

Doctoral students' challenges in preparing and publishing research in reputable international journals

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This study explored the challenges faced by doctoral students in preparing and publishing research in reputable international journals. A descriptive qualitative approach was employed to gather in-depth information from four doctoral students in three higher education institutions in Sumatra, Indonesia. The participants were recruited through purposive sampling and through semi-structured interviews gave their views about international journal preparation and publication challenges. Data were analysed using the six steps in thematic analysis developed by Braun and Clarke (2006). Findings indicated that doctoral students faced diverse challenges, including lack of title formulation knowledge, limited research funding, lack of methodological knowledge, and language problems. This study's findings can provide information about the challenges facing Indonesian doctoral students in achieving publishing of their research in an international journal as a requirement for doctoral completion.

Introduction

Publishing articles in a reputable international journal has been initiated by many universities around the world, including Indonesia's universities, as a graduation requirement for a doctoral program. It is based on the idea that higher education comprises leading knowledge institutions that create, evaluate and disseminate knowledge to society (Sheehy, 2022), and also aspire to attain social prestige and a global ranking (Chien, 2019). Publication also reflects scholars' research quality (Bucher, 2018). Therefore, in countries around the world, education policymakers are devoting resources to improve research so that they can compete better with other universities (Mok & Wei, 2008).

To be accepted in the journal is not easy. Aspiring authors must know about English writing for publication (Karimnia, 2012; Nolan & Rocco, 2009), and acquire the ability to integrate their research skills with article writing activities such as literature review, scientific vocabulary, and organisation of ideas in a logical order (Elton, 2010). Fundamental English writing skills can enable good academic outcomes for their article (Moldovan, 2011), and support their future academic careers (Caparrós-Ruiz, 2019), because the English language is very commonly used for publishing in international publications (Phothongsunan, 2016). This requirement is different from Indonesian language articles published in unindexed local journals (Adnan et al., 2021; Arsyad & Arono, 2016; Swales, 2004). English writing skills help scholars to publish worldwide (Bucher, 2018), express ideas based on their discipline, and contribute to research needs (Gusmuliana et al., 2022; Klein, 2008).

The challenges in attaining international publication have been investigated by numerous studies, for example, doctoral students' publication and completion time (Churchill et al.,

2021), publication experiences of international indexed journals (Ge, 2015), examining of publication challenges for doctoral students in education, engineering, business and law (Hill & Thabet, 2021), Vietnamese doctoral students' challenges (Hoang & Florence, 2019), investigation of Polish students' low publication rates (Kijak, 2014), Hongkong doctoral students' publication challenges (Kwan, 2010), African doctoral publication challenges (Mouton, 2011), and North Cyprus doctoral students' publication challenges (Shamsi & Osam, 2022). However, examining challenges in doctoral students' publication starting from research preparation until publication process was rare. Therefore, I sought to conduct research to explore more detail about the challenges, using the guiding question, "What challenges face Indonesian doctoral students in preparing and publishing research in reputable international journals?"

My research aimed to focus on "challenges faced by doctoral students" rather than upon a discussion about "reputable". For this reason, this research defines "reputable international journals" for interim or working purposes as "any journal selected by a pre-eminent indexing service" (for example, see Scopus, n.d.).

Literature review

The importance of publication during doctoral research

Publishing in reputable international journals is a prerequisite for doctoral students. It is a part of strategies to improve the quality of research students' activities, relying upon academic journal processes to assess significance, accuracy of data and quality of results (Bradley, 2009; Aitchison et al., 2010). Also, publication ensures dissemination to other researchers for advancing knowledge in the publication's field of research (Shin et al., 2018), and helps to establish the students' research productivity (Ynalvez et al., 2014). In addition, the policies implemented by universities are a strategy to obtain external funding and to undertake internal allocations (Epstein et al., 2005), publicise their professional research efforts (Niven & Grant, 2012), and increase their research productivity (Churchill et al., 2021).

A number of case studies provide helpful insights and examples for the present study. Lindqvist (2018) investigated a case of doctoral students publishing articles. The study adopted a mixed method design in which the quantitative phase using statistics was used to characterise the process of publication, while the qualitative was for compiling quotations from editors and reviewers. It concluded that the publication process after students completed their doctoral programs increased their understanding of writing and publication techniques for indexed international journals. In an African context, Asante and Abubakari (2021) explored publication experiences during their doctoral study in geography by adapting an autoethnography method. They revealed that publication contributed to the education sector by being managed by scholars with experience in international research and publishing. This could assist institutions in obtaining international research funding, and in the economic sector, research results can help governments to make national policies that are beneficial for the country. Xu and Grant (2020) investigated doctoral students publishing academic work through a case study

involving mid-program students of education as the research participants. Interview transcript analyses showed that a PhD by publication can establish the students' academic identity.

