Journal publication productivity, impact, and quality among Applied Linguistics and TESOL academics in the Group of Eight Australian Universities

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This article reports on a study in which journal publication performance of Applied Linguistics and TESOL (AL/TESOL) academics in the Group of Eight (G08) Australian universities was examined for each academic rank (Lecturer to Professor) and across apparent genders (females and males). Journal publication performance was defined in terms of productivity (number of articles), academic impact (number of citations to those articles), and quality (journal impact factor and quartile rankings). To this end, journal publications of 65 G08 AL/TESOL academics were determined over 19 years (2000–2018 inclusive). Normative research profiles are provided for each academic level and across two genders and are discussed in light of the literature. Where appropriate, a critical view has also developed concerning issues such as "publish or perish" and "gender gap" in academic publication. Results and discussion of results can contribute to a better understanding of AL/TESOL journal article production in G08 universities as a reference group.

Keywords: applied linguists, applied linguistics and TESOL, scholarly productivity, scholarly publication, journal article citation, impact, journal quality, Australian Group of Eight Universities

1. Introduction

Productivity, academic impact, and quality are new jargons in academia and are used to establish a discourse of academic evaluation among academics and other stakeholders. Productivity relates to the number of scholarly publications that may include a variety of academic outputs such as journal articles, books and book chapters, and others. In the current paper, we use the number of published

articles for productivity, the number of citations made to each article for impact, and the quartile of the journals in which articles are published for impact. More detailed explanations of these terms are given in the methods section.

These key performance indicators (KPI) are used to assess academic works at the individual, department and faculty (or school), and institutional levels. At the individual level, these KPIs are used as part of evaluating academics for employment, workload, promotion, and grant applications. At the department and faculty or school level, these KPIs are used to rank the departments and faculties. For example, the Excellence in Research for Australia (ERA) exercise is currently assessing the impact at the discipline level using these KPIs (productivity, impact, and quality). At the institutional level, these KPIs are usually used in institutional strategic evaluation and planning as well as university rankings by international ranking organisations such as Times Higher Education and Shanghai.

To fulfil the above practices and achieve the above goals, researchers not only need to be prolific, they also need to be concerned about where they publish. As Lee (2019) observed, "the notion 'publish or perish' is more intricate and problematic than it suggests, because even though academics do publish, they may still perish in the system if their publications do not meet the requirements laid down by their universities" (p. 25). Thus, academics also need to be concerned about where they publish their research.

Accordingly, it seems crucial to investigate research productivity, impact, and quality systematically as related to different disciplines and fields of study. The outcomes of such investigations will help different stakeholders and will provide them with normative data that can be of great help in their decision making for different purposes. As Mcnally (2016) argued, "There is an increasing need for empirical evidence on variations in research productivity, quality, and impact because such data are essential in helping develop, frame, and anchor realistic expectations and judgements about research performance" (p. 204).

On the other hand, among the different factors that influence scholarly productivity and impact are academic rank and gender (McNally, 2010). There is a paucity of research on the assessment of the scholarly productivity of AL/TESOL academics in Australia or across the globe. This lack of empirical data will significantly affect both inner (disciplinary) and outer (cross-disciplinary) representation of AL/TESOL. In the absence of reliable data, discussion of disciplinary status will be challenging. Further, the scarcity of reliable data may cause some misrepresentation of the discipline outside its own boundaries. The current study was, therefore, initiated to fill this gap by collecting and analysing the data as related to the patterns of productivity, academic impact, and quality of AL/TESOL academics in the G08 Australian universities.

The study emulates a similar one conducted in Psychology (McNally, 2010) with the hope of creating a ground for similar studies in other contexts. Together, such studies can provide robust and reliable data sources for intra- and inter-disciplinary discussions by different stakeholders. At a minimum, such data sources would be useful as a starting point for the discussion of academic performance among AL/TESOL in Australia and across the globe given the current debates and discussion around these issues as discussed in the next section. It needs to be clarified here that no representative claim can be made about AL/TESOL academics' performance based on one study only, given its limitations. However, the initiative can lead other researchers to expand the scope and provide more representative results.

2. Background to the study

2.1 Academic publishing

Whether intended as an intellectual activity or aiming at improving practice and policy, scholarly publishing is now considered a driving force and a norm in academia. Through scholarly publishing, and in particular journal article publishing, researchers generally disseminate and validate their research results via intersubjective review processes. It is also considered essential for career development in most academic and professional fields (Starovoytova, 2010). As such, academic publishing has been and is an inevitable priority in academia underpinned by the well-known "publish or perish" dictum. As observed by Lee (2019), significant activities in academia such as contract renewal, tenure, and promotion all hinge on the ability of academics to publish, and thus "the publish-or-perish mantra has, in recent years, pervaded academia and increasingly taken its toll on academics" (p. 250).

Similarly, Starbuck (2013) stated that "the publication of academic papers has serious implications for authors' prestige and continuing employment, the prestige of departments and universities, and the funding of education and research" (p. 708). Forgues and Liarte (2013) also contended that "due to our 'publish or perish' context, the number of published articles and academic journals keeps climbing" (p. 744). On the other hand, McKay and Monk (2017) stated that one of the essential criteria for who does and who does not get research grants is academic rank and publication output. As such, journal articles constitute a crucial component of scholarly publishing that enable "communication and exchange between colleagues interested in the same topic, thereby reinforcing collaboration and improving networks" (Forgues & Liarte, 2013, p. 743). Forgues and Liarte (2013) go

on and assert that "getting published represents the best way to be recognized and eventually promoted and tenured" (p. 743). Nygaard and Bahgat (2018) stated that due to the difficulty of including other types of publications such as books, book chapters, and others, "most studies on productivity rely on journal article publication as a sole indicator of productivity, although a notable few take into account additional outputs, such as book chapters" (p. 68). This is also true with the current study in which we have relied only on journal article publication as an index of productivity.

