse.

To be published, a research paper needs to be conceived and conducted with theoretical and methodological rigor, at least to the standard of a disciplinary par, but also with a strategic consideration of the zeitgeist of the community and the publishing ecology [12]. This is where the supervisor can offer the support and appreciation of the discipline which might take the student years of study to develop. The historical development of the subject area, the nuance of the arguments and the current state of theoretical and empirical evidence, along with assistance for the presentation of papers for specific journals, are each dimensions through which students can derive knowledge and make the process of

publishing more targeted and successful [13]. Publishing involves a variety of occluded communication with gatekeepers, understanding of the review process, developing competencies in the language used and responses needed in respect of reviewer comments and editorial decisions [122]. Much of this is not a necessarily a natural process or application of common sense [123]. It is a process of development and experience, often gained through years of submissions, reports, reviews, resubmissions, and developing a “thick skin” to some harsh, unpleasant and difficult to hear commentary on submitted papers [124]. This is certainly not helped through the anonymity of the review process and editorial positions which may bind the editor/editorial board to accept and follow the decision of a panel of reviewers (who frequently differ on what changes are needed to be incorporated prior to acceptance and publication). Ultimately, Kwan [13] found that despite a movement towards a publish or perish culture among some international universities, training from the supervisory team regarding publishing was very limited (and in some instances non-existent). Other respondents to Kwan’s work explained that being involved in the supervisor’s research group was necessary to receive training and assistance to publish papers during their doctoral studies, and without the supervisor’s help, identifying and creating a suitably original topic on which a paper could be based was a ‘struggle’. Even when the doctoral student has the basis of a paper which has received positive comments from their supervisor about its ‘publish-ability’, getting it to the finished standard can have negative effects. As Pasco [14] notes in respect of such a situation, a graduate student had been encouraged to revise a paper for publication. As a result of the additional work, this student neglected his classes in order to improve the paper. It was unclear how much support, if any, the supervisors provided in this process, but ultimately the student never managed to get the piece into print.

Additionally, academics are increasingly using Twitter (X) and other forms of social media to engage with others and to share research findings. However, through training of doctoral students, students and early-career researchers must be mindful of issues as noted by Zhu and Procter [125]. They found potential problems such as the lack of standards and incentives with the use of social media, the risks of ideas being stolen, lack of knowledge of how to start and maintain using social media tools and the potential need to invest significant amounts of time and effort. Students can be encouraged to diversify their dissemination. They should become familiar with different forms of dissemination other than journal articles, such as book chapters, policy briefs, infographics, podcasts and op-ed pieces in the press. Finally, engaging with feedback will enhance the quality of published work, and will assist with other forms of dissemination—especially those beyond academia. Students should be instilled with the increasingly significant impact of quality research and the expectations of institutions.

## **7. How to Train Supervisors to Support Doctoral Students to Publication**

It is an integral part of the research-education system to prepare supervisors to be effective in assisting their doctoral students in publishing and disseminating their results. Research has identified that there is often insufficient training of supervisors to help students complete this [126]. Even where training is provided by institutions, this has proven to be inadequate [127] due to its focus on the administration of the degree rather than subject content or pedagogy [128]. These problems are exacerbated when the institutional training is compulsory, with the consequence of lack of engagement from those doctoral supervisors forced into attendance—ultimately the staff remain unconvinced of the efficacy of such resources [129]. To combat such perceptions, where training is provided by active researchers they have the ability [130], especially where this is delivered by more senior colleagues [131], to make a positive contribution to doctoral supervisors’ development.

To enhance supervisors’ skills and abilities in this area, various methods and training programs can be implemented. On a practical basis, training programmes and workshops can help in various aspects of the role [132]. How to provide feedback to the student, how to help them develop their writing style, and how to understand the training and



developmental needs of the student (even beyond the knowledge the student has of their own abilities and skills) are each aspects which may not be naturally “known” by a supervisor. It requires training to help others become academically proficient, as the teaching of these skills is likely to be different from the development of these skills by supervisors over the course of their career [133]. Universities can help through creating provisions, whereby supervisors can meet and support each other through the sharing of experiences, establishing best practice, and joining organisations (communities of practice)—which remains possible through external contacts if the particular institution lacks the resources or critical mass of supervisors/experience to do so “in house” [134]. Increasingly, such training is held online [135] through synchronous and asynchronous courses, enabling use of interactive sessions, role-playing scenarios, case studies and presentations. The pedagogic underpinnings of doctoral supervision may also form part of training of supervisors, which is particularly valuable to new supervisors, and research has found engagement with such training exercises improves student supervision [136]. Pedagogy is crucial here as it moves the training away from anecdotal commentary regarding the supervisor’s own experiences and offers a theoretical underpinning to the practice of supervision [137].