Moreover, Sharmini et al. (2015) examined the approaches used by examiners towards students seeking a PhD through a thesis that included publications. They conducted a case study with a survey method involving 1300 doctoral students and 900 supervisors. They revealed that students with publication experience who were writing a thesis were easier to guide than those with no publication experience, because a part of the thesis had been reviewed, given suggestions, and edited by the reviewer's journal. Nethsinghe and Southcott (2015) also investigated the contribution of a publication to thesis, using an autoethnography method with interviews. Their study involved both the supervisor and supervisee as the participants. The supervisor encouraged the supervisee to publish an article at the beginning of the study as a requirement before writing the doctoral thesis. They concluded that joint research and article writing during the doctoral program can enrich the experience of writing a thesis.

Publication policy for doctoral students in Indonesia

The origins of publication policy in Indonesia may be related to a number of regional investigations of academic research productivity. Vinluan (2012) compared the research productivity of the Philippines with a number of ASEAN countries, including Indonesia, Malaysia, Singapore, Thailand and Vietnam, in the fields of education and psychology from 1966 to 2009. Publication data was taken from Clarivate's *Web of Science* (WoS, n.d.), "...a paid-access platform that provides ... access to multiple databases that provide reference and citation data from academic journals..." (*Wikipedia*, 2023). The study showed that Indonesia ranked fifth after the Philippines. Hassan et al. (2012) investigated trends and features of research activities in ASEAN countries in the fields of nanotechnology; energy; health; food, agriculture and biotechnology; environment; information and communication technology (ICT); and industrial technology during 2000-2008. Their study revealed research productivity for Indonesia was far behind Singapore, Thailand and Malaysia. Low research productivity made Indonesian government increase efforts in motivating and facilitating academics to publish their articles in reputable international journals (Arsyad et al., 2019). Arsyad et al (2019) noted that "... Indonesian academic publications were mostly by faculty from science, technology, health and medicine fields such as Engineering (15.14%), Medicine (10.64%), Computer Science (10.2%), Agriculture and Biological Sciences (9.57%), Physics and Astronomy (5.39%)". Only 4.74% of Indonesian academic publications were in Social Science fields (Arsyad et al., 2019).

To improve Indonesia's research productivity ranking, students from undergraduate to doctoral program levels have become obligated to publish their research-based work (Indonesia Publication Circular, 2019), arising from the Government's aim to develop Indonesia's scholarly competitiveness (Purwanto et al., 2021). One of the strategies implemented by the Government is facilitating scholars to conduct research every year and obligating doctoral students to publish part of their dissertation in an international reputable journal before completing their doctoral program (Gusmuliana, 2022). The

effort has brought Indonesia into a foremost ranking with more than one hundred thousand researchers publishing in national and international journals (Purwanto et al., 2021). To fulfil this requirement for doctoral graduation, most Indonesian universities have required students to have an international publication, expected during their candidature, with the student positioned as the first author, though this may place pressures on institutional and supervisory support (Mason & Merga, 2018).

Factors Influencing article preparation and publication

In preparing articles for publication, title formulation, funding, knowledge of methodology, and language are four important factors that must be considered by authors. Title is often the first factor that influences article acceptance in reputable international journals. It refers to the representation of the text that informs the reader about the basic idea so that the reader can understand the content quickly (Akman, 2013). Therefore, the selection of an appropriate title or topic is one of the important factors in preparing for publication (Gul et al., 2021). It can help the authors to choose the most appropriate research methodology (Wintersberger & Saunder, 2020) and align with future research trends related to their field of study (Bancong et al., 2021). Qaseem and Zayid (2019) who investigated students' challenges and problems in writing a research project suggested that supervisors should be more focused on guiding students to select a research topic that will yield good research results.

Regarding funding, defined as getting financial support for article preparation and publication needs, the pivotal role has been discussed by Arsyad et al. (2019 and Feyera et al. (2017). Institutions need to support the publishing of research in reputable international journals by providing publication funding. Such funding can enable young researchers to access journal databases, get data analysis assistance and interpretation from statistic experts (Mason et al., 2021), start their research career earlier and generate innovations ((Kumwenda et al., 2017). The study by Taylor (2001) using survey research indicated how the implementation of research funding improves student completions of research studies at universities.

