Academic research networks and the role of literacy and network brokers in the publication of articles in Institute of Science Index-indexed journals: A case study of University Professors in English as a foreign language context

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ABSTRACT

The small number of Institute of Science Index (ISI)-indexed articles published by some Iranian professors call for a solution. Therefore, this study focuses on local and transnational academic research networks of four university professors who are successful in publishing their articles in ISI-indexed journals. Through semi-structured interviews, this research describes professors' academic research networks and identifies "literacy brokers," "network brokers" and their role in the process of article publication. The study indicates that literacy brokers were mostly colleagues, PhD supervisors and advisors, applied linguistic professors and reviewers. Network brokers were fewer in number and were found to be PhD advisors and an editor of a journal. Implications for novice researchers are also discussed.

Keywords: Brokers, literacy, Institute of Science Index journals, network, research

INTRODUCTION

English is deemed as lingua franca in academia due to its status and imperialistic nature, which puts the periphery academics in non-Anglophone countries under pressure to publish in English medium journals and disseminate their articles so as to eschew perishing.[1-5] The gravity of the situation is laid bare when these periphery scholars are propelled to publish in journals with high impact factors. However, in these non-Anglophone countries where

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English is spoken as a foreign language (EFL), the possibility of living up to those expectations is diminished largely due to language-related issues, which hinder non-native writers from passing the gatekeepers of high impact journals.

In a study, it was expressed that periphery scholars were pushed to publish in high impact western journals to be considered as a legitimate socialized member of the target community.[6] However, this prestige attached to western journals was more pertinent to hard than soft disciplines.[7] A research study highlighted that writers publishing in high impact western journals hoped for more citation, the high number of which would be evaluative of academic advancement (scholars were evaluated by counting the number of citations of their work).[4] Another study espoused this issue even more; in his study the participants claimed that published articles in non-English journals are wholly taken for granted resulting in lesser chance of academic recognition world-wide.[5] However, this orientation toward publishing in high impact journals

was more encouraged by government policies through incentives and higher payments.[8]

Two researchers aimed at delineating some guidelines through which non-native writers can publish their articles.[9,10] Salager-Meyer introduced several guidelines, such as appointing periphery scientists to the editorial board of international journals, broadening their practice of publishing special issues on scholarship in non-West contexts and diminishing the cost of scientific publication.

To overcome such hindrance, periphery scholars also resort to various sources of knowledge and networking so that they are able to publish their articles on some grounds. A study focused on a longitudinal text-oriented ethnographic study of 30 psychology scholars in Hungary, Slovakia, Spain and Portugal to follow their publication process in order to understand what is involved in successful English-medium academic publications. Moreover, the authors described scholars' networks with specific focus on the concept of "literacy brokers."[11]

They believed that in addition to the lead-author, "literacy brokers such as editors, reviewers, academic peers and English-speaking friends and colleagues who mediate text production in a number of ways" can influence the production of a text for publication (p. 4). Through analysis of texts written for publication, they categorized literacy brokers as academic professionals (a general academic, a discipline expert and a sub-disciplinary specialist), language professionals (translators, copy editors, teachers of English, etc.) and non-professionals (friends, spouse and family).

They found that literacy brokers influenced a text in a number of ways. For instance, they identified an appropriate target journal, influenced the shape and content of the final article, introduced different methods of data analysis, etc., The study concluded that 73% of literacy brokers were academic professionals, 24% were language professionals and 3% were non-professionals.

In another study about academic research networks, "network brokers" was introduced based on the concept of literacy brokers as "network members who play a pivotal role in bringing others into networks or helping them forge networks."[12] They also distinguished between literacy brokers and network brokers; according to them, "literacy brokers are directly involved in the production of texts, whereas network brokers may or may not intervene directly in text production but are important in providing access to resources and opportunities for publishing."

This research presented "network history" of 4 scholars.[12] Those scholars who developed close collaboration with others were able to publish articles in English; however, Diana by the age of 51 did not publish articles in English and had never developed close relations with her colleagues who might support her. The study concluded that local networks can help the formation of transnational ones and are often more durable than transnational networks.

In this study, Ornella's supervisor who introduced her to a Spanish supervisor acted as a network broker for her. Other scholars such as Olivia who brought a colleague and a student to a multi-country project and Ernesto who developed a research group and linked his students to the network of his French colleague acted as network brokers for others.