2.2 Academic publishing and professionalism

Fyfe et al. (2017) referred to the professionalization of academia in the early twentieth century when publishing became tightly linked to the institutional and disciplinary cultures of academic researchers and a key driver of career progression. They described modern academia as a "prestige economy," which operates "on the symbolic capital generated primarily by publications, rather than on direct financial rewards" (p. 3). Fyfe et al. (2017) also noted that "during the post-war decades, editorial peer review became particularly important as a way to identify publications that counted in this prestige economy" (p. 3). They go on to say that since the 1980s, increasing demands for accountability by the government of universities, and in turn, by universities of their staff, have significantly increased the perceived role of research and research outputs in demonstrating institutional and individual excellence.

Similarly, Angermüller (2010) observed that in recent decades the breaking down of academic knowledge into smaller fields of specialization is the "consequence of an ever-increasing number of producers and products" and that generally, "new members entering the system are encouraged to create knowledge that nobody else has produced before. As a consequence, academics usually spend considerable time and energy on acquiring some unique expertise distinguishing them from everybody else in the field" (p. 2).

The above observations imply that while academics attempt to meet the criteria of being unique in their research, the various products by academics in a discipline might risk the coherence of the discipline and, in turn, professionalism. Angermüller (2010) contends that the most significant achievements in research are often, in some way or another, the least commensurable ones, which can be hardly understood or appropriately evaluated by the peers. The result, Angermüller asserts, is that in most cases, researcher's outputs are assessed by those who are not necessarily familiar with the researcher's field.

In addition to the recent move towards specialization and thus breaking knowledge (Angermüller, 2010), the Australian Research Council (ARC, 2008)

considers discipline as the central unit of research work. Liddicoat (2010) believes that this trend will undoubtedly impose some problems for AL as "there are potential issues for the integrity of AL as a field of research" (p. 14.10). All these allude to the dilemma of specialisation versus professionalism. On the one hand, new trends in academic disciplines have encouraged more areas of specialisations leading to what Angermüller (2010) referred to as breaking knowledge. On the other hand, professionalism requires more coherent disciplines where researchers can concentrate on and develop a focused perspective.

In this article, we use "Applied Linguistics" (AL) in its narrow definition and thus co-bagged with "Teaching English to Speakers of Other Languages" (TESOL). This view considers applied linguistics as "linguistics applied" (Widdowson, 2000), that is, applying linguistic theories to language-related issues, including teaching and learning languages. As Cook and Seidlhofer (1995) noted, despite the potentially broad scope of the field, "it is with language teaching and learning, and particularly English language teaching and learning, that many works on applied linguistics are primarily concerned" (cited in Murray & Crichton, 2010, p. 15.2)

2.3 AL/TESOL journal publication outlets

A list of 52 journals related to AL/TESOL and titled "How to Get Published in TESOL and Applied Linguistics Serials" was presented at the TESOL Convention and Exhibit in 2015 in Toronto. There is also a list of periodicals (including journals, magazines, and other publications) related to AL/TESOL and related fields by Lessard-Clouston (2014), which included 710 periodicals. This list was updated in September 2018 to include a total of 962 periodicals in various areas of AL/TESOL and related fields. Some of these sources are only available in print, others are only available online, and most others are available in some combination of these, as Lessard-Clouston reported.

Renandya (2014) reacted to this number of journals and magazines with exclamation and stated: "[I]t is really a jungle out there!" (p. 2). He further explained that "this whopping number can be both a blessing and a curse" (p. 2). It can be a blessing because you can always find a journal that is most suitable for your paper but it can also be a curse, especially for novice authors, because this huge number of journals is formidable to choose from. However, more important than choosing an appropriate journal for publication from such a huge list is the way this extraordinary number of periodicals might risk the coherence and integrity of AL/TESOL as an academic discipline—a concern raised by many researchers including Liddicoat (2010).

Notwithstanding the above discussion, the high number of journals in AL/TESOL may be related to the interdisciplinary nature of this academic discipline. Baldauf and Kaplan (2010) observed that "Applied Linguistics is a diverse field, comprising a substantial number of sub-fields, sub-specializations and related fields" (p. 4.1). While this trend may create an opportunity for AL/TESOL academics, it may equally lead to breaking knowledge (Angermüller, 2010) and risk the coherence and integrity of the discipline and thus become a challenge for AL/TESOL researchers to position themselves.

Some AL researchers have attempted to organize a list of journals to represent the discipline better. Baldauf and Kaplan (2010), for example, chose 28 key journals to represent Applied Linguistics and to analyze the structure and relationships of topics in AL. On the other hand, Egbert (2007) analyzed the quality of journals in AL/TESOL. Looking for an alternative to the current characterization of journals concerning impact factor and quality, Egbert sent a survey questionnaire to approximately 300 members of the TESOL Research Interest Section (IS). The survey asked participants "to list what they consider to be the top 10 research journals (print or electronic) in the field of TESOL … (and) to list the criteria they used to select the journals that they listed" (Egbert, 2007, p. 161). Respondents provided a list of 35 journals following the criteria suggested by Egbert. The researcher then searched the Journal Citation Report (JCR) database and found that of the 35 journals suggested by the participants, 12 journals were listed in the Applied Linguistics and the Education categories of the JCR list. Egbert then attempted to compile a list of journals that could meet the criteria of the highest quality journals according to the participants' suggested criteria as well as relative consistency across the quality indicators gathered for that purpose. She identified seven journals that met the quality indicators she discussed in her study. These seven journals included *Applied Linguistics, English Language Teaching Journal, Journal of Second Language Writing, Language Learning, Modern Language Journal, Studies in Second Language Acquisition*, and *TESOL Quarterly*. Drawing on Weiner (2001), Egbert (2007) stated that "the quality of such journals often determines the visibility and impact of the articles they contain; the ranking of programs, departments, and individual performances; the distribution of research funds, and even the way data are presented and discussed" (p. 157).

