The Politics of Contextualization in Communication Research: Examining the Discursive Strategies of Non-U.S. Research in Communication Journals

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The ideological hegemony of an academic discipline can be reflected by the discursive strategies adopted by authors in their academic writing. We examined 509 non-U.S. studies across eight communication journals listed in the Journal Citation Reports (JCR) from 2000 to 2020 and coded for the prevalence of references to local (in-country), United States, and other country (out-country) contexts. The findings revealed a substantive amount of contextualization to U.S. concerns and literature among the journal articles and revealed how academic writing sustains the omnipresence of the United States in communication scholarship. If striving for greater international representation and diversity is a goal for the field, then actors involved in the production and dissemination of knowledge, including authors, reviewers, and editors, should engage in more reflexivity on the politics of contextualization and how academic writing not only can reinforce the status quo but also give more visibility to countries at the peripheries.

Keywords: contextualization, writing, metadiscourse, ideological hegemony, periphery

Much of the working lives of aspiring and existing scholars involve the written word because it is fundamental for the exchange of knowledge and ideas within and beyond academia. It also comprises a valuable source of academic capital, typically manifested as books and journal articles, in which accumulation is necessary to fulfill a range of metrics that has become essential to advance individual careers and institutional prestige (Burrows, 2012). The field of communication is no different. Yet, academic writing must be considered within an overarching, complex, and interrelated system of actors and practices that shape what gets written, how it is written, how it is evaluated, and whether it will ever be published (Lillis & Curry, 2010).

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When describing communication as a "post-discipline," Waisbord (2019) noted that increased globalization of the field in the past decades has not addressed the enduring structural inequalities that are characterized by "an unequal, multiple-tiered academic order, featuring the supremacy of U.S. institutions and academic cultures" (p. 94). It has facilitated the spread of metrification in universities across the globe, leading to the rise of the Impact Factor (IF) in the Journal Citation Reports (JCR) as an indicator of individual and institutional reputation. To succeed in this environment of "publish globally or perish locally" (Chou & Chan, 2017, p. 63), authors outside the United States are often compelled to submit to JCR journals. Yet, much of the works published in the field's most influential journals are still authored by those affiliated with U.S. institutions (Demeter, 2019a; Lauf, 2005; Walter, Cody, & Ball-Rokeach, 2018). And although there are positive indications that the geographical diversity of these journals' editorial boards is increasing, leading to more publications by authors outside the United States (Goyanes & Demeter, 2020), the field is still very much dominated by those affiliated with U.S. and a few Western European institutions in terms of total JCR article output (de Albuquerque, de Oliveira, dos Santos Junior, & de Albuquerque, 2020).

We build on these insights from another perspective. First, we are interested in the discursive characteristics of non-U.S. research articles published in the field's JCR-listed communication journals and how they might contribute to the ideological hegemony of the U.S. academic culture. Specifically, we examine the extent to which authors of non-U.S. studies *contextualize* their writing in relation to their own local and other geographical foci. This is important because anecdotal evidence suggests that works based on non-U.S. samples are often held to a different standard when it comes to judging their contributions to the literature (Rojas & Valenzuela, 2019). Second, we focus on ideological hegemony *within* what is generally considered the "center" (i.e., dominant countries in the field responsible for the majority of JCR journal output) and highlight how the ideological hegemony of the U.S. academic culture is sustained by institutions in economically prosperous countries. This study thus informs, but does not strictly examine the discourse on de-Westernization (e.g., Waisbord & Mellado, 2014) nor the broad Global North versus South divide (Boczkowski & Mitchelstein, 2019). Ultimately, our goal and contribution are to examine whether the aforementioned inequalities in communication scholarship are also manifested at the level of the text.

Contextualization in Academic Writing

A journal article is a highly specialized genre of writing that follows the norms and conventions of the journal as well as the community of scholars within their respective fields and areas of specialization (Patriotta, 2017). These norms can be explicit (e.g., citation style) or implicit (e.g., manipulation checks for experiment) and are adhered to by discourse communities that each have their own specific organizations, goals, standards, norms, and terminologies (Swales, 2016). Academic writing consists of metadiscourse, which are "aspects of a text which explicitly organize a discourse or the writer's stance towards either its content or the reader" (Hyland, 2018, p. 16). It goes hand in hand with context because context binds the sections of a manuscript to provide meaning and a cohesive narrative that the author wants to communicate to readers. Contextualization is thus one of the most salient aspects of academic writing, but it also poses a perennial challenge for authors conducting research from non-U.S. samples when they submit their work to JCR journals.