It is crucial to note that the effectiveness of these training sessions will depend largely on the specific context, which includes the discipline, the culture of the institution, as well as the characteristics of the supervisors and students. It is necessary to assess and provide feedback to supervisors and their students on a continuous basis in order to adapt and improve these programs according to their specific needs and challenges. Supervisors in the humanities may benefit greatly from specific training techniques for helping doctoral students when attempting to disseminate their research [13]. There are several techniques available for this purpose. For students, developing academic writing skills, constructing persuasive arguments and communicating effectively can be learned through workshops or seminars. In a large-scale research project, Larivière [138] discovered that PhD students contribute to about a third of the publication outputs in the Quebec province, with collaboration being an important component of this socialisation. There was a marked difference between students in the hard sciences being much more likely to co-author papers with their supervisors than was present in the humanities, but the paper shows that involving doctoral students in publications is positively linked with degree completion and research careers.

For supervisors to be able to guide their students in disseminating their research beyond the confines of academia, they should be trained in public-engagement strategies and tools, such as writing for a larger audience, utilising social media and engaging with traditional media. However, all researchers should be mindful of producing research and the ethical implications of multimodal and digital dissemination to unknown audiences [139]. For Lee and Kamler [140], as publishing pressures increase during and after candidature, pedagogies should adopt a more explicit outreach orientation, developing a stronger orientation to induction and participation in peer-reviewed activities. Supervisors can be better equipped to support students during this often-challenging stage of the publication process by being aware of the intricacies of the peer-review process, including how to respond effectively to reviewer comments and criticism. Lindquist [98] notes the management of expectations of students, understanding the review process and time it takes for papers to be reviewed, revised and accepted, before the publication process begins.

## 8. Conclusions

This entry has sought to identify the features and current standing of a policy that has been present in academia for nearly a century, and which most recently cascaded down to impact doctoral students. The culture of publish or perish has raised concerns among academics given disparities between teaching-focused staff and institutions compared with those which are more research focused (given the associated resources afforded the latter to achieve these goals). It is also clear that doctoral students who do wish to enter the increasingly competitive market for academic jobs may feel the need to have in their

possession a host of publications or evidence of their dissemination of research findings when seeking to differentiate themselves from their peers.

Ultimately, the culture does, where properly managed and where support for the doctoral students exists, provide many benefits and shows an appreciation of academic life to students to help them conclude whether such a career is suitable. Perhaps where a change could be made is within the culture itself. The term “perish” is unfortunate and appears as a warning of what might befall a researcher who cannot meet thresholds for outputs. A simple change in thought process, of replacing “publish or perish” to “publish and flourish” would send a completely different message [141]. A message that encourages dissemination of research, and that emphasises quality of publication, of engagement with affected communities, and of institutions recognising the value of students who publish during their studies and seek opportunities to produce outputs, but without seeing this as an additional burden and rather an opportunity when circumstances allow.

This entry has not been able to explore all areas of the negative effects the current culture creates. Publish or perish can work for established academics, those who already have a standing in the community, who are experts in an area or have created a niche area of research in which they are the experts. This is much more difficult for students just starting out in their academic career who are having, often for the first time, expectations placed on them to produce “original” research. This is more difficult for doctoral students who are studying part-time, for those with caring responsibilities, for those who become parents during their studies, and it ignores students from diverse cultural backgrounds. With an ever-increasing importance being placed on equality, diversity and inclusion, a publish or perish culture can hardly be thought of as fostering a more inclusive and diverse scholarly community.

Supervisors, who should have the closest relationship with doctoral students, need support and training to be in a position to assist students to achieve in a publish or perish culture. Various mechanisms exist to help with this task, but ultimately if institutions are using this culture to determine success in academia, they also must be compelled to provide the resources to become inclusive for all doctoral students.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Bok, D.C.; Bok, D.C. *Beyond the Ivory Tower: Social Responsibilities of the Modern University*; Harvard University Press: Cambridge, MA, USA, 2009.
2. Ari, M.D.; Iskander, J.; Araujo, J.; Casey, C.; Kools, J.; Chen, B.; Swain, R.; Kelly, M.; Popovic, T. A science impact framework to measure impact beyond journal metrics. *PLoS ONE* **2020**, *15*, e0244407. [CrossRef] [PubMed]
3. Available online: <https://www.ukri.org/who-we-are/research-england/research-excellence/research-excellence-framework/> (accessed on 29 August 2023).
4. Available online: [https://www.exeter.ac.uk/media/universityofexeter/ref2021/Simple\\_Guide\\_to\\_REF2021.pdf](https://www.exeter.ac.uk/media/universityofexeter/ref2021/Simple_Guide_to_REF2021.pdf) (accessed on 29 August 2023).
5. Available online: <https://www.ukri.org/publications/explainer-qr-research-funding-and-the-ref/> (accessed on 29 August 2023).
6. Niles, M.T.; Schimanski, L.A.; McKiernan, E.C.; Alperin, J.P. Why we publish where we do: Faculty publishing values and their relationship to review, promotion and tenure expectations. *PLoS ONE* **2020**, *15*, e0228914. [CrossRef] [PubMed]
7. Schimanski, L.A.; Alperin, J.P. The evaluation of scholarship in academic promotion and tenure processes: Past, present, and future. *F1000Research* **2018**, *7*, 1605. [CrossRef] [PubMed]
8. Rawat, S.; Meena, S. Publish or perish: Where are we heading? *J. Res. Med. Sci. Off. J. Isfahan Univ. Med. Sci.* **2014**, *19*, 87.
9. Chen, S. Leaving academia: Why do doctoral graduates take up non-academic jobs and to what extent are they prepared? *Stud. Grad. Postdr. Educ.* **2021**, *12*, 338–352. [CrossRef]
10. Buirski, N. Is mindfulness a useful next trend in doctoral supervision? *Austin Univ. Rev.* **2020**, *62*, 61–68.