In light of the above background, the current study was motivated to investigate the journal article publications by AL/TESOL academics in G08 universities as a reference group in Australia. It seems crucial to investigate scholarly productivity concerning journal article publications, academic impact, and quality of the journals among AL/TESOL academics in G08 universities. There are some reasons why it is crucial to conduct studies like the present one. First, it can fill the research gap in terms of the trend of scholarly productivity of this discipline. Sec-

ond, it can help different stakeholders and decision-makers if they are looking for reference groups. Third, this and similar studies can help AL/TESOL community to address issues of disciplinary coherence and diversity as relates to academic publication and thus visibility.

2.4 Gender and academic publication

Drawing on the related literature over the last 40 years, Nygaard and Bahgat (2018, p. 67) reflected on draw gender gap in research publication and conclude that "not only do men seem to produce more publications than women, but men are over-represented among the top producers" while "women are over-represented among the low or non-producers (those who produce little or no published research)". Lillis and Curry (2018) also draw on other bibliometric studies (e.g., Freitsch, Haller, Funken-Vrohlings, & Grupp, 2009; Kwiek, 2015) to reach the same conclusion that women are represented to tend to have lower productivity than men.

One reason for the low productivity records for women might be their recent participation and collaboration in scholarly productivity. Lillis and Curry (2018) believe that "women's participation in formal academic institutions is historically recent" (p. 55). Lillis and Curry (2018) studied 10 women scholars using a longitudinal interview-based approach They explored the women's perspectives and practices of writing for publication. The methodology provided a space for the participants to explicitly reflect and discuss what it means to be a woman scholar. Most participants said the gender is not significant when they were commenting on their experiences as women scholars. Aiston and Jung (2015) also provided some potential explanations for women's so-called "lower productivity." They refer to the gendering of academic labour; that is, women are shown to be carrying out a considerable amount of mentoring, service, and administrative work. Aiston and Jung (2015) also refer to having higher teaching loads than men as another potential explanation.

The current paper will address journal article publishing across academic ranks and gender. The results provide evidence for the discussion of the above broader topics, that is, academic publication, journal article outlets, and gender and academic publication.

3. Purpose of the study and research questions

The present study investigates the research performance indicators among Australian Applied Linguistics and TESOL academics in Go8 universities. These indi-

cators include research productivity, academic impact, and journal quality over the last 19 years (2000–2018 inclusive). One of the reasons for focusing on the first two decades of the 21st century is that "Academic publishing has been the fastest-growing media sub-industry in the last decade" (Forgues & Liarte, 2013, p.740). This time period thus provides an appropriate context to accurately gauge scholarly productivity and academic impact among this cohort of applied linguists.

The following questions inform the study and will be answered by providing evidence from the findings:

1. What is the overall pattern of journal article productivity among AL/TESOL academics in the G08 Australian universities across the academic level and gender?
2. What is the overall academic impact (citation patterns) of the published articles across the academic level and gender?
3. What is the quality (quartile rank) of the journals in which AL/TESOL academics in the G08 Australian universities published their articles?

4. Methods

4.1 The sample of the study

The first eight Universities created in Australia organized themselves into a self-defined group in 1999, The Group of Eight Universities (G08) (Marginson, 2009). These eight universities comprise The University of Melbourne, The Australian National University, The University of Sydney, The University of Queensland, The University of Western Australia, The University of Adelaide, Monash University, and The University of New South Wales (UNSW). This group of universities focus on influencing the development and delivery of long-term sustainable national higher education and research policy, and in developing international alliances. In 2017, all G08 Universities were ranked in the top 150 institutions worldwide, and seven G08 universities were ranked in the top 100 universities worldwide (Group of Eight Australia, 2018).

Regarding research funds, according to G08 Newsletter (2015), in 2013, the research funding for G08 universities was $ 2.4 billion, which was two-thirds of all research funding to Australian universities. This means the other 35 Australian universities were able to secure only one-third of the research funding. Besides, research students comprised one in 12 students in the eight universities, compared with one in 30 for the rest of the sector. This trend makes the G08 Australia's leading research-intensive universities. Also, according to Group of Eight Australia (2018), the G08's proportion of world-leading research is twice that of the rest of

the sector, and the group accounts for more than half of all Australian research papers with international collaboration. The group also invests $ 3.2 billion annually in applied research and experimental development. All the above facts make Go8 universities an excellent sample to study especially as a reference group to which other universities might be compared.

University websites were searched to identify AL/TESOL academic staff at Australia's Go8 Universities. Besides, over the last few years, the Scopus[1] and SciVal[2] Indexing has improved the matching of publications to Scopus IDs. The accuracy and availability of publication lists at universities has also improved, due mostly to the adoption of Pure system[3] (Elsevier) at several of the Go8 universities. All these helped the researchers to collect the data as comprehensively and accurately as possible, although there still might be some inaccuracies in the data (see the Limitations section).