Besides, in a study it was found that English-language correction assistants for Chinese science doctoral students were: Supervisors, peers, language professionals as well as editorial service. In this study, they also discussed advantages and disadvantages of these resources. Supervisors were found not to have enough time and competence in making efficient comments. Peers may ask for addition of their names as co-authors and language professionals may not understand the scientific points presented in the text. Editorial services could be used if scientists could afford the cost and trust their services.[13]

Since very few university professors, in an EFL context like Iran, are able to publish their research in Institute of Science Index (ISI)-indexed journals, this study tries to focus on the academic research network of scholars who were successful in publishing their articles in ISI-indexed journals with specific focus on those who acted as literacy/network brokers. To the best of our knowledge, almost no research has been conducted to explore the "network histories" of Iranian university professors and the role of brokers in the publication of articles in ISI-indexed journals.

In other words, this research aims to describe the local and transnational networks Iranian scholars create and participate in to increase the chance of publication in ISI-indexed journals. Simply put, it tries to find out who the literacy and network brokers are and determine their influence on the process of article publication. Therefore, the following questions were posed:

- Who are the literacy and network brokers in the academic research networks of university professors?
- How do they help the authors in article publication?.

METHODOLOGY

This is a case study which provides a detailed description of the participants through interviews. The participants of this qualitative research are 4 university professors at a university in Iran, all being successful in publishing their articles in ISI-indexed journals. They were chosen from various disciplines, genders, ages, qualifications and number of publications to develop an understanding of different networks. Since very few university professors at the target university have successfully published articles in ISI-indexed journals, "theoretical or purposive sampling" was used to find scholars who can provide us with relevant information with regard to research questions. Table 1 displays these professors' personal and academic information. "Network histories" of these scholars are described to determine the members of each network. Moreover, special attention is paid to those who act as literacy brokers and network brokers and their influence in the process of publication.

To gain an in-depth understanding of the issues, semi-structured interviews were conducted with the participants. Interviews lasted about 30-45 min; all were conducted in Persian, recorded, transcribed and codified to achieve conclusion and interpretations. If needed, some parts were translated into English by the author. Moreover, respondent validation was used to ensure the accuracy of interpretations.[14] Open coding in which data is coded by identifying patterns found in the data was used for this research and initial categories were extracted by passing through the data. Several categories are developed in relation to the research questions and then potential connections are created among them.[15]

Scholars' Network Histories

Arash, 32

Arash is an assistant professor of Geography. He co-authors articles with one of his colleagues with whom

Table 1: Personal and academic information of participants

Pseudonym	Gender	Age	Discipline	Academic qualification	Number of publications
Arash	Male	32	Geography	Assistant professor	5
Hossein	Male	45	Chemistry	Full professor	80
Maryam	Female	35	Applied linguistics	Assistant professor	8
Ahmad	Male	35	Computer engineering	Assistant professor	5

he shares the same area of interest. His colleague helps him with both scientific and linguistic revisions since he is more proficient than Arash in English. A professor in the department of Statistics also helps him with statistical analysis of his reports. Moreover, he stays in touch with his doctoral supervisor in New Zealand and his advisor in the U.S. They read his manuscripts, revise and edit them with respect to scientific and linguistic aspects.

Arash mentioned that only one of his articles was written in English from the beginning and the remaining four were written in Persian at first and then translated into English. Two professors of Applied Linguistics help him with the revision and translation of his manuscripts to English. These two professors introduce their MA students to him in case they are busy to provide linguistic comments on his texts.

Though he mentioned that translation cannot convey the original intended meaning of a manuscript, it seems that it is the only way to change a Persian-medium text to English one. In a case that the translator cannot understand the scientific facts, he should explain the points for him to be able to translate the meaning as closely as possible to English. To overcome these difficulties, he also asks one of his colleagues who work in the same university but whose mother tongue is English to provide scientific and linguistic comments.

Literacy broker: His colleagues, a native speaker colleague, a professor in the department of Statistics, Applied Linguistics professors, his doctoral supervisor/advisor and MA students of Applied Linguistics.

Network broker: Applied Linguistics professors.