11. Baptista, A.; Frick, L.; Holley, K.; Remmik, M.; Tesch, J.; Åkerlind, G. The doctorate as an original contribution to knowledge: Considering relationships between originality, creativity, and innovation. *Frontline Learn. Res.* **2015**, *3*, 55–67.
12. Jalogo, M.R.; Boyer, W.; Ebbeck, M. Writing for scholarly publication as ‘tacit knowledge’: A qualitative focus group study of doctoral students in education. *Early Child. Educ. J.* **2014**, *42*, 241–250. [[CrossRef](#)]
13. Kwan, B. An investigation of instruction in research publishing offered in doctoral programmes: The Hong Kong case. *High. Educ.* **2010**, *59*, 55–68. [[CrossRef](#)]
14. Pasco, A. Should graduate students publish? *J. Sch. Publ.* **2009**, *40*, 231–240. [[CrossRef](#)]
15. Lee, A.M. Developing effective supervisors: Concepts of research supervision. *S. Afr. J. High. Educ.* **2007**, *21*, 680–693. [[CrossRef](#)]
16. Lei, J.; Hu, G. Apprenticeship in scholarly publishing: A student perspective on doctoral supervisors’ roles. *Publications* **2015**, *3*, 27–42. [[CrossRef](#)]
17. Deem, R. Rethinking doctoral education: University purposes, academic cultures, mental health and the public good. In *Structural and Institutional Transformations in Doctoral Education: Social, Political and Student Expectations*; Palgrave Macmillan: Cham, Switzerland, 2020; pp. 13–42.
18. Abiddin, N.Z.; Hassan, A.; Ahmad, A.R. Research student supervision: An approach to good supervisory practice. *Open Educ. J.* **2009**, *2*, 1.
19. Young, S.N.; VanWye, W.R.; Schafer, M.A.; Robertson, T.A.; Poore, A.V. Factors affecting PhD student success. *Int. J. Exerc. Sci.* **2019**, *12*, 34. [[PubMed](#)]
20. Hockey, J. A complex craft: United Kingdom PhD supervision in the social sciences. *Res. Post-Compuls. Educ.* **1997**, *2*, 45–70. [[CrossRef](#)]
21. Caplow, T.; McGee, R.J. *The Academic Marketplace*; Basic Books: New York, NY, USA, 1958.
22. McGrail, M.R.; Rickard, C.M.; Jones, R. Publish or perish: A systematic review of interventions to increase academic publication rates. *High. Educ. Res. Dev.* **2006**, *25*, 19–35. [[CrossRef](#)]
23. Moosa, I.A. *Publish or Perish: Perceived Benefits versus Unintended Consequences*; Edward Elgar Publishing: Cheltenham, UK, 2018.
24. Coolidge, H.J. (Ed.) *Archibald Cary Coolidge: Life and Letters*; Books for Libraries: Boston, MA, USA, 1932; Volume 308.
25. Steele, C.; Butler, L.; Kingsley, D. The publishing imperative: The pervasive influence of publication metrics. *Learn. Publ.* **2006**, *19*, 277–290. [[CrossRef](#)]
26. Available online: <https://undark.org/2022/06/16/why-wont-academia-let-go-of-publish-or-perish/> (accessed on 29 August 2023).
27. Mwamwenda, T.S. Academics’ stance on the slogan “publish or perish”. *Assess. Eval. High. Educ.* **1994**, *19*, 99–108. [[CrossRef](#)]
28. Becker, A.; Lukka, K. Instrumentalism and the publish-or-perish regime. *Crit. Perspect. Account.* **2022**, *94*, 102436. [[CrossRef](#)]
29. Lee, N.R.; Bukovszki, S. Doctoral students’ perspectives on academic publishing. *EduLingua* **2016**, *2*, 1–14.
30. Fyfe, A.; Coate, K.; Curry, S.; Lawson, S.; Moxham, N.; Røstvik, C.M. *Untangling Academic Publishing: A History of the Relationship between Commercial Interests, Academic Prestige and the Circulation of Research*; University of St Andrews: St Andrews, UK, 2017. [[CrossRef](#)]
31. Ramalho Correia, A.M.; Carlos Teixeira, J. Reforming scholarly publishing and knowledge communication: From the advent of the scholarly journal to the challenges of open access. *Online Inf. Rev.* **2005**, *29*, 349–364. [[CrossRef](#)]
32. Lawrence, P.A. Rank injustice. *Nature* **2002**, *415*, 835–836. [[CrossRef](#)] [[PubMed](#)]
33. Hakala, J. The future of the academic calling in the era of the publish or perish culture: Junior researchers’ perspectives. *Ephemera* **2011**, *11*, 27.
34. De Rond, M.; Miller, A.N. Publish or perish: Bane or boon of academic life? *J. Manag. Inq.* **2005**, *14*, 321–329. [[CrossRef](#)]
35. Kara, H.; Lemon, N.; Mannay, D.; McPherson, M. Dissemination. In *Creative Research Methods in Education*; Policy Press: Bristol, UK, 2021; pp. 143–158.
36. Gagnon, M.L. Moving knowledge to action through dissemination and exchange. *J. Clin. Epidemiol.* **2011**, *64*, 25–31. [[CrossRef](#)] [[PubMed](#)]
37. Lee, I. Publish or perish: The myth and reality of academic publishing. *Lang. Teach.* **2014**, *47*, 250–261. [[CrossRef](#)]
38. Nazarovets, S. Doctoral students benefit from international publishing. *Nature* **2022**, *603*, 32. [[CrossRef](#)] [[PubMed](#)]
39. Digo, G.S.; Labor, J.S. Effectiveness of online colloquia in improving the research dissemination skills of graduate students. *ASEAN J. Open Distance Learn.* **2022**, *14*, 42–53.
40. Clifton-Ross, J.; Dale, A.; Newell, R. Frameworks and models for disseminating curated research outcomes to the public. *SAGE Open* **2019**, *9*. [[CrossRef](#)]
41. Hyland, K.; Zou, H.J. “I believe the findings are fascinating”: Stance in three-minute theses. *J. Engl. Acad. Purp.* **2021**, *50*, 100973. [[CrossRef](#)]
42. Klar, S.; Krupnikov, Y.; Ryan, J.; Searles, K.; Shmargad, Y. Using social media to promote academic research: Identifying the benefits of twitter for sharing academic work. *PLoS ONE* **2020**, *15*, e0229446. [[CrossRef](#)] [[PubMed](#)]
43. Rotich, D.C.; Musakali, J.J. Publish or perish: Remaining academically relevant and visible in the global academic scene through scholarly publishing. In *Proceedings of 13th Annual IS Conference and Programme Chairs*; University of Zululand: KwaDlangezwa, South Africa, 2013; pp. 58–81.
44. Wilson, A.; Sharrad, S.; Rasmussen, P.; Kernick, J. Publish or perish: Ensuring longevity in nurse education—Evaluation of a strategy to engage academics, students, and clinicians in publication activity. *J. Prof. Nurs.* **2013**, *29*, 210–216. [[CrossRef](#)] [[PubMed](#)]