4.2 Data collection procedures

Institutional school and department websites and institutional researcher profiles of Go8 universities were searched to identify AL/TESOL staff as well as their position titles of Lecturer, Senior Lecturer, Associate Professor, and Professor. No attempt was made to establish if an appointment was full-time or fractional, or whether the academic was at the affiliated institution for the entire publication period searched; only current institutional affiliations were established. Emeritus Professor or Postdoctoral Research Fellow positions were not included since we were not able to find accurate data about these two cohorts in these universities.

Concerning areas, we used Baldauf and Kaplan's (2010) main areas of AL research and did our best to select and include journal articles related to these areas as it was a challenging task. Baldauf and Kaplan's list includes broad areas of second language acquisition (SLA), second language reading and writing research, language learning and teaching, and more specific areas such as English for professional and academic purposes (ESP and EAP), foreign language teaching, language assessment, language policy and planning, corpus linguistics, and critical perspectives in AL. Accordingly, journal articles related to Translation and Interpreting were not included in the current study since they were not listed in Baldauf and Kaplan's list perhaps because this area of research is now a distinct and autonomous field of study although it has links with AL. Further, our data set

1. https://www.elsevier.com/solutions/scopus
2. https://www.elsevier.com/solutions/scival
3. https://www.elsevier.com/solutions/pure

includes only AL/TESOL as it relates to the English language and not languages other than English (LOE) or Indigenous languages.

For all Academics, the following details were recorded: institution, surname, first name, apparent gender, position, department/faculty, and link to department/faculty/researcher online profile. For each Academic, productivity and impact records were made using Scopus, for the period from 2000–2018 including article title, journal title, volume, issues, year, ISSN, DOI, EID, deep article link where available, and total citation count for each article title. For the current study, only journal articles were included in the study. Books, book chapters, conference papers, and articles in press were excluded from the study for several reasons.

Firstly, the focus of the study was on journal article productivity, which did not include other publication types. Secondly, books, book chapters, and conference papers were not accessible as systematically and reliably as were the journal articles. Articles in press were also excluded from the analysis because we intended to limit our analysis to a specific period, 2000–2018. With published articles, we were able to include further analyses such as journal impact factors and quartiles. The 2017 Journal Impact Factor (JIF) was determined for each journal. Journal quartile is also represented by Q1, Q2, Q3, or Q4. A Q1 (first quartile) indicates that the journal is in the top 25% of its subject area or field, while a Q4 (fourth quartile) indicates that the journal is in the bottom 25% of the journal list in that area or field. Besides, SJR (SCImago Journal Rank) as well as 2017 JCR best quartile and SJR best quartile for each of the journals identified in the data set were used. Further, included was an indication as to whether each journal appeared on the 2018 Excellence Research Australia (ERA) journal list. Related to the results presented in the next section, we should clarify that there might have been individuals' shifting ranks over the 19 years. The total number of articles and citations for each rank is, therefore, accumulative. However, we did not collect data (and we are not sure if it was possible to collect such data) related to each staff as they were in a particular rank. Lecturers are the only exception since they were yet to make such a transition. As such, this needs to be taken into consideration when reading the results.

5. Results

5.1 AL/TESOL staff journal article productivity in Go8 universities

Sixty-five academic staff were identified as AL/TESOL members in the Go8 universities. Table 1 presents these academics' institutional affiliation.

Table 1. Number and institutional affiliation of the AL/TESOL academics in Go8 universities

Institution	Faculty	Department/School	Number of academics
University of Adelaide	Faculty of Arts	School of Education	2
Australian National University	ANU College of Asia & the Pacific	School of Culture, History & Language	2
		School of Literature, Language & Linguistics	4
University of Melbourne	Faculty of Arts	School of Language & Linguistics	11
	Melbourne Graduate School of Education		4
Monash University	Faculty of Arts	School of Languages, Literatures, Cultures & Linguistics	10
	Faculty of Education		5
University of Queensland	Faculty of Humanities & Social Sciences	School of Language and Cultures	9
	School of Education		3
University of Sydney	Faculty of Arts & Social Sciences	Department of Linguistics	4
		School of Education and Social Work	5
University of WA	Faculty of Arts, Business, Law & Education	School of Social Sciences	1
University of New South Wales	Faculty of Arts & Social Sciences	School of Education	3
		School of Humanities & Languages	2

These 65 academics were identified at the Lecturer level or above, and all were retained and included in the analyses. The 65 academics included 39 (60%) female and 26 (40%) male staff.

In terms of scholarly publishing, these 65 academics published a total of 741 journal articles over almost the first two decades of the 21st century (2000–2018). Figure 1 presents the overall pattern of journal article publication (productivity) of these academics.

As Figure 1 shows, there is generally an increasing pattern of journal article publication by AL/TESOL academics. Although there seems to be a decreasing