The third factor is knowledge of methodology. This factor includes many topics such as data collection, analysis, and interpretation for both quantitative and qualitative research (Creswell, 2012) to systematically answer research questions (Patel & Patel, 2019). Therefore, research writing skills training needs to be provided, for example as conducted by Alfakih (2017) who found that training programs significantly influenced postgraduate students' abilities in preparing research proposals, especially in methodology. Lecturers can implement self-regulated learning through blog projects that motivate students to write to improve their research methodology (Retnawati, 2017). The study by Nind et al. (2020) on students' perspectives of learning about research methods found that teaching of methodology provided benefits.

The fourth factor is language. Knowledge of language typically refers to English linguistic proficiency, the key to international publication and successful academic writing (Bardi, 2015) for use by global academic communities (Uzuner, 2008). Qasem and Zayid (2019)

suggested focusing on English academic writing workshops to reduce students' anxiety and to increase motivation for completing the research. This strategy is effective for students' writing performance (Wenger, 2004). Students who have acquired writing skills tend to be more optimistic in preparing manuscripts for publication (Ge, 2015).

Method

Research design

A descriptive qualitative approach was employed in this study since it attempts to investigate challenges faced by doctoral students in preparing and publishing a research article in an international reputable journal. This research approach explores social problems faced by individuals or groups (Creswell, 2014), and is commonly used in second and foreign language research (Basturkmen, 2012). Therefore, it is appropriate for this study, because it can help the researchers to gain more insightful in-depth information from participants, compared to quantitative research (Willig, 2013).

Participants

This study was conducted in three public universities in Sumatra, Indonesia, purposively chosen for the research due to ease of access and being providers of doctoral programs. All selected participants had never published their research in an international reputable journal. They were purposively selected as research participants via sampling based on the data of *Scopus* and *Web of Science* in SINTA 3 index which is used to search authors' publications in Indonesia. We opened publication data for all doctoral students of the three universities and selected those who had no international publications. The eligible participants were contacted using *WhatsApp* application to secure four volunteers, all male, with an average age of 28-31 years who were pursuing a doctoral program in different fields of study.

Pseudonyms in the form of common first names in English were used for each participant to ensure high confidentiality, and their individual affiliations are not divulged. The participants were from different semesters (3rd to 5th). They were Robert and John (both Islamic education), Adam (educational management), and James (mathematics education). Our relationships facilitated follow-up interviews anytime to confirm initial interview results.

Robert had undertaken his Islamic education doctoral for less than two years at a well-known Islamic university in Sumatra, Indonesia. Robert was one of five students in the English department among many others in a doctoral program. His GPA was higher than 3.50 from semester one to semester three. Although he gained good grades in each subject, he always kept seeking to achieve a higher grade for the next GPA. His experience of rejection by a reputable international journal made him follow article coaching in his spare time, as preparation for the next his next doctoral publication attempt.

John studied at the same university as Robert. Although his doctoral study was undertaken through *Zoom* meetings for one year due the Covid-19 pandemic, this did not reduce his motivation to keep learning. He finished assignments given by lecturers happily and submitted through email on time, having a strong desire to complete his doctorate in less than four years. He was also an active student in his online classes so became well known by the lecturers in these subjects.

Adam was a fifth-semester student in a doctoral program in Java, Indonesia. He was a student with no background in English skills. Doctorate by publication made him worry about finishing in three and a half years, the standard for an Indonesian doctoral program. His limited knowledge of international journals lead to his article being declined by an international journal chief editor several times. However, these bad experiences did not reduce his motivation to learn to improve his writing weaknesses, formulate an appropriate title, and use the right methodology for his next attempt at publication.

James, coming from the natural sciences and especially mathematics, tended to propose his research as quantitative. With his natural science background, he was very interested to conduct his dissertation research in the form of correlations with more than three variables using multiple regression. Due to the consideration, his research results can be divided into more than one article for publication in an international reputable journal. However, he felt hindered by problems in composing his research results into a form acceptable to international journals.