Not All Context Is Equal

Informed by world-systems theory (Wallerstein, 2004), Canagarajah (2002) argued that ideological hegemony is propagated through journals that are sustained by networks of scholars from narrow linguistic and cultural backgrounds, such that the so-called disciplinary norms and journal conventions are, in reality, norms and conventions set by Western (primarily the United States) institutions and scholars because of their material and discursive power. Given that these gatekeepers control the key apparatus of knowledge production and dissemination, non-U.S. scholars in developing countries at the periphery are compelled to adhere to the dominant ideology and its associated practices if they want to publish their work in the same journals. This is consistent with Bourdieu's (1988) notion of the "field" and the wielding of symbolic power by dominant groups in academia that sustain the inequality of academic production by virtue of their academic and intellectual capital. These dynamics also pervade the semiperiphery and even the center. Bennett (2014) points to Spain, Portugal, and countries in Eastern Europe as exemplars of the semiperiphery, which is "an intermediary category in the global academic order where the constraints described by Canagarajah still exist, but in a less severe, less debilitating form" (p. 1). Like those in the periphery, scholars in these countries attain their academic capital through the "uncritical subservience" to the epistemologies, theories of the anglophone-dominated center, and privilege writing that contextualizes to the center rather than their own local contexts (Bennett, 2014, p. 3).

These challenges are also faced by prosperous countries in the Global North. In Meriläinen, Tienari, Thomas, and Davies (2008), the first author recounts her experiences as a Finn scholar who not only faced linguistic challenges publishing in a field where all the top journals are U.S. based but is also often asked by reviewers to explain the relevance of the Finnish context. Rojas and Valenzuela (2019) also highlighted this inequity in the field of political communication, noting their experiences and other scholars who had to justify to reviewers whether their research findings were generalizable phenomena rather than artifacts attributable to their specific geography. The inequity lay in their argument that authors from the United States and other Western countries who study the same phenomena were not asked to contextualize their findings to the rest of the world. Thus, contextualization "is a political intervention in knowledge production: It shapes what gets to be said, in which ways, by whom, and how it is received" (Boczkowski & Mitchelstein, 2019, p. 677). It not only affects the practices of academic writing *across* the center, semiperiphery, and periphery but also *within* them, thus enabling the overall gravitation of academic cultures toward the center with U.S. academic institutions and cultures at its apex.

This is not to say that those in the peripheries are completely subservient to the center. As Demeter (2019b) noted, scholars in Latin America have the advantage that Spanish is widely spoken, and Spanish-language journals have made headway into the major citation indices. This provides a pathway for those who do not publish in English to accumulate substantive academic capital. In the English-speaking world, however, the politics of contextualization is one of the main discursive ways in which ideological hegemony of predominantly American scholarship is sustained. Imagine a highly ranked journal that is associated with a U.S. academic association; its editorial team and board members are primarily affiliated with U.S. universities, and it features predominantly articles by U.S. scholars. For those working on non-U.S. samples, these characteristics can evoke a powerful imagined audience (i.e., the "mental conceptualization of the people with whom we are communicating"; Litt, 2012, p. 331) that shape what metadiscourses and contexts

they bring to their writing. For some authors, this means that contextualizing one's country context in the manuscript is not really an option but rather a necessity to preemptively address the imagined concerns from imagined reviewers (Chan, 2019). It may mean framing a study as an empirical replication of theories and topics from the "Global North" so as to justify the relevance of one's "local" scholarship to editors and reviewers from the center (Ergin & Alkan, 2019). Various examples will be elaborated below.

Discursive Practices That Reinforce Ideological Hegemony

The degree of contextualization of one's country sample in a manuscript can vary broadly along a continuum. On one end is a study that has minimal country context. For example, in Arendt's (2013) experimental study of priming effects, the country is not mentioned at all except for one appearance in the methods section that described the experimental stimuli (i.e., "an article with an Austrian offender"). On the other end is the kind of study that necessitates substantive contextualization, such as Hassid's (2012) content analysis on Chinese bloggers and political discourse that would require in-depth explication of China's censored digital communications environment for readers to understand the conditions in which such bloggers operate. The examples represent relative degrees of *in-country contextualization*, and its use depends on the author's research topic, epistemological stance, and/or methodology. It may serve different purposes. In the introduction it can set the scene by describing a specific local phenomenon, such as a social movement or critical event. In the methodology section, it can describe the specific cultural characteristics of the sample. In the discussion section, it can delineate the geographic scope of the findings. Equally important is *out-country contextualization* because the politics of contextualization can be more readily observed by examining how authors contextualize different parts of their manuscripts in relation to other countries. Several examples below illustrate this point.