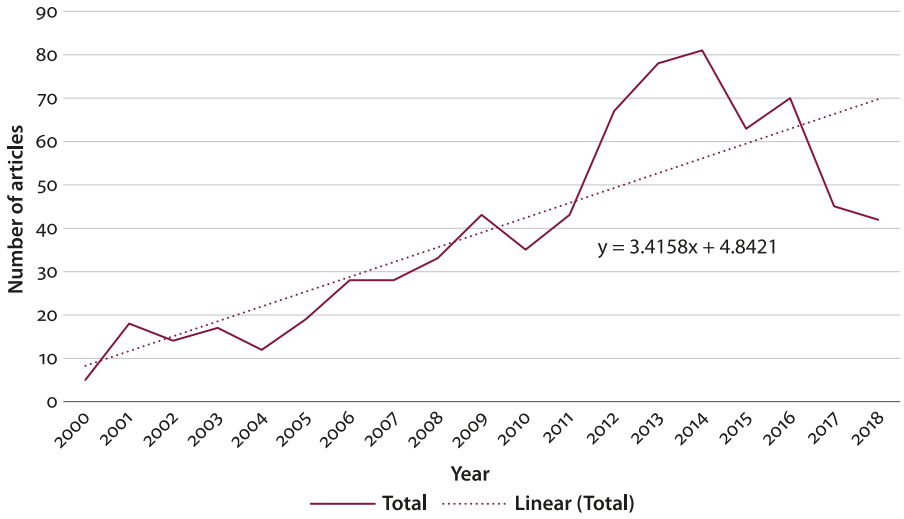

Figure 1. Overall pattern of productivity (article publication)

pattern from 2014, there is a positive slope indicating an overall increasing pattern, as the regression line shows.

Table 2 shows the distribution of journal article productivity across the academic level and gender. Productivity is defined as the number of journal articles published by academics. However, in order to be able to make a comparison between academics across levels as well as gender, we need to calculate an average article per rank, which is defined as the ratio of publication and staff number. A similar average article per gender can be calculated. In that case, the higher the average value, the more productive the staff is.

Table 2. Distribution of journal article productivity across academic rank and gender

Academic rank	Gender			Number of journal articles			Anapa*
	Male	Female	Total	Male	Female	Total no. of articles	
Lecturer	05	18	23	23	113	136	5.91
Senior Lecturer	04	08	12	67	70	137	11.42
Associate Professor	08	06	14	70	103	173	12.36
Professor	09	07	16	191	104	295	18.44
Total	**26**	**39**	**65**	**351**	**390**	**741**	**11.4**

* Average number of articles per academic

As can be seen from Table 2, Lecturers comprised the highest number, 23 (35%) of academic staff in G08 universities followed by Professors, 16 (25%), Associate Professors, 14 (22%), and Senior Lecturers, 12 (18%). Further, female academic staff outnumbered male staff; however, they were unequally distributed across the academic level with relatively more at lower rather than higher academic levels. The situation is almost reversed for male academic staff who were mostly positioned at higher academic levels. In addition, the productivity (overall rate of article publication) of the male staff was 13.5 (351 articles divided by 26 male staff) while it was 10 (390 articles divided by 39 female staff) for female staff. Concerning academic rank, as can be seen from the last two columns in Table 2, there was increased productivity as we moved from Lecturer to Professor. These results will be discussed in the discussion section.

5.2 Academic impact (journal article citation patterns)

Academic impact is defined as the number of citations made to each article. Citations are an established measure usually used to show the academic impact of the journal articles. Like productivity, they are reported as raw citation counts to each article. To work out how influential a journal article and, in turn, a researcher is, we can simply add up the number of times other researchers have cited articles written by a particular researcher. The 741 journal articles were cited 11,377 times. There was indeed a considerable variation in academic impact with zero (only six articles) to a maximum of 354 (only one article) citations. The mean citation per article was 15.35, and the standard deviation was 26.85, which does show an extensive range and variability in the citation pattern. The median was seven, meaning that half of the articles were cited seven times or more while the other half were cited seven times or less. The mode was one showing that articles with only one citation had the highest frequency, that is, 179 articles (24.16%) were cited only once. Table 3 presents more details about the citation patterns across academic levels.

As Table 3 shows, the average number of citations per academic rank increase as we move from Lecturer to Professor except that the average citation per article was a bit higher (19.75) for Associate Professors compared to that of Professors (19.10). Lecturers had 136 articles cited 949 times with an average citation per article of 6.98. Senior Lecturers had 137 articles cited 1378 times with an average citation per article of 10.05. Associate Professors had 173 articles cited 3416 times with an average citation per article of 19.75, and Professors had 295 articles cited 5634 times with an average citation per article of 19.10. Also, the number of articles which received more than 10 citations showed an increasing pattern from Lecturer to Professor.

Table 3. Productivity and citation patterns across academic levels

	No. of articles	Number of citations	Average no. of citations per article	Fewer than 10 citations	More than 10 citations
Lecturer	136	949	6.98	102	34
Senior Lecturer	137	1378	10.05	100	37
Associate Professor	173	3416	19.75	85	88
Professor	295	5634	19.10	139	156
Total	**741**	**11379**		**426**	**315**

Based on the above results, the following conclusions can be made:

1. According to Figure 1, there is an increasing trend of journal article publication by AL/TESOL staff in G08 universities over the 19 years.
2. Female ($n=39$) staff outnumbered male ($n=26$) staff in G08 universities. Of the 65 AL/TESOL staff in G08 universities, 60% were female and 40% were male. This was while 67% of the female staff were at the Lecturer and Senior Lecturer levels and only 33% were at the Associate and full Professor levels. The trend was reversed for the male staff. That is, only 35% were at the Lecturer and Senior Lecturer levels while 65% were at the Associate and full Professor levels.
3. The number of publications was found to be proportionate to the academic level. That is, as can be seen from Table 2, there is an increasing trend of journal article publication as we move from Lecturer to Professor level.
4. This trend is also true concerning the average number of articles published by each level as well as the average number of citations per article except that Associate Professors showed a higher average citation index compared to Professors. However, articles that received more than 10 citations followed a steady increase from Lecturer to Professor.