45. Bartkowski, J.P.; Deem, C.S.; Ellison, C.G. Publishing in academic journals: Strategic advice for doctoral students and academic mentors. *Am Soc* **2015**, *46*, 99–115. [CrossRef]
46. Pickering, C.; Byrne, J. The benefits of publishing systematic quantitative literature reviews for PhD candidates and other early-career researchers. *High. Educ. Res. Dev.* **2014**, *33*, 534–548. [CrossRef]
47. Caffarella, R.S.; Barnett, B.G. Teaching doctoral students to become scholarly writers: The importance of giving and receiving critiques. *Stud. High. Educ.* **2000**, *25*, 39–52. [CrossRef]
48. Hanafizadeh, P.; Shaikh, A.A. Developing doctoral students'/researchers' understanding of the journal peer-review process. *Int. J. Manag. Educ.* **2021**, *19*, 100500. [CrossRef]
49. Prager, E.M.; Chambers, K.E.; Plotkin, J.L.; McArthur, D.L.; Bandrowski, A.E.; Bansal, N.; Martone, M.E.; Bergstrom, H.C.; Bespalov, A.; Graf, C. Improving transparency and scientific rigor in academic publishing. *J. Neurosci. Res.* **2019**, *97*, 377–390. [CrossRef]
50. Atai, M.; Karimi, M.; Asadnia, F. Conceptions of research publication among Iranian doctoral students of applied linguistics: Cherish the wish to publish or rush to perish. *Appl. Linguist.* **2018**, *21*, 29–65. Available online: <https://semanticscholar.org/paper/ff822412ed0ed01b4f07857d7bdee2ef2cab1724> (accessed on 29 August 2023).
51. Rust, C.; Robertson, A. Show or tell? Opportunities, problems and methods of the exhibition as a form of research dissemination. In Proceedings of the 5th European Academy of Design Conference, Barcelona, Spain, 28–30 April 2003.
52. Available online: <https://www.ukri.org/what-we-do/supporting-collaboration/supporting-collaboration-research-england/knowledge-exchange-framework/> (accessed on 29 August 2023).
53. Pendell, K.; Kimball, E. Dissemination of applied research to the field: Attitudes and practices of faculty authors in social work. *Insights UKSG J.* **2021**, *34*, 14. [CrossRef]
54. Ribeiro-Soriano, D.; Berbegal-Mirabent, J. Disseminating scientific research: A double-edged sword? *Knowl. Manag. Res. Pract.* **2017**, *15*, 280–390. [CrossRef]
55. Finch, J.; Bell, S.; Bellingan, L.; Campbell, R.; Donnelly, P.; Gardner, R.; Hall, M.; Hall, S.; Kiley, R.; van der Stelt, W.; et al. Accessibility, sustainability, excellence: How to expand access to research publications. *Executive summary. Int. Microbiol.* **2013**, *16*, 125–132. [PubMed]
56. Grand, A.; Davies, G.; Holliman, R.; Adams, A. Mapping public engagement with research in a UK university. *PLoS ONE* **2015**, *10*, e0121874. [CrossRef] [PubMed]
57. Regmi, K. Ethical and legal issues in publication and dissemination of scholarly knowledge: A summary of the published evidence. *J. Acad. Ethics* **2011**, *9*, 71–81. [CrossRef]
58. Henry, C.; Stiglitz, J.E. Intellectual property, dissemination of innovation and sustainable development. *Glob. Policy* **2010**, *1*, 237–251. [CrossRef]
59. Merry, W.W. (Ed.) *Homer. Odyssey, Books I–XII*; From the guiding character in Homer's the Odyssey; Clarendon Press: Cary, NC, USA, 1882.
60. Hasan, S.S.; Ahmadi, K. Publish or perish: A mandate with negative collateral consequences. *Acad. Med.* **2017**, *92*, 140. [CrossRef] [PubMed]
61. Moradi, S. Publication should not be a prerequisite to obtaining a PhD. *Nat. Hum. Behav.* **2019**, *3*, 1025. [CrossRef] [PubMed]
62. Grimes, D.R.; Bauch, C.T.; Ioannidis, J.P. Modelling science trustworthiness under publish or perish pressure. *R. Soc. Open Sci.* **2018**, *5*, 171511. [CrossRef]
63. Germani, F. The Mental Health of PhD Students Is at Stake: Scientific Journals Should Take the Blame. *ZME Science*. 2023. Available online: <https://www.zmescience.com/science/journals-to-blame-poor-phd-mental-health-0432/> (accessed on 29 August 2023).
64. Bello, S.A.; Azubuike, F.C.; Akande, O.A. Reputation disparity in teaching and research productivity and rewards in the context of consequences of institutionalization of Publish or Perish culture in academia. *High. Educ. Q.* **2023**, *77*, 574–584. [CrossRef]
65. Miller, A.N.; Taylor, S.G.; Bedeian, A.G. Publish or perish: Academic life as management faculty live it. *Career Dev. Int.* **2011**, *16*, 422–445. [CrossRef]
66. Cho, S.; Hayter, C.S. Under pressure: A systematic review of stress and its impact among graduate students. *Sci. Public Policy* **2020**, *47*, 758–771. [CrossRef]
67. Grady, R.K.; La Touche, R.; Oslawski-Lopez, J.; Powers, A.; Simacek, K. Betwixt and between: The social position and stress experiences of graduate students. *Teach. Sociol.* **2014**, *42*, 5–16. [CrossRef]
68. Laws, T.A.; Fiedler, B.A. Universities' expectations of pastoral care: Trends, stressors, resource gaps and support needs for teaching staff. *Nurse Educ. Today* **2012**, *32*, 796–802. [CrossRef] [PubMed]
69. Bekkouche, N.S.; Schmid, R.F.; Carliner, S. "Simmering pressure": How systemic stress impacts graduate student mental health. *Perform. Improv. Q.* **2022**, *34*, 547–572. [CrossRef]
70. Davies, B.; Felappi, G. Publish or perish. *Metaphilosophy* **2017**, *48*, 745–761. [CrossRef]
71. Esia-Donkoh, K.; Yelkpiერი, D.; Esia-Donkoh, K. Coping with stress: Strategies adopted by students at the Winneba Campus of University of Education, Winneba, Ghana. *US-China Educ. Rev. B* **2011**, *2*, 290–299.
72. Makulilo, A. "Where to Publish?" Avoiding Mediocrity for Academic Staff Promotion at the University of Dar es Salaam. *Afr. Rev.* **2021**, *48*, 621–646. [CrossRef]