Contextualization of the Study

Li's (2019) mixed-methods study examined the gratifications obtained from and perceptions of different types of news (political, health, science) among citizens in Taiwan, and uses U.S. statistics to set up the local relevance of the study even though similar statistics for Taiwan are readily available:

> With the rapid development of Internet-related technologies, an increasing number of people obtain news from social media. However, recent surveys by the Pew Research Center show that two-thirds of Americans rely on social media for news, but 57% of them consider news on social media to be inaccurate (Matsa & Shearer, 2018). Similarly, many people in Taiwan also rely on social media for news, but they are suspicious of the credibility of news on social media. (p. 635)

Matthes and Schmuck (2017) used a survey experiment to examine how anti-immigrant right-wing populist advertisements affected the Austrians' attitudes toward foreigners. When introducing the literature on right-wing populist advertising, they felt the need to contrast their object of study with the United States rather than explain the general prevalence of political posters in other nations, which would make their findings more generalizable: "Whereas in the United States, political candidates rely on televised political advertising

as the primary method for communicating with the voters, political posters still remain the most important form of political advertising in Europe" (Matthes & Schmuck, 2017, p. 558).

There is nothing inherently "wrong" with these paragraphs, but they invoked U.S. contexts that tailored to a U.S. readership even though their inclusion did not necessarily strengthen the scientific relevance of the studies. Various thought processes may be operating here at the conscious and subconscious levels. One is the perceived legitimacy and authority by association, such that metadiscourses derived from the U.S. literature are more effective signposts to signify the study's importance and hence necessity to an imagined U.S. audience. As Demeter (2021) pointed out, scholars from the periphery "tend to use central knowledge strategically in order to be accepted by their central peers," (p. 58). More practically, U.S.-based studies are simply more common as most communication theories originated in the United States (Walter et al., 2018). This means they are easier to find as they are cited more often compared to works from other countries (Peng & Zhu, 2012). It is also possible that the authors received their doctoral training in the United States or have spent time there as a postdoctoral scholar or visiting faculty, so they are already embedded within the norms and conventions of the dominant (i.e., U.S.) discourse community. In some countries, the inculcation of the superiority of the U.S. academic culture is ingrained even earlier. Such is the case of Korea where undergraduate curricula draw heavily from U.S. theories and methods, and where professors in the most prestigious universities have U.S. doctorates (Kim, 2011). Another possibility as pointed out by others (e.g., Meriläinen et al., 2008; Rojas & Valenzuela, 2019) is that authors were compelled to do so by U.S.-based reviewers to make revisions that reflected reviewers' own parochial views of the phenomenon being studied. Whatever the reason, the examples above reveal the omnipresence of the United States, even though it is not the subject of study.

Contextualization of the Research Findings

The discussion section is very often another part of the journal article where the politics of contextualization can be observed. Normally, this is the section where the author summarizes the findings and explicates key contributions and insights to the field, acknowledges conceptual and methodological limitations, and recommends avenues for future research. Yet, as Boczkowski and Mitchelstein (2019) noted for the subfield of political communication, this can also often be the space where authors of non-U.S. studies are asked to contextualize their findings to the idiosyncrasies of their countries' samples while findings based on U.S. studies are accepted as universally generalizable. For example, Eggermont (2004) examined the relationship between television viewing and conceptions of romance among Belgian adolescents. The findings showed that increased TV viewing was related to the perceived importance of physical attractiveness for a romantic partner. Later, in discussing the limitations, Eggermont (2004) hedges on the generalizability of the study findings:

> Further, this research was conducted in a specific, European context. We do not believe this really to affect the generalizability of the results, however, since the focus of this study was on a rather universal dimension of romantic relationships and not on more culture-specific dimensions such as dating scripts. (pp. 261–262)

Of course, it is not possible from reading the text alone to know whether text related to out-country contextualization in the discussion was because of reviewer suggestions or the author's preemptive inclusion. But the fact remains that they do occur, but in different forms.

For some non-U.S. studies, the U.S. baseline is explicitly stated from the outset so contextualization with the United States is a given in the discussion section. These are typically studies that are framed as extensions or replications of U.S. studies, where the local country serves as "data" for "northern theory" (Ergin & Alkan, 2019, p. 259). An example would be the study by Tsfati, Tukachinsky, and Peri (2009) that examined how watching political comedy television was related to security concerns and political trust in the Israeli context. The beginning of their abstract was clear on the purpose of the study and the role of U.S. context:

> Previous research has demonstrated that exposure to news media increases viewers concerns about national security, as well as their mistrust of politicians and government. However, the contribution of entertainment media to security concerns and trust in government has received only scant attention in previous research, conducted mainly in the American context. (p. 399)

As expected, the discussion contextualized the findings in relation to previous U.S. findings (i.e., whether they were "consistent" and the possible reasons for unexpected "null findings"; e.g., "cultural differences"). Another example would be the study by Chang, Jacobson, and Zhang (2013) that examined Singaporeans' perceptions of government messages and their influence on citizens' perceived legitimacy of the government. As to why the study was necessary, the authors explained that: "The study reported here expands on previous research on communicative action and legitimation in the United States . . . by using it in the hybrid political system of the city-state of Singapore" (Chang et al., 2013, p. 1159).