Hossein, 45

Hossein is a full professor of Chemistry. He himself mostly checks the scientific and linguistics aspects of his articles based on his experience accumulated through time. In some of the cases, he discusses his linguistic problems with professors of Applied Linguistics and English Literature in the same university. He does not usually work with his colleagues; rather he co-authors articles with his PhD and MA students.

Moreover, he receives linguistic and scientific assistance from overseas professors who work in the same field. These professors came from different parts of the world to attend conferences. They exchanged their E-mails and

provided each other with help. Hossein also makes use of editors' and reviewers' comments on his manuscripts. He has become a friend of an editor and met regularly in various conferences. He sends him E-mails, discusses his discursive and "non-discursive"[6] problems with him and asks him to provide resources.

He usually writes his articles in English and edits and translates texts from English to Persian. Since methodological and scientific aspects of an article are more important than the language used to convey meanings, he does not bother himself with linguistic issues. Consequently, his own knowledge of English suffices for manuscript revision.

Literacy broker: Applied Linguistics and English Literature professors, overseas scholars with the same area of interest, an editor of a journal and his PhD and MA students.

Network broker: The editor who provides resources.

Maryam, 35

Maryam is an assistant professor of Applied Linguistics. She co-authors articles with her two advisors in America. They both help her with scientific and linguistic revisions of her manuscripts and identification of hot topics in the field. She receives very few comments concerning linguistic issues since she is proficient enough to deal with linguistic difficulties herself. Moreover, one of her advisors once introduced her to one of the big names in her area of study in a conference. They exchanged their E-mails and since then she has received help from that person.

She does not collaborate with her colleagues in Iran; rather, she works with overseas professors. Maryam and these professors are interested in the same area and have become friends since they met each other in international conferences. They exchanged E-mails and participated in online discussions about different issues.

In fact, she makes use of international conferences to expand her network. In addition, during her travels as a tourist to European countries, she tries to visit different universities to develop an acquaintance with university professors with whom she shares the same areas of interest.

Literacy broker: Her advisors, overseas scholars met in a conference and European scholars met in her travels to European countries.

Network broker: Her advisor.

Ahmad, 35

Ahmad is an assistant professor of computer engineering. He mostly writes his articles alone, but in some cases he co-authors manuscripts with his colleagues. He receives help from his friends who are professors of Applied Linguistics in revising his texts. However, he is not usually satisfied with the final product at the end. Therefore, he has decided to improve his own English knowledge through reading so many articles. When he reads articles, he pays attention to the structure of articles and how a particular meaning is represented through linguistic elements. Consequently, he has become proficient in article composition and revised his manuscripts himself.

He sometimes translates his texts from English to Persian himself. If problems arise, he asks help from his applied linguists who are his friends. He believes that for a translation to be accurate and efficient, he needs to have a face to face contact with the translator. He should explain the scientific facts to the translator so that he can provide a meaningful text in English.

He consults with his colleagues in scientific issues and makes use of peer reviewers' comments as well. He revealed that almost all reviewers' comments are included in his manuscripts since these comments help improve the quality of texts both linguistically and scientifically. His PhD supervisor also edits his articles and provides linguistic and content comments.

Literacy broker: His colleagues, Applied Linguistics professors, reviewers and his PhD supervisor.

Network broker: Not mentioned.

Flowerdew discussed the role of English-speaking supervisors and colleagues who helped non-native scholars in article publication process.[4] He referred to them as "academic mentors;" however, Lillis and Curry used the term "mediators" for these people.[11] Moreover, some studies referred to those who influence a text for publication as "shapers" of research articles.[16,13] In line with a previously mentioned study,[11] we refer to text mediators as literacy brokers since it is a more comprehensive term to use in this study.

Hossein and Arash participated in both local and transnational networks. However, Maryam had only a transnational network and Ahmad participated in a local network. Contrary to Lillis and Curry who believed that

local networks had important roles in access to transnational ones, Maryam participated in no local network but a transnational one.[11] Therefore, it is revealed that access to transnational networks can be achieved through other means such as studying abroad or attending international conferences rather than participating in local networks.

Among network members, literacy brokers were greater in number and more influential on the text. All scholars made use of literacy brokers but not all of them had network brokers. Ahmad seemed not to have a network broker in his research network but others received help from one or two network brokers. Proficient colleagues with the same area of interest, PhD supervisors, Applied Linguistics professors and peer reviewers and editors of journals were among the most frequent literacy brokers in these networks.