73. Tran, T.; Trinh, T.P.T.; Le, C.M.; Hoang, L.K.; Pham, H.H. Research as a base for sustainable development of universities: Using the Delphi method to explore factors affecting international publishing among Vietnamese academic staff. *Sustainability* **2020**, *12*, 3449. [[CrossRef](#)]
74. Korytkowski, P.; Kulczycki, E. Publication counting methods for a national research evaluation exercise. *J. Informetr.* **2019**, *13*, 804–816. [[CrossRef](#)]
75. Siegel, M.G.; Brand, J.C.; Rossi, M.J.; Lubowitz, J.H. “Publish or perish” promotes medical literature quantity over quality. *Arthrosc. J. Arthrosc. Relat. Surg.* **2018**, *34*, 2941–2942. [[CrossRef](#)]
76. Herndon, N.C. Research fraud and the publish or perish world of academia. *J. Mark. Channels* **2016**, *23*, 91–96. [[CrossRef](#)]
77. Wright, I. Endpiece: Publish or perish? *BMJ Br. Med. J.* **2005**, *330*, 336. [[CrossRef](#)]
78. Kendall, G.; Linacre, S. Predatory journals: Revisiting Beall’s research. *Publ. Res. Q.* **2022**, *38*, 530–543. [[CrossRef](#)]
79. Nicholas, D.; Rodríguez-Bravo, B.; Boukacem-Zeghmouri, C.; Herman, E.; Clark, D.; Xu, J.; Abrizah, A.; Świgoń, M.; Watkinson, A.; Sims, Q.; et al. Early career researchers and predatory journals during the Covid-19 pandemic. An international analysis. *Prof. Inf.* **2023**, *32*, 1. [[CrossRef](#)]
80. Nicholas, D.; Herman, E.; Abrizah, A.; Rodríguez-Bravo, B.; Boukacem-Zeghmouri, C.; Watkinson, A.; Świgoń, M.; Xu, J.; Jamali, H.R.; Tenopir, C. Never mind predatory publishers. . . What about ‘grey’ publishers? *Prof. De La Inf.* **2023**, *32*, 5. [[CrossRef](#)]
81. Stoilescu, D.; McDougall, D. Starting to publish academic research as a doctoral student. *Int. J. Dr. Stud.* **2010**, *5*, 79. [[CrossRef](#)] [[PubMed](#)]
82. Mlinarić, A.; Horvat, M.; Šupak Smolčić, V. Dealing with the positive publication bias: Why you should really publish your negative results. *Biochem. Medica* **2017**, *27*, 447–452. [[CrossRef](#)] [[PubMed](#)]
83. Head, M.L.; Holman, L.; Lanfear, R.; Kahn, A.T.; Jennions, M.D. The extent and consequences of p-hacking in science. *PLoS Biol.* **2015**, *13*, e1002106. [[CrossRef](#)]
84. Cooksey, R.; McDonald, G.; Cooksey, R.; McDonald, G. Should I Publish as I Go? In *Surviving and Thriving in Postgraduate Research*; Springer: Gateway East, Singapore, 2019; pp. 1117–1136.
85. Currie, G.M. Academic integrity and artificial intelligence: Is ChatGPT hype, hero or heresy? *Semin. Nucl. Med.* **2023**, *53*, 719–730. [[CrossRef](#)]
86. Crawford, J.; Cowling, M.; Allen, K.A. Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI). *J. Univ. Teach. Learn. Pract.* **2023**, *20*, 2. [[CrossRef](#)]
87. Mahmud, S.; Bretag, T. Postgraduate research students and academic integrity: ‘It’s about good research training’. *J. High. Educ. Policy Manag.* **2013**, *35*, 432–443. [[CrossRef](#)]