Other forms of U.S. contextualization were more ad hoc. These studies were not framed by the authors as extensions to the U.S. literature, but it was still invoked when discussing the scope and contribution of the findings. Kim et al. (2019) examined the relationship between social media dependency and local community engagement in Seoul, Korea, and out-country contextualization in the discussion was made to the United States and no other country: "These results also suggest that the effects of community storytelling on local engagement can be observed in places outside the United States, where most previous CIT studies have been conducted" (Kim et al., 2019, p. 25). Other studies invoked other countries and regions beyond the United States. One by Lecheler, Bos, and Vliegenthart (2015) contextualized their Dutch study on attitudes toward immigration in the context of the rise of anti-immigrant political parties in Western Europe and noted that the "findings can provide guidance for communication practitioners in the Netherlands and other European countries" (p. 828). Nevertheless, when they reviewed the literature on framing, the only instances of out-country contextualization were to U.S. and European samples.

These examples are reflective of the ideological hegemony of the American academic culture that permeates academic writing. But just how pervasive this practice is and how long it has existed require further systematic investigation. Thus, the first step of the study is to pose a general research question:

RQ1:   What are the general characteristics of non-U.S. studies published in the JCR communication journals in this study?

Here, we are interested in general aspects of the study that are relevant to our focus on contextualization, such as general research approaches adopted in the studies. We also examine authorship in terms of whether the first author is affiliated to a U.S. university or received PhD training (or the highest qualification) in the United States because these authors are more likely to be embedded within the norms and conventions of the dominant discourse communities, which in turn may shape their academic writing. The main focus of this study is on the extent of in-country and out-country contextualization employed by the authors in the text. Hence, we pose the following research questions:

RQ2:   How prevalent is in-country contextualization in the articles?

RQ3:   How prevalent is out-country contextualization to the United States and other countries outside the country of study in the articles?

These questions led to the systematic development of a coding protocol that will be used to analyze the articles in JCR communication journals.

Methodology

Sampling Frame

The selection of the study sample for analysis was based on three considerations. First, the journals should be listed in the JCR Communication category from 2000 to 2020 (*N* = 32). Second, they are generalist journals known for publishing empirical work to a broad readership. Third, they are affiliated with prominent academic associations as they "represent existing power relationships in the world system of knowledge production" (Goyanes & Demeter, 2020, p. 1130). This led to the selection of eight journals, including: *Communication Monographs* (CM), *Communication Research* (CR), *Human Communication Research* (HCR), *International Journal of Public Opinion Research* (IJPOR), *Journal of Broadcasting & Electronic Media* (JBEM), *Journal of Communication* (JOC), *Journalism & Mass Communication Quarterly* (JMCQ), and *Public Opinion Quarterly* (POQ). We excluded journals that focused on a specific subfield of communication (e.g., health communication, political communication), geographical location (e.g., *European Journal of Communication*), methodological approach (e.g., *Discourse and Society*), and mode of communication (e.g., written communication). Although CR is not affiliated with an academic association (see Table 1), we still included it because of its generalist orientation and long history in the field (published since 1974).

Table 1. Journals Sampled in the Study and URL Links Used for Article Search.

Journal and URL	Publisher	Affiliated organization
Communication Monographs https://www.tandfonline.com/toc/rcmm20/current	Taylor & Francis	National Communication Association
Communication Research https://journals.sagepub.com/home/crx	SAGE	—
Human Communication Research https://academic.oup.com/hcr	Oxford	International Communication Association
International Journal of Public Opinion Research https://academic.oup.com/ijpor	Oxford	World Association for Public Opinion Research
Journalism & Mass Communication Quarterly https://journals.sagepub.com/home/jmq	SAGE	Association for Education in Journalism and Mass Communication
Journal of Broadcasting & Electronic Media https://www.tandfonline.com/toc/hbem20/current	Taylor & Francis	The Broadcast Education Association
Journal of Communication https://academic.oup.com/joc	Oxford	International Communication Association
Public Opinion Quarterly https://academic.oup.com/poq	Oxford	American Association for Public Opinion Research

Sampling

After establishing the sampling frame, we downloaded the pdf versions of the articles directly from the publisher websites through their respective search functions (URLs shown in Table 1). We used country names and nationalities (e.g., "Australia" and "Australian") along with the timeframe (i.e., "2000" to "2020") as parameters to search through the respective journal abstracts. The keyword choices were derived from Demeter's (2019a) analysis of the top 50 countries that published in JCR communication journals from 2013 to 2017 based on the affiliations of the authors. We focused on the 21 countries in the list that had a share in publication output above 1%. They included countries in Western Europe (England, Germany, The Netherlands, Spain, Sweden, Denmark, Switzerland, Italy, Austria, Belgium, Finland, Norway); Asia (China, Korea, Singapore, Taiwan); Australasia (Australia, New Zealand) as well as Canada, Israel, and South Africa. By and large, most of these can be considered developed or minority world countries. One important note about this sampling method is that it relies on the country name to appear in the title or abstract. Thus, it is possible that the final sample underrepresents the actual number of articles from the 21 countries if such a practice is common. We believe this is unlikely.