Data collection

This study began after gaining approval from the doctoral programs of three public universities in Sumatra, Indonesia where the research is conducted. I first explained the purpose of the research to the participants. Semi-structural interviews were employed to address research questions. This technique of data collection is considered an appropriate instrument which can provide in-depth data to be examined and comprehended by the researchers (Indrayadi et al., 2021; Muluk et al., 2021) because it allows participants to describe their personal experiences (Hatch, 2002). Each participant was interviewed for 40 to 50 minutes, between October and December 2022, using the Indonesian language to get in-depth answers and avoid misunderstandings due to the lack of English proficiency among participants (translations from recordings and transcripts into English for the purposes of illustrative quotations are by the researcher).

I met the four participants individually in their offices and homes to confirm the interview system and schedule either a face to face interview or an online interview based on their time availability and preferences. Two participants, Adam and John, did not want direct contact, so they were sent a *Zoom* link for an online interview three hours before the scheduled time. A second interview for each participant was conducted for previous interview confirmation and clarification. Administering follow-up interviews enables the researchers to capture clear issues and to gather in-depth information about the phenomena investigated (Heigham & Croker, 2009). Before interviews, we discussed the consent form to be signed by the participants for research ethics, privacy and confidentiality purposes.

Demographic information was sought first, followed by open-ended questions regarding their challenges in preparing and publishing research articles. First, I asked “How important is a relevant title is to you?”, to ascertain their challenges encountered in selecting the appropriate title. Second, “How far do limitations in funding impact upon your research and publication?”, to examine the role of funding for conducting and publishing the research in a reputable international journal. Third, “what is the role of methodology knowledge for your research and publication?” to learn the impact of research methodology knowledge on attaining publication in a reputable international journal. In addition, I asked “How important are English language skills for you?” to investigate the role of English proficiency in their research and publication efforts. Interviews were audio recorded using a mobile phone app and transcribed verbatim by listening to the recording several times.

Data analysis

After transcribing, the interviews were translated into English and immediately analysed. Braun and Clarke's (2006) six steps guide for thematic analysis was adopted: (1) familiarisation with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report. In doing so, I first familiarised myself with the data by reading it several times for understanding. The familiar data were then coded with pattern codes and organised into meaningful units. The coded data were related to the research theme that represents the views of the participants. Moreover, I reviewed the themes to examine their relevance to answering the research questions. In addition, I identified the emerging themes of the four research participants. Sixth, I presented the saturation data. To ensure the credibility of the obtained data, the interviewed transcripts were returned to all participants to gain their feedback and agreement to ensure their views were not misrepresented. This member-checking technique is used to avoid misinterpreting the results in the final report (Abrar et al., 2023), and to ensure the contribution accuracy of the participants (Creswell, 2014; Kamil, 2022; Ngwenya & Nzuza, 2022).

Findings

The findings related to each research question are based on four themes; article title, limited research funding, lack of knowledge of methodology, and language problems, as derived from interview data analyses. The themes represent key roles in exploring challenges faced by participants in preparing and publishing articles in a reputable international journal.

Lacking ability in title formulation

This theme focuses on the lack of appropriate title formulation knowledge. The title is the first step that needs to be considered by authors in conducting research article development, because it can direct their writing of a literature review and choice of methodology. In this theme, the participants were responding to a question about their

efforts in selecting a title for their research. The students reflected that they were confused about finding appropriate titles for their articles.

I'm having trouble finding and formulating titles that are relevant for reputable international journals (Robert).

Limited knowledge and experience regarding the suitability of titles required by reputable international journals made me hesitate to prepare the article for publication (John).

Although I have published my articles in local journals, it is difficult for me to understand the required title for a reputable international journal (Adam).

I have tried to submit my topic to a reputable international journal, but the editor-in-chief rejected, and replied that my writing was not appropriately within the scope of their journal (James).

The excerpts showed that all participants were not familiar with issues related to their international publication topic, although they had national publication experiences.

Limited funding

The second theme that emerged was limited funding. This is also important in conducting research and publishing. It refers to contributions in terms of financing from the government or institution where they work, to support research and publishing activities. Under this theme, the interviewees were asked about the crucial role of funding for research activities. They acknowledged that lack of financial support was a factor that could hinder research and publication.

As a novice lecturer, I was only once involved in a competitive research group with a senior lecturer at the college where I taught. We get very limited funds and only enough for the implementation of research only. Therefore, we decided to publish our research results in local journals only (Robert).

Honestly, my college provided research funding assistance for lecturers, but not enough to finance publication in reputable international journals. That's why I submit articles as the outcome of my research to local journals only (John).