88. Folse, K.A. Ethics and the profession: Graduate student training. *Teach. Sociol.* **1991**, *19*, 344–350. [[CrossRef](#)]
89. Arsenault, A.C.; Heffernan, A.; Murphy, M.P. What is the role of graduate student journals in the publish-or-perish academy? Three lessons from three editors-in-chief. *Int. Stud.* **2021**, *58*, 98–115. [[CrossRef](#)]
90. Wadesango, N.; Machingambi, S. Post graduate students’ experiences with research supervisors. *J. Sociol. Soc. Anthropol.* **2011**, *2*, 31–37. [[CrossRef](#)]
91. Polkinghorne, M.; Taylor, J.; Knight, F.; Stewart, N. Doctoral supervision: A best practice review. *Encyclopedia* **2023**, *3*, 46–59. [[CrossRef](#)]
92. Leavey, A. Leadership in Higher Education: Graduate Teaching Assistants as the agents of change. *Postgrad. Pedagog.* **2023**, *3*, 153–174.
93. Craswell, G. Deconstructing the skills training debate in doctoral education. *High. Educ. Res. Dev.* **2007**, *26*, 377–391. [[CrossRef](#)]
94. Duranczyk, I.M.; Franko, J.; Osifuye, S.; Barton, A.; Higbee, J.L. Creating a model for graduate student inclusion and success. *Contemp. Issues Educ. Res. (CIER)* **2015**, *8*, 147–158. [[CrossRef](#)]
95. Scaffidi, A.K.; Berman, J.E. A positive postdoctoral experience is related to quality supervision and career mentoring, collaborations, networking and a nurturing research environment. *High. Educ.* **2011**, *62*, 685–698. [[CrossRef](#)]
96. Vitae. *Concordat to Support the Career Development of Researchers*; Vitae: Cambridge, UK, 2019.
97. Brown, S.D.; Lent, R.W.; Ryan, N.E.; McPartland, E.B. Self-efficacy as an intervening mechanism between research training environments and scholarly productivity: A theoretical and methodological extension. *Couns. Psychol.* **1996**, *24*, 535–544. [[CrossRef](#)]
98. Lindqvist, M.H. Reconstructing the doctoral publishing process. *Exploring the liminal space. High. Educ. Res. Dev.* **2018**, *37*, 1395–1408. [[CrossRef](#)]
99. Holley, K.A.; Caldwell, M.L. The challenges of designing and implementing a doctoral student mentoring program. *Innov. High. Educ.* **2012**, *37*, 243–253. [[CrossRef](#)]
100. Pallas, A.M. Preparing education doctoral students for epistemological diversity. *Educ. Res.* **2001**, *30*, 1–6. [[CrossRef](#)]
101. Moore, S.; Neylon, C.; Paul Eve, M.; Paul O’Donnell, D.; Pattinson, D. “Excellence R Us”: University research and the fetishisation of excellence. *Palgrave Commun.* **2017**, *3*, 1–13.
102. Schein, E.H. *Organizational Culture and Leadership*; John Wiley & Sons: Hoboken, NJ, USA, 2010; Volume 2.
103. Duke, D.C.; Denicolo, P.M. What supervisors and universities can do to enhance doctoral student experience (and how they can help themselves). *FEMS Microbiol. Lett.* **2017**, *364*, fnx090. [[CrossRef](#)] [[PubMed](#)]
104. Ince, S.; Hoadley, C.; Kirschner, P. The role of libraries in teaching doctoral students to become information-literate researchers. *Inf. Learn. Sci.* **2019**, *120*, 158–172. [[CrossRef](#)]