The initial search yielded 1,102 articles, which were then carefully screened by the authors following the PRISMA guidelines (Moher, Liberati, Tetzlaff, Altman, & Group, 2009). Most of the articles that were screened out did not match the search criteria. These included articles that had U.S.-only samples, were not among the 21 countries of interest in this study, and results based on authors' university affiliation rather than the study sample. Additional screening also involved the removal of duplicate articles as well as articles that were not empirical in nature, such as book reviews and editorials. This provided a relevant study sample of 605 unique articles. Of that number, there were 128 comparative studies, of which 94

included a U.S. sample. Because this study focused on non-U.S. studies, we also removed these articles. This resulted in a final study sample of 509 journal articles, of which 477 were single-country studies and 34 were cross-national studies with two or more samples among the 21 countries. Most articles across the two decades were from CR, IJPOR, JMCQ, and JOC, which comprised 77% of all articles.

Table 2. Distribution of Countries Featured in Study Sample (2000–2020).

	CM	CR	HCR	IJPOR	JBEM	JOC	JMCQ	POQ	Total	%
The Netherlands	2	29	3	13	10	8	7	5	77	15%
Germany	3	17	0	14	7	11	15	7	74	15%
Israel	2	12	1	9	5	18	9	1	57	11%
Korea	1	9	0	10	0	0	18	0	38	7%
China	0	5	1	11	1	13	4	1	36	7%
United Kingdom	0	3	0	2	5	2	2	9	23	5%
Belgium	1	11	0	2	5	0	2	1	22	4%
Taiwan	0	4	0	5	5	0	5	1	20	4%
Canada	1	1	0	6	6	0	2	1	17	3%
Sweden	1	4	0	2	2	4	3	0	16	3%
Australia	1	2	2	3	2	1	4	0	15	3%
Singapore	0	3	0	4	2	3	3	0	15	3%
Spain	0	1	0	7	0	4	1	1	14	3%
Switzerland	0	3	0	6	2	0	1	0	12	2%
Austria	0	6	0	1	0	0	1	0	8	2%
Denmark	0	1	0	3	1	2	0	1	8	2%
New Zealand	2	1	1	0	1	0	0	1	6	1%
Norway	1	0	0	2	0	1	2	0	6	1%
Italy	0	1	0	3	1	0	0	0	5	1%
Finland	0	0	0	0	1	2	0	1	4	1%
South Africa	0	0	0	2	0	1	0	0	3	1%
Comparative	2	7	0	9	2	5	5	3	33	6%
N	17	120	8	114	58	75	84	33	509	100%

Protocol Development and Codebook

The first and second authors of this study developed and tested a coding protocol for the purposes of defining the variables and classifying the coding units relevant to the study. Then, the third and fourth authors were trained to apply the initial protocol to 20 articles featuring non-U.S. samples that were not part of this study. Simple agreement exceeded 80% for all variables. Deliberations among all authors led to further refinement of the final coding protocol, which is shown in Table 3 below. The 509 articles were then distributed equally among the second, third, and fourth authors, and they coded the articles based on the protocol. To assess intercoder reliability, 87 articles were randomly selected according to the formula by Riffe, Lacy, Watson, and Fico (2019) for determining a reliable sample size (i.e., 95% level of probability and 90% assumed level of agreement in the population) and coded by the same three authors. Calculations

of Krippendorff's alpha showed very good to excellent reliability overall (α = .94) and among individual coding units (α = .84 to α = 1.00). Any disagreements were conferred upon by the four authors to reach a consensus on the code.

Although most of the coding units are self-explanatory, it should be noted that for C1 and C2 we examine not only whether the local country is explicitly named in the text but also whether the text has at least one piece of information about the country. Therefore, a sentence like "This study was conducted in Germany" would be coded as "N," whereas a sentence like "Germany serves as a good case for analysis, since the first federal equal treatment law was introduced as early as 1980" would be coded as "Y." Several examples of out-country contextualization (D1–D4) have already been provided in the literature review above. Moreover, when coding for in-country and out-country contextualization for comparative studies, "in-country" refers to *any* instance of a sample in the study, whereas "out-country" refers to countries not among the sample.

Table 3. Overview of Coding Protocol and General Frequencies of Codes.