Arash and Ahmad like the participants in another study emphasized that to translate a text into English they needed to explain scientific issues to language professionals so that they could revise the text better; however, they were not satisfied with the final product.[13] Scholars in Flowerdew and Li's study believed that "there will always be a gap between the translated and original text."[8] This fact is also reported by the participants of this study and it seems that if the scholar himself has good command of English, he can translate the text himself and achieve a better result at the end.

Moreover, a proficient colleague with the same area of interest is more helpful than a language professional. These people can revise a text both linguistically and scientifically. To translate a text, these people can act more efficiently than language professionals since they have good knowledge of language and content. As mentioned by a researcher and his colleague "professional peers are better than language professionals in helping NNS authors to convey their message well" since their intervention can influence both the scientific and linguistic facts.[17]

Overseas colleagues, native speakers' PhD supervisors/ colleagues and other scholars met in a conference were other network members of this study. These people who acted as literacy and/or network brokers helped scholars to overcome various problems in the process of article publication. Flowerdew and Li also expressed that scholars collaborated with overseas academics to overcome publication difficulties, co-authored articles with them and asked them to help with the translation of texts.[8]

Hossein as a professor of chemistry wrote a large number of articles. This fact is related to both his academic qualification and the nature of his discipline. Lower visibility of social science and humanities scholars was discussed by the above-mentioned study and more publication in hard science than soft science was emphasized by Li and Flowerdew.[13]

In addition, it seems that the number of publications is not related to the scope of academic research networks but the proficiency level of scholars and the nature of their disciplines. For instance, Hossein participated in a small network and mainly relied on his own experience and knowledge gathered through time.

Our findings highlighted the important roles of Applied Linguistics professors as literacy brokers. They were permanent members of all networks and could provide great help with the revision of texts in an EFL context. Moreover, PhD supervisors and advisors were found to be influential in article publication. These people seem to provide help for their students even after graduation.

The importance and influence of network members in the process of article publication has already been discussed. The nature of these networks is dynamic and can change through time as the authors become more skillful in article compilation and get acquainted with novel brokers. Participant scholars in this study not only received help from brokers, they also tried to improve their level of proficiency in different ways, using interesting strategies. For instance, Ahmad tried to read a large number of articles in his field and analyze them to understand how to use linguistic structures to manifest his intention. In addition, Hossein has developed a good knowledge of his field and English through time. Besides, the language of a manuscript seemed to be of less significance in his field of study than in Geography or Applied Linguistics.

Maryam tried to make use of international conferences to become familiar with her overseas colleagues within the same area of interest. She visited different European scholars through her travels to European countries. She tried to get acquainted with those interested in the same area to widen the scope of her research network.

CONCLUSIONS AND IMPLICATIONS

Regardless of the scholars' English knowledge, creation and participation in local and transnational networks increase their access to English-medium publishing. This study examined the "network history" of 4 Iranian scholars who

have published their articles in ISI-indexed journals. Since only a few academic staff who lectured in the university under the study could successfully publish their articles in ISI-indexed journals, exploration of successful research networks and strategies used by scholars can be of great interest for novice researchers.

This study emphasized the importance of research networks in article publishing. The need for networking and literacy/network brokering in article publication has also been implied in some studies.[6] He referred to lack of a sound peer group to help the researcher as a non-discursive problem which caused limited publication in refereed journals. Contrary to some researchers that described the academic research network of psychology scholars,[12] this study traced "network histories" of 4 periphery university professors from various disciplines. It tried to explore literacy and network brokers of Iranian scholars and personal strategies they use to achieve publication. The small number of published articles in ISI-indexed journals by Iranian scholars calls for a solution. Description of Iranian professors' academic networks who published articles in these journals can be very helpful. It shows how these people manage to overcome their discursive and non-discursive limitations and the strategies they use.

Furthermore, it provides a comprehensive understanding of local and transnational networks of university professors in an EFL context like Iran. Unsuccessful professors can follow the strategies used by scholars who have published articles in ISI-indexed journals, participate in their networks and create their own local and transnational networks. Exploration of the nature of academic research networks in other disciplines can add to the understanding of various networks and help novice researchers in different ways. Moreover, understanding the reasons for the high number of published articles in chemistry when compared to other disciplines can be an area for further investigations.

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