105. Alvarez, B.; Bonnet, J.L.; Kahn, M. Publish, not perish: Supporting graduate students as aspiring authors. *J. Librariansh. Sch. Commun.* **2014**, *2*, eP1141. [\[CrossRef\]](#)
106. Kamler, B. Rethinking doctoral publication practices: Writing from and beyond the thesis. *Stud. High. Educ.* **2008**, *33*, 283–294. [\[CrossRef\]](#)
107. Cotterall, S. Doctoral students writing: Where's the pedagogy? *Teach. High. Educ.* **2011**, *16*, 413–425. [\[CrossRef\]](#)
108. Stewart, N.; Polkinghorne, M.; Devis-Rozental, C. *Identifying Factors Influencing Higher Education Research Culture: An Embodied Relational Understanding Approach to PhD Supervision*; Bournemouth University: Poole, UK, 2022.
109. Hammersley, J.; Waters, M.; Keefe, K. Use of peer mentoring, interdisciplinary collaboration, and archival datasets for engaging undergraduates in publishable research. *Front. Psychol.* **2019**, *10*, 96. [\[CrossRef\]](#)
110. Friedrich-Nel, H.; Mac Kinnon, J. The quality culture in doctoral education: Establishing the critical role of the doctoral supervisor. *Innov. Educ. Teach. Int.* **2019**, *56*, 140–149. [\[CrossRef\]](#)
111. Gower, O. *UK Research Supervision Survey—2021 Report*; UK Council for Graduate Education (UKCGE): Lichfield, UK, 2021.
112. Beasy, K.; Emery, L.; Dyer, L.; Coleman, D.; Bywaters, D.; Garrad, T.; Crawford, J.; Swarts, K.; Jahangiri, S. Writing together to foster wellbeing: Doctoral writing groups as spaces of wellbeing. *High. Educ. Res. Dev.* **2020**, *39*, 1091–1105. [\[CrossRef\]](#)
113. Polkinghorne, M.; Taylor, J.; Knight, F. *Finding the Key to Successful Doctoral Supervision*; Bournemouth University: Poole, UK, 2022.
114. Bulat, A. *The UCL Good Supervision Guide*; University College London: London, UK, 2018.
115. Woodhouse, J.; Wood, P. Creating dialogic spaces: Developing doctoral students' critical writing skills through peer assessment. *Stud. High. Educ.* **2020**, *47*, 643–655. [\[CrossRef\]](#)
116. Taylor, S.; Kiley, M.; Humphrey, R. *A Handbook for Doctoral Supervisors*, 2nd ed.; Routledge: Abingdon, UK, 2017.
117. Cornell, B. *PhD Students and Their Careers*; HEPI Policy Note 25; Higher Education Policy Institute: Oxford, UK, 2020.
118. Bryan, B.; Guccione, K. Was it worth it? a qualitative exploration into graduate perceptions of doctoral value. *High. Educ. Res. Dev.* **2018**, *37*, 1124–1140. [\[CrossRef\]](#)
119. Kandlbinder, P.; Peseta, T. *Supervisors' Words: An Insider's View of Postgraduate Supervision*; University of Sydney: Sydney, Australia, 2001.
120. Nolan, R.; Rocco, T. Teaching graduate students in the social sciences writing for publication. *Int. J. Teach. Learn. High. Educ.* **2009**, *20*, 267–273.
121. Gray, P.; Drew, D. *What They Didn't Teach you in Graduate School. 199 Helpful Hints for Success in Your Academic Career*; Stylus Publishing: Sterling, VA, USA, 2008.
122. Spender, D. The gatekeepers: A feminist critique of academic publishing. In *Doing Feminist Research*; Routledge: London, UK, 2013; pp. 186–202.
123. Tennant, J.P.; Ross-Hellauer, T. The limitations to our understanding of peer review. *Res. Integr. Peer Rev.* **2020**, *5*, 6. [\[CrossRef\]](#)