Code	Description	Code	% Yes
General characteristics			
A1	Research approach adopted for the study	Quantitative	85%
		Qualitative	10%
		Mixed	5%
A2	Specific methodology adopted for the study		
B1	Non-U.S. first author by affiliation	Y / N	85%
B2	First author highest qualification from a U.S. institution	Y / N	32%
In-country contextualization (ICC)			
C1	Provides country context in the introduction or literature review with at least one piece of information	Y / N	66%
C2	Provides country context in the methodology, results, or discussion with at least one piece of information	Y / N	71%
Out-country contextualization (OCC)			
D1	Contextualizes the study in the introduction or literature review to the United States	Y / N	59%
D2	Contextualizes the study in the introduction or literature review to nonlocal/non-U.S. country	Y / N	49%
D3	Contextualizes findings in the results or discussion to the United States	Y / N	27%
D4	Contextualizes findings in the results or discussion to nonlocal/non-U.S. country	Y / N	24%

Note. Top five for A2: survey (47%), experiment (19%), mixed (13%), content analysis (10%), interviews (3%).

Results

General Characteristics of the Articles (RQ1)

Of the 509 articles, over half were single-country studies in Europe (53%) with The Netherlands and Germany each accounting for 15%. The Asian countries (China, Korea, Singapore, Taiwan) accounted for 21% of articles, while those in Australasia (Australia and New Zealand) accounted for 4%. For other countries, Israel accounted for 11%, with Canada at 3% and South Africa under 1% (See Table 2). Examining over-time trends, Figure 1 shows a steady increase of non-U.S. studies overall in the past two decades that is led by the growth of studies from Europe and Asia.
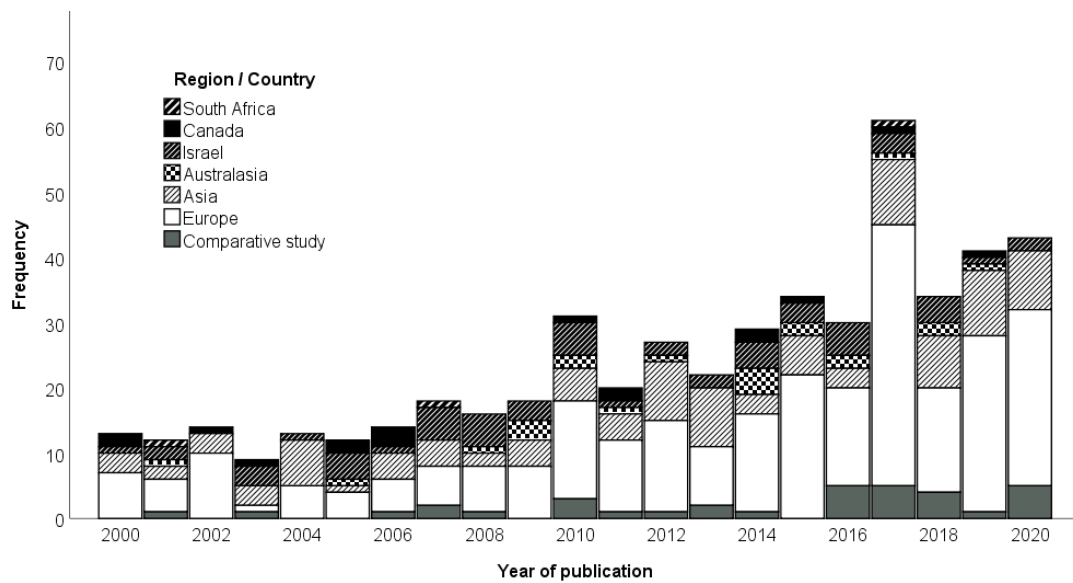

Figure 1. Distribution of articles across region/countries from 2000 to 2020.

In terms of research approach, most articles employed quantitative methods (85%) followed by qualitative (10%) and mixed methods (5%). Survey, experiment, and content analysis accounted for 75% of the articles. About authorship, most first authors were not affiliated with a U.S. institution, though it is notable that around half of studies on China and Korea featured a first author with a U.S. affiliation. Moreover, many first authors of Asia-based studies as well as in New Zealand, Israel, and Canada obtained their highest qualification (i.e., PhD) from the United States. The most notable example is Taiwan, where all first authors obtained their PhDs in the United States although most were not affiliated with a U.S. institution.

In-Country Contextualization (ICC; RQ2)

Full descriptive statistics of the frequency of ICC and OCC according to country, U.S. affiliation and education, method, and year of publication are in the Appendix. Aggregated results in Table 4 showed that 82% of articles have a least one type of ICC, including the introduction of the local context in the introduction

or literature review section of the article (C1 = 66%) and providing more in-depth exposition in the later sections of the study (C2 = 71%). While the amount of ICC is very high in studies on Asia (93% to 100%), there was greater variation within Europe. While Denmark, Finland, Italy, and Norway included ICC in 100% of articles, the number was 81% and below for the other European studies. In the other country categories, studies on Australia had the lowest total ICC at 67%, whereas in New Zealand and South Africa, the figure was 100%.