5.3 Journal quality for the published articles

The 65 AL/TESOL academics in the G08 universities published 741 journal articles from 2000 to 2018 inclusive. These staff published their articles in 243 journals, quite a variety of journals. There are two indices which are usually used to define journal quality. The first index is the journal impact factor (IF). According to Clarivate (2019), IF is a measure of the frequency with which the "average article" in a journal has been cited in a particular year or period. The annual JCR

impact factor is a ratio between citations and recent citable items published. Thus, the impact factor of a journal is calculated by dividing the number of current year citations to the source items published in that journal during the previous two years.

For example, if A is the total cites in 2012 and B is the number of cites to articles published in 2010–2011 (which is a subset of A), and C is the number of articles published in 2010–2011 in a journal. The 2012 IF of the journal will then be B divided by C. IF is considered to be a useful index in clarifying the significance of absolute (or total) citation frequencies since it eliminates some of the bias of such counts which favour large journals over small ones, or frequently issued journals over less frequently issued ones, and of older journals over newer ones (Clarivate, 2019). This is because, for example, older journals have a larger citable body of literature than smaller or younger journals. All things being equal, the larger the number of previously published articles, the more often a journal will be cited.

The second index of journal quality is journal quartile. Journal quartile is represented by Q1, Q2, Q3, or Q4 as explained earlier. Together, these two indices (IF and Quartile) can help understand the ranking of the journals.

Of the total 741 articles published by AL/TESOL academics in the Go8 universities, 539 articles (72.74%) were published in journals with a reported impact factor by 2017 JCR Journal Impact Factor, while 202 articles (27.26%) were published in journals with no JCR reported impact factor. The minimum and maximum reported impact factors were 0.115 (*Across Languages and Cultures*) and 5.847 (*Internet and Higher Education*). The mode for impact factor was 1.039, the median 1.195, and the mean impact factor was 1.409 with a standard deviation of 0.84.

Table 4 presents the overall number of articles in the JCR/JIF and SJR Best Quartile journal lists. SJR is an alternative measure produced by Scopus and is based on a different citation universe.

Table 4. The overall pattern of published articles in the two best quartile lists

	Number and percentage of published articles across journal quartiles				
	Q1	**Q2**	**Q3**	**Q4**	**Unranked**
JCR/JIF Best Quartile	192 (25.91%)	187 (25.24%)	111 (14.98%)	49 (6.61%)	202 (27.26%)
SJR Best Quartile	556 (75%)	110 (14.85%)	35 (4.72%)	10 (1.35%)	30 (4%)

Concerning JCR/JIF Best Quartile reference, 379 articles (51.15%) were published in journals with Q1 and Q2 ranks, while 160 articles (21.59%) were pub-

lished in Q3 and Q4 journals and 202 articles (27.26%) were published in unranked journals. However, based on SJR Best Quartile, the picture becomes different. That is, 666 articles (~ 90%) were published in Q1 and Q2 journals, while only 75 articles (~ 10%) were published in Q3, Q4, or unranked journals.

Table 5 shows that publishing in Q1 and Q2 journals have a steady increasing trend from Lecturer to Professor levels. In other words, it seems that as AL/TESOL staff gain more experience, they publish more in journals with higher impact factors and quartile ranks.

Table 5. Distribution of articles in the JCR/JIF Best Quartile journals across academic level

	JCR/JIF Best Quartile						Average impact factor
	Q1	Q2	Q3	Q4	Unranked	Total	
Lecturer	21	29	21	5	60	136	1.52
Senior Lecturer	32	33	19	10	43	137	1.28
Associate Professor	66	38	20	11	38	173	1.60
Professor	73	87	52	24	59	295	1.40

In addition to journal IF and quartile indices, Excellence in Research Australia (ERA) has also created a journal list. Of the 243 journals in which AL/TESOL academics published articles, 159 journals (65.43%) were listed on ERA's 2018 journal list. However, 84 journals (34.57%) were not listed on ERA's 2018 journal list, which is closer to the JCR/JIF unmarked journals (27.26%) as shown in Table 4.

The next step was to examine which journals were more attractive to this cohort of AL/TESOL academics. In order to find out this tendency, we looked for journals which had published 10 or more articles from this cohort of academics. Only 17 journals had a publication rate of 10 articles or more. These journals published 286 articles (38%) from a total of 741 articles. The other 226 journals had a publication rate of fewer than 10 articles, having published 462 articles (62%) in total. Table 6 shows the list of the 17 journals, number of articles published in each, their quartiles, and their impact factors. All 17 journals are on the ERA 2018 list.

Journal of Pragmatics received the highest number of publications ($n = 40$) followed by *Australian Review of Applied Linguistics* ($n = 30$), *Language Testing* ($n = 29$), *Australian Journal of Linguistics* ($n = 23$), and *TESOL Quarterly* ($n = 18$).

In terms of journal impact factor (IF), the top five journals in which the Go8 academics published their articles included *Journal of Second Language*

Table 6. The 17 journals in terms of the rate of article publication, quartiles, and impact factor

Journal title	Number of articles	JCR/JIF Best Quartile	SJR best quartile	2017 JCR journal impact factor
Journal of Pragmatics	40	Q1	Q1	1.039
Australian Review of Applied Linguistics	30	–	Q2	–
Language Testing	29	Q1	Q1	1.431
Australian Journal of Linguistics	23	Q3	Q1	.595
TESOL Quarterly	18	Q1	Q1	2.256
Current Issues in Language Planning	17	–	Q1	–
World Englishes	15	Q3	Q1	.75
Linguistics and Education	14	Q2	Q1	.892
Journal of Second Language Writing	13	Q1	Q1	3.324
Multilingua	12	Q4	Q1	.404
Language Teaching Research	11	Q1	Q1	2.86
Applied Linguistics	11	Q1	Q1	3.225
System	11	Q1	Q1	1.547
Journal of English for Academic Purposes	11	Q2	Q1	1.42
Intercultural Pragmatics	11	Q2	Q1	1.125
Assessing Writing	10	Q1	Q1	1.906
Asian Englishes	10	–	–	–

Writing (*IF*=3.324), *Applied Linguistics* (*IF*=3.225), *Language Teaching Research* (*IF*=2.86), *TESOL Quarterly* (*IF*=2.256), and *Assessing Writing* (*IF*=1.906).