Robert and John's words denoted that they intended to submit their articles for their doctoral candidature as required by the university where they studied, but this was delayed due to limited funds. The funds are only sufficient for national publications which cannot be used as a graduation requirement.

Participants Adam and James added that they never obtained a research project grant from their university at all during two years of teaching. They used their savings to cover research and publication, stating:

The college where I teach has never provided a publication budget for lecturers who conduct independent research for publication. To publish the research results in local and reputable international journals, I use my own budget (Adam).

The difficulty of getting financial assistance made me try to save my own money for research and publication needs because that was a requirement for me to finish my doctorate later (James).

From the excerpts above, it is seen that the obligation to publish research results in international journals for graduation requirements makes them prepare their own budgets for article publishing charges. The absence of funds allocated by stakeholders for publication requires students to work harder to prepare them. This problem is of course an obstacle for students who submit to targeted journals.

Lack of methodological knowledge

Lack of methodological knowledge is a common problem faced by authors, especially in the cases of reputable international journals. This theme includes matters such as research design, recruiting participants, instruments, data collection, and data analysis. Robert, John, and James highlighted how research methodology troubled them in preparing research for publication in national and international journals:

I do not know the types of qualitative and quantitative research in detail; how to collect data, and how to analyse data' that are usually used in reputable international journals (Robert).

Methodology is my main challenge for international reputable journals. From several articles that I have read, the research design, participants or samples, instruments, data collection, and data analysis are presented in detail (John).

Being rejected several times in reputable international journals forced me to strengthen my research methodology (James).

The results of these interviews indicated that the students did not have as rich an understanding of both quantitative and qualitative research methodologies as usually apparent in internationally published articles. They only have knowledge of local standard methodologies. Thus, training to enrich their command of methodologies based on international standards is essential.

One participant, Adam express a different view from Robert, John and James in relation to research methodology. When asked about research methodology challenges, he mentioned that he used a qualitative methodology only.

I used a qualitative methodology in the form of field research when I publish in local journals. However, I hesitated when I was going to write for a reputable international journal because all steps starting from selecting participants to data analysis had to be well structured (Adam).

The interviews highlighted that a lack of knowledge about qualitative research methodologies based on international standards discouraged Adam from publishing in a reputable international journal. He felt that everything related to methodology must be well prepared, explained in detail and clearly fit for international publication.

Language problems

Language problems refers mainly to low English proficiency skills. This theme is considered a major problem in non-native English-speaking countries when researchers preparing articles are usually English as a foreign language (EFL) authors. In interviews I asked about the participants' problems in using English in their manuscript preparation. They found it is difficult. Of the four, Robert and John faced the most difficult problems in writing up their research:

English is the main obstacle in preparing a manuscript for an international reputable journal. The grammar must be understandable and the choice of words must be appropriate. This problem hindered me in preparing the draft of the article (Robert).

Even though my undergraduate experience is in an English department, I had problems when using English in preparing my manuscript, starting from the scientific terms used and also maintaining coherence between paragraphs (John).

The problem of preparing manuscripts in English as the common language used by most reputable international journals made it difficult for Robert and John to prepare their articles academically. This is due to the difficulty in selecting academic words and presenting sentences in English grammatically.

Adam and James had similar problems to Robert and John in preparing research articles, they sought other methods to address problems:

My limited proficiency in English made me confused when I was preparing a draft. The difficulties made me try to use *Google Translate* to translate it. But I have to edit it so that the sentences can be understood easily (Adam).

I faced problems related to English for my articles. So, I have to prepare a draft in Indonesian first, then I asked and paid a certified expert to translate it (James).

Their words indicated that difficulties in using English made students use Indonesian first in compiling articles, then translating them into English using *Google Translate* or commissioning paid translators to translate the manuscript.

Discussion

This present study explores the challenges faced by doctoral students in preparing and publishing research articles in reputable international journals. Findings show that although some universities in Indonesia had obligated publication as a requirement of the doctorate, participants still face serious challenges. The challenges were caused by a lack

of experience in relating to reputable international publications. Concerning topic selection and formulation, this study indicates that students are not familiar with accepted topics in reputable international journals relevant for their field of research. This finding is consistent with Ameen et al. (2018) who also reported related challenges with research topic formulation in the context of PhD dissertations. Lack of conceptual clarity may create difficulties in formulating research titles appropriately. This problem is caused by students' inexperience in conducting research and unwillingness to comprehend a qualified topic (Keshavarz & Shekari, 2020). Nagano and Bukovsxki (2016) pointed out that topic problems lead doctoral students into publish their research in Hungary's local journals rather than internationally. Therefore, topic formulation is the first step that must be considered in preparing a research manuscript, thereby helping researchers to develop rationale and methodological justification (Wintersberger & Saunders, 2020).