Out-Country Contextualization (OCC; RQ3)

As shown in Table 4, 67% of articles had at least one type of OCC to the United States, and 56% had one type of OCC to another country that is neither the United States nor the local sample. For studies on Europe, OCC to the United States ranged from 50% for Finland to 100% for Italy. In Asia, it ranged from 53% for Singapore to 75% for China and Taiwan. In Australasia it ranged from 33% for New Zealand to 73% for Australia. The figure is also relatively high in Canada (88%) and Israel (72%). Looking more specifically at the differences between ICC and OCC to the United States, the differential is skewed in most cases toward ICC. In other words, authors generally described the local context of their studies more than describing the U.S. context. The only three exceptions were the United Kingdom, Australia, and Canada. The opposite pattern was observed when comparing the differential between OCC to the United States and OCC to other countries. In most cases, contextualization to the United States was more frequent than contextualization to other countries. The two most noticeable cases in the other direction were studies on New Zealand and South Africa.

Table 4. Percentage of Articles by Country That Include United States and Other Country Elements.

	Non-U.S. author	U.S. education	Total ICC	Total OCC to United States	Total OCC to Other	ICC–OCC (United States)	OCC (United States)–OCC (Other)
Europe							
United Kingdom	91%	17%	65%	83%	52%	−17%	+30%
Switzerland	100%	0%	75%	75%	58%	0%	+17%
Spain	93%	29%	79%	79%	64%	0%	+14%
Denmark	100%	0%	100%	75%	63%	+25%	+13%
Austria	100%	0%	75%	75%	63%	0%	+13%
Germany	92%	5%	76%	58%	46%	+18%	+12%
Sweden	88%	19%	81%	75%	69%	+6%	+6%
Finland	75%	25%	100%	50%	50%	+50%	0%
Italy	80%	20%	100%	100%	100%	0%	0%
Norway	83%	17%	100%	67%	67%	+33%	0%
Netherlands	96%	6%	71%	57%	58%	+14%	−1%
Belgium	100%	5%	50%	36%	45%	+14%	−9%
Asia							
Korea	53%	92%	100%	74%	39%	+26%	+34%
China	50%	72%	97%	75%	61%	+22%	+14%
Taiwan	85%	100%	95%	75%	70%	+20%	+5%
Singapore	87%	67%	93%	53%	67%	+40%	−13%
Australasia							
Australia	67%	33%	67%	73%	60%	−7%	+13%
New Zealand	100%	50%	100%	33%	67%	+67%	−33%
Other							
Canada	93%	46%	82%	88%	53%	−6%	+35%
Israel	76%	41%	95%	72%	46%	23%	+26%
Comparative	85%	27%	82%	64%	73%	18%	−9%
South Africa	100%	0%	100%	67%	100%	+33%	−33%
Total	85%	32%	82%	67%	56%	+15%	+11%

Note. ICC = In-country contextualization. OCC = Out-country contextualization.

To further explore the findings, we ran binary logistic analyses to assess which variables predicted ICC and OCC (see Table 5). Variables were entered into the model and tested simultaneously (because of low *N* = 3, South Africa was not included in the models and for ease of interpretation most countries were grouped into regions). Only three models were significant at *p* < .05, while the others were marginally significant (*p* < .10). The results showed that studies in Asia and Israel were more likely than those in Europe to contextualize to their local contexts, while studies with quantitative designs were less likely to feature ICC. There also appeared to be less ICC over time. Studies from Canada and those employing mixed-methods and quantitative research designs were more likely to invoke the United States when

contextualizing their studies in the introduction or literature review. Studies in Israel were less likely to contextualize to a non-U.S. country compared with those in Europe. Not too surprisingly, comparative studies were more likely to contextualize to nonlocal/non-U.S. countries. Neither being based in the United States nor having U.S. qualifications predicted any type of ICC or OCC. Implications of the findings are discussed next.

Table 5. Logistic Regression Analyses Predicting Likelihood of ICC and OCC.