Based on the results presented in Section 5.3, the following conclusions can be made:

1. A majority of the articles (72%) were published in journals that have a reported impact factor (IF) by 2017 JCR. The mean IF of these journals was 1.413. Similarly, a majority of the journals (65.43%) were on the ERA 2018 journal list.

2. In terms of journal quartiles, 544 articles (63.7%) were published in journals with a Q1-Q4 quartile rank according to the JCR/JIF Best Quartile list. This percentage was even higher (95.7%) when the SJR Best Quartile list was used. Besides, a majority of the articles (51%) were published in Q1 and Q2 journals according to the JCR/JIF list, while this percentage increased to 90% when the SJR list was used.
3. In terms of journal quartile and academic rank, the findings showed that publishing in Q1 and Q2 journals had a steadily increasing pattern from Lecturer to Professor. That is, we observed more journal publication in Q1 and Q2 journals by Professors compared to other ranks.
4. Only 17 journals (7%) of the total 243 journals had a publication rate of more than 10 articles by the AL/TESOL academics throughout 2000–2018, while the other 226 journals (93%) had a publication rate of fewer than 10 articles over the same period.

6. Discussion

In this section, we will elaborate on and discuss the results in light of the research questions. Each research question is restated, and the achieved results are discussed.

6.1 RQ1: What is the overall pattern of journal article productivity among AL/TESOL academics in the G08 Australian universities?

As Figure 1 in the results section shows, there is an increasing pattern of journal article publication by this cohort of AL/TESOL staff. This increasing pattern may be attributed to the "publish or perish" mantra currently being practiced by universities across the globe. The ripples in Figure 1 can be ignored because of the overall increasing trend shown by the regression line. We can, therefore, predict, based on the regression line in Figure 1, that the number of publications by AL/TESOL academics in G08 will have an increasing pattern alluding to a "publish or perish" trend. Further, based on Table 2, it can be discerned that the average number of articles per academic rank followed as expected. That is, Professors had the first rank with an average of 18.44 articles over the 19 years (2000–2018) followed by Associate Professors with an average of 12.36 articles, Senior Lecturers with 11.42 articles, and Lecturers with 5.91 articles. In a sense, this finding somewhat resonates with Angermüller's (2010) observation that "journal article publication and citation practice in academia may be considered a game of recognition and identification of one's membership in particular fields" (p. 23).

The average article publication was 11.4 over 19 years. While in natural sciences publishing journal articles is a core research activity, in human and social sciences publishing book chapters, monographs, edited volumes, and conference proceedings are also very common. It would thus be worthwhile to investigate the other types of publications among this cohort of academics in order to be able to make a fairer evaluation of scholarly polishing among this group.

The second point relates to productivity versus gender. The female academic staff outnumbered male staff (31 vs 22), which resulted in more article publications ($n=306$, 52%) for them compared to male academics ($n=280$, 48%). However, female academics were unequally distributed across the academic ranks vis-à-vis male academics. In fact, in three academic ranks (Lecturer, Senior Lecturer, and Associate Professor), female academics were more prolific than their male counterparts, and it is only at the level of Professor that males had more publications. Even at the Associate Professor level, the five female Associate Professors published more articles ($n=80$) than the seven male academics ($n=51$) in the same rank. Previous studies (e.g., Lillis & Curry, 2018 and Nygaard & Bahgat, 2018 both drew on a large number of studies on the gender gap in academic publishing) reported that women are represented with lower scholarly productivity. Results of the current study show that women generally outperformed their male counterparts in terms of journal article publication. However, compared to males, they were at lower academic ranks. This finding is in line with that of Lillis and Curry (2018) who, using the UK Excellence of Research, found that women held lower positions within institutional hierarchy. It might be the case that females are either reluctant or modest in putting applications for promotion. This could perhaps be mainly because, as Lillis and Curry (2018) observed, they are assuming more mentoring, service, and administration work and thus not having time to prepare for and apply for promotion. There thus seems to be a need for a closer evaluation of productivity and academic promotion and a more encouraging policy by departments, faculties, and universities to compensate for this discrepancy.

6.2 RQ2: What is the overall academic impact (citation patterns) of the published articles?

As discussed above, the average number of articles per academic rank followed the expected pattern. This trend was also repeated for the overall number of citations as well as the average number of citations per article (Table 3). Lecturers had 136 articles, which were cited 949 times with an average citation per article of 6.98. Senior Lecturers had 137 articles cited 1,378 times with an average citation per article of 10.05. Associate Professors had 173 articles cited 3,416 times with an average citation per article of 19.75, and Professors had 295 articles cited 5,634 times with

an average citation per article of 19.10. In the same vein, the articles with more than 10 citations followed the same pattern, that is, more citations per academic rank. Overall, it can be concluded that journal article citation patterns have followed that of journal article productivity: more articles, more citations.