124. Horn, S.A. The social and psychological costs of peer review: Stress and coping with manuscript rejection. *J. Manag. Inq.* **2016**, *25*, 11–26. [\[CrossRef\]](#)
125. Zhu, Y.; Procter, R. Use of blogs, Twitter and Facebook by UK PhD students for scholarly communication. *Observatorio (OBS\*)* **2015**, *9*, 29–46. [\[CrossRef\]](#)
126. Richards, K.; Fletcher, T. Navigating the personal challenges and sociopolitics of doctoral supervision. *Self-Study Teach. Teach. Educ. Pract.* **2019**, *15*, 260–277. [\[CrossRef\]](#)
127. Jackson, D.; Power, T.; Usher, K. Learning to be a doctoral supervisor: Experiences and views of nurse supervisors of higher degree research students. *J. Clin. Nurs.* **2021**, *30*, 1060–1069. [\[CrossRef\]](#)
128. Manathunga, C. The development of research supervision: "Turning the light on a private space". *Int. J. Acad. Dev.* **2005**, *10*, 17–30. [\[CrossRef\]](#)
129. Hamilton, J.; Carson, S. Speaking of supervision: A dialogic approach to building higher degree research supervision capacity in the creative arts. *Educ. Philos. Theory* **2015**, *47*, 1348–1366. [\[CrossRef\]](#)
130. Motshoane, P.; McKenna, S. Crossing the border from candidate to supervisor: The need for appropriate development. *Teach. High. Educ.* **2021**, *26*, 387–403. [\[CrossRef\]](#)
131. Hammond, J.; Ryland, K.; Tennant, M.; Boud, D. *Building Research Supervision and Training across Australian Universities: Final Report*; Australian Learning and Teaching Council: Sydney, Australia, 2010.
132. Kiley, M. Developments in research supervisor training: Causes and responses. *Stud. High. Educ.* **2011**, *36*, 585–599. [\[CrossRef\]](#)
133. Taylor, S.; Kiley, M.; Holley, K.A. (Eds.) *The Making of Doctoral Supervisors: International Case Studies of Practice*; Routledge: London, UK, 2020.
134. Wisker, G.; Robinson, G.; Shacham, M. Postgraduate research success: Communities of practice involving cohorts, guardian supervisors and online communities. *Innov. Educ. Teach. Int.* **2007**, *44*, 301–320. [\[CrossRef\]](#)
135. Kumar, S.; Kumar, V.; Taylor, S. *A Guide to Online Supervision*; UK Council for Graduate Education: Litchfield, UK, 2020.
136. Kiley, M.; Mullins, G. Supervisors' conceptions of research: What are they? *Scand. J. Educ. Res.* **2005**, *49*, 245–262. [\[CrossRef\]](#)
137. Taylor, S. *Good Supervisory Practice Framework*; UK Council for Graduate Education (UKCGE): Lichfield, UK, 2019.
138. Larivière, V. On the shoulders of students? The contribution of PhD students to the advancement of knowledge. *Scientometrics* **2011**, *90*, 463–481. [\[CrossRef\]](#)
139. Robinson-Pant, A.; Singal, N. Beyond authorship and accountability? The ethics of doctoral research dissemination in a changing world. *Br. Educ. Res. J.* **2019**, *46*, 859–877. [\[CrossRef\]](#)

140. Lee, A.; Kamler, B. Bringing pedagogy to doctoral publishing. *Teach. High. Educ.* **2008**, *13*, 511–523. [[CrossRef](#)]
141. Lambovska, M.; Todorova, D. ‘Publish and flourish’ instead of ‘publish or perish’: A motivation model for top-quality publications. *J. Lang. Educ.* **2021**, *7*, 141–155. [[CrossRef](#)]

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