Participants faced problems with limited funding for conducting research and publishing articles in reputable international journals, a finding in accord with (Arsyad et al., 2019). Although a majority of the students were positively aware of international publications, they were worried about no incentives being provided by their institution if their articles are published. Likewise, Gusmuliana et al. (2022) found that English department lecturers were hindered from publishing their articles in reputable international journals because of lack of financial support from their universities. Moreover, Kumwenda et al. (2017) investigated publication expenses encountered in many African countries, concluding there is a "...need for improved funding for institutional and research network strengthening in Africa, with particular attention given to expanding opportunities for young researchers". Due to the importance of publication for doctoral students, funding support from governments or universities is highly desirable to facilitate doctoral research being published in reputable international journals or proceedings (Hill & Thabet, 2021; Mouton, 2011).

Regarding lack of methodological knowledge, students are constrained when adapting to research methodology standards for international journals. My findings relating to the lack of methodological knowledge are in line with Purwanto et al. (2021) who found that limited knowledge of research methodology was one of the challenges faced by seven doctoral students from four provinces in Indonesia. Similarly, Moosavi (2020) reported that designing an online questionnaire for research data collection was challenging because of his unfamiliarity with online questionnaire systems. Lack of knowledge about methodology can lead to inadequate research results, for example, errors in determining sample sizes and analysing data (Ramlall et al., 2020). Therefore, the students should be provided with better preparation before writing up the research, to anticipate methodological challenges (Mouton, 2011; Thummapol et al., 2019).

Finally, the findings demonstrated the challenge of language problems. Participants faced a serious academic problem when preparing a manuscript in English. A similar finding was obtained by Hill and Thabet (2021), who noted that 20% of doctors who were involved in their study had low writing skills. Nagano and Bukovsxki (2016) reported that Hungarian doctoral students had difficulty expressing their thoughts in English, especially in terminology and grammar. Shamsi and Osam (2022) found that composing articles in

English was problematic for doctoral students at a university in Northern Cyprus. Similar research findings were also found by Kijak (2014) who investigated low publication rates in internationally indexed journals being due to difficulties in writing academic English. The language difficulty faced by doctoral students in non-English speaking countries students arises from differences between the student's first language and English in terms of vocabulary and grammar (Hoang & Florence, 2019). Hoang and Florence (2019) pointed out that writing up research results by Vietnamese doctoral students is influenced by different thinking patterns between Vietnamese and English. Adding to this perspective, Chien (2019) found that Taiwanese researchers could not readily make logical arguments acceptable by international readers. Ge (2015) also added to this perspective, noting that "Language and communication were viewed as the main obstacles when writing and bidding for publication in English."

Conclusion

This study provides information about the challenges of doctoral students in Indonesia encounter in carrying out international publication obligations as a requirement for completing the doctoral program. During the two months after the interviews for this study was completed, I identified how the participants faced challenges with the article title, limited research funding, lack of methodological knowledge of methodology, and language problems. The first is associated with a lack of good understanding of research title relevancy for international reputable journals. Limited research funding includes a lack of attention from the institution or government about supporting self-research and publication. Concerning lack of knowledge of methodology, I found that the participants faced problems with how to recruit participants, use instruments, and collect and analyse data. Fourth, students face very complex obstacles regarding English as the language that is used predominantly by international journals.

This study has several limitations. First, it was conducted in only three higher education institutions in Sumatera Island, Indonesia. Second, it was confined to a qualitative design using thematic analysis. Third, the data collection was limited to a small number of doctoral students having only two to three years of teaching experience and lacking a scholarship from the government. Identifying these three limitations suggests priority directions for further research, such as obtaining larger and more diverse samples and the addition of qualitative methods of investigation. However, the further drawing of implications and presenting of stronger evidence for recommendations also needs attention. Concerning implications, further research could investigate the scope for other kinds of publication and dissemination of research, for example local publications and workshops that disseminate research which directly benefits local community social and economic activities, thereby complementing international academic publication. For another example, stronger evidence for recommendations may be obtained from case studies that identify and showcase examples of success in submissions to international reputable journals, in spite of the major challenges that have been evidenced in the present research.

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