While the journal article publication and citation records are currently considered a normal research activity in academia, there is another side of the coin worth considering. This refers to academics' attempt to be recognized and thus to seek promotion and tenure track. As Angermüller (2010) observed, "if academic researchers want to be understood, they need to situate their thoughts in an epistemic field … Hence, citing somebody serves to show who one knows, who said what and who takes what position vis-à-vis others" (p. 6).

Angermüller (2010) further argues that often excellence and legitimacy are inextricably bound up with each other, resulting in a common understanding that the most legitimate representative of a field is also often the most excellent one in one way or another. The journal article publishing and the citations, therefore, need to be more critically addressed when studies like the present one are underway. That is, it is worth investigating how highly cited articles may also represent research excellence in the field.

6.3 RQ3: What is the quality (quartile rank) of the journals in which AL/TESOL academics in the G08 Australian universities published their articles?

Another aspect of journal article publication and professionalism relates to journals in which articles are published. As presented in Section 5.3, AL/TESOL academics published their articles in 243 journals, quite a wide range of journals. According to JCR/JIF Best Quartile, almost 50% of these articles were published in Q1 and Q2 journals, 22% in Q3 and Q4, and 28% in unranked journals. The picture got rosier though when we used SJR Best Quartile. In that case, 90% of the articles were published in Q1 and Q2 journals; only 6% in Q3 and Q4, and even fewer 4% in unranked journals. From one perspective, the huge number of journals may represent the wide range of research topics being addressed by AL/TESOL academics as well as the "pluridisciplinary" (Bourguignon, 2001 cited in Liddicoat, 2010, p. 14.9) nature of this discipline. However, and at the same time, this level of diversity of topics and journals can be a cause for concern if AL/TESOL community aims at representing itself more coherently. Liddicoat (2010) reflected on the diversity of Applied Linguistics journals to pose two fundamental problems for Applied Linguistics research in Australia: "The first is a problem of visibility. The second is a problem of fragmentation" (p. 14.13).

The diversity of journals also resonates with Forgues and Liarte's (2013) sentiment that "due to our 'publish or perish' context, the number of published articles and academic journals keeps climbing" (p. 744). This trend may also lead to incommensurability as observed by Angermüller (2010), which may result in a relentless drive to uniqueness as usually required by evaluation standards. The implication of this situation for academic publishing may lead academics to conform to cultural norms ("publish or perish") rather than to strive for excellence and development of ideas in a particular field. As such, journal article publication and citation practice in academia may be considered a game of recognition and identification of one's membership in particular fields. This may take place unconsciously but not less consequentially as Angermüller observed.

7. Limitations

There are several limitations in the current study that may make the generalization of the results somehow difficult. First, the present study relied exclusively on journal article publications. AL/TESOL academics also commonly publish books (monographs and edited volumes), book chapters, and papers in conference proceedings. A complete portrait of scholarly productivity, impact, and quality will, therefore, need to include other types of publications. Second, we relied on the publicly available database to measure research productivity over the period 2000–2018. While we did our best to gather the data as comprehensively and accurately as possible, errors might have occurred in the identification of academics and estimation of productivity. An alternative approach would be to use surveys and collect data directly from individual academics. Third, the present study focused only on the Go8 universities in Australia. The discipline of AL/TESOL is represented in almost all Australian universities, so a more comprehensive study may aim at replicating the present study at a larger scale including all universities with AL/TESOL programs. Fourthly, the present study used citation data as the only measure of scholarly impact. There is controversy over the usefulness of this measure as a research quality index. Drawing on Polanyi (1962); Aksnes, Langfeldt, and Wouters (2019) considered plausibility, originality, and scientific value as three dimensions of research quality. They added that recently, "studies have added societal value, that is, including the importance for society as a fourth dimension of research quality" (p. 8). They then argued that "from citation counts alone one cannot reveal why a specific paper is repeatedly cited by other researchers" (p. 8). Future studies may thus include other measures of impact in addition to citations. Finally, we acknowledge that there might have been individuals' shifting ranks over the 19-year period. However, as we explained

earlier, we did not collect data related to this transition. Future research may take this into consideration and provide a trajectory of academics' research production over time and conduct a more nuanced comparison across academic ranks.

8. Conclusions

Despite its limitations, the current study has some contributions as listed below.

First, it was found that AL/TESOL academics in Go8 universities are entering into and recognizing the "publish or perish" game currently being played by universities. The increasing pattern of journal article publishing from the year 2000 shows that this cohort of academics is well-prepared to play the game. It was also found that journal article publishing and citation patterns are proportionate to academic levels.

Second, this study showed that while female AL/TESOL academics in Go8 universities outnumber male academics and have higher publication rates in the first three academic ranks, they assume lower academic ranks vis-à-vis male academics. Third, the study showed that the number of journals in which AL/TESOL academics publish is more diverse than expected. This diversity in journals has both implications and consequences. The high number of journals imply that this cohort of academics may be concerned about the "publish or perish" mantra and thus attempt to publish where they get the chance. The consequence of such a wide range of journals might pose a risk to disciplinary coherence and integrity. Even the two journal ranking systems (JCR and SJR best quartile) present two different lists in terms of journal quality. For example, while 90% of the articles were recognized by SJR as Q1 and Q2 journal publications, only 50% of those articles were included in Q1 and Q2 journals by JCR. The JCR ranking was closer to ERA's list. AL/TESOL academics and scholars may want to think about and consider better ways of representing the discipline regarding the journal outlets.

There is hope that this line of research is continued in future both nationally and internationally, so that AL/TESOL academics performance could be further analyzed for comparative purposes.

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