	C1 (ICC1)	C2 (ICC2)	D1 (OCC1)	D2 (OCC2)	D3 (OCC3)	D4 (OCC4)
	B	B	B	B	B	B
Model						
Chi-square	73.73***	46.34***	16.73#	16.43#	17.29#	20.89*
NR^2	.19	.12	.04	.04	.05	.06
Region/country						
Europe (b)						
Australasia	−.15	−.26	.08	−.02	−.21	−.07
Asia	1.08**	.95*	.23	−.24	−.14	.18
Canada	.36	.11	1.94*	−.04	.22	−.56
Israel	1.22**	.38	.31	−.80*	.55	−.25
Comparative	.25	.24	−.28	.63	.46	1.35***
Research approach						
Qualitative (b)						
Mixed	.07	−.19	1.14*	−.66	−.12	−.40
Quantitative	−1.22**	−1.21**	.64*	−.24	−.37	−.89**
First author						
U.S. based (Yes)	.19	.16	−.36	−.28	−.53	.23
U.S. qualifications (Yes)	.53	.63	−.08	.35	.24	.06
Time period						
Year (2000–2020)	−.06***	−.03	−.01	.01	−.02	−.01
N	509	509	509	509	509	509

Notes. Figures are unstandardized beta coefficients. (b) = baseline category.
*** = $p < .001$; ** = $p < .01$; * = $p < .05$; # = $p < .10$.

Discussion

The past decades have seen the field of communication become increasingly diverse and international. Yet, the increasing metrification of academia also means that career trajectories are tied to scholars' ability to publish in JCR-listed journals. This structural and hierarchical arrangement between the field and the publishing industry situates and sustains knowledge production and dissemination among a small network of scholars, organizations, and institutions based predominantly in the United States (de

Albuquerque et al., 2020), giving them the symbolic power to sustain the ideological hegemony of U.S. perspectives and shape what gets published in what journals with which methods, by whom, and how.

Previous research has already critiqued several aspects of communication scholarship: It privileged certain paradigms, theories, and methodologies over others (Walter et al., 2018), concentrated journal output among a few countries, especially the United States (Demeter, 2019a), and lacked gender diversity (Trepte & Loths, 2020). Our study takes a different perspective by examining how ideological hegemony can be sustained through academic writing and the politics of contextualization. This is important because several of the inequalities mentioned above can be addressed or attenuated only in a top-down manner by those in power. For-profit companies decide which journals are listed in the JCR, while editors shape the ethos and directions of their journals. Academic writing is unique to each individual. In the same way that making a conscious effort to cite more international scholars and women gives the individual researcher power to alleviate diversity imbalances in the field (Trepte & Loths, 2020), authors can also challenge the politics of contextualization by being more reflexive on which countries and regions they use to contextualize their studies while writing their manuscripts.

It is important to emphasize that even though this study examined countries that are generally considered to be in the "center" of knowledge production in communication scholarship, the unequal distribution of journal output shown in Table 2 clearly showed the structural inequalities and differences in academic capital even within this domain. In Demeter's (2019b) typology of world regions in the global social sciences, Western Europe is considered a decentralized and autonomous core region. Yet the findings here suggest that at least within the field of communication, Western Europe appears very much peripheral to the United States, at least from a *discursive* perspective.

Overall, our main findings showed both similarities and differences in how authors used ICC and OCC. Particularly, studies from Asia, Israel, Canada, South Africa, and several others in Europe more frequently introduced their own countries context in the early sections of the manuscript and then contextualized the results to their own countries in the discussion section. It could be as Chan (2019) noted, a preemptive strategy to address an imagined group of U.S. reviewers, or more practically to inform an international readership that may not be familiar with the country or region. The amount of ICC varies much more within Europe. For example, studies in The Netherlands and Germany, which comprise 151 articles in our sample, have a relatively low ICC of 71% and 76% respectively. This could be attributed to their many quantitative studies featuring experiments and surveys and their emphasis on generalizable knowledge. It is also noticeable that the bottom six countries in terms of journal output (i.e., Denmark, New Zealand, Norway, Italy, Finland, Finland, and South Africa) featured 100% ICC. This could be that ICC has become a standard metadiscourse used by authors in countries with less clout in the center to justify the relevance of their work.

The politics of contextualization were more readily observed with OCC. Especially, our findings showed that a substantial number of single-country studies contextualized their work to the United States in contrast to other countries. For studies in Canada (88%), this is perhaps understandable given its geographic proximity to the United States, but the number is still high in other regions, such as the United Kingdom (83%), Israel (72%), and three Asian countries (74%+ in for China, Korea, and Taiwan). A possible

reason is that the development of their academic cultures was influenced by U.S. mentorship and the education of early communications scholars in those countries (Wiedemann & Meyen, 2016). The presence of the United States is amplified when compared with the low OCC of other countries. As mentioned previously, there are various reasons for the bias: theoretical extensions and/or replications of U.S. studies to a local country context; authors citing prominent theories from U.S. scholars or reports from prominent U.S. organizations (e.g., Pew Research Center); the wider availability and hence citability of U.S. literature; or "suggestions" by U.S. reviewers. Regardless of the reasons, the United States pervades many non-U.S. studies, and the perpetuation of this practice sustains the ascendancy of the American academic culture in the center. When communication scholars from the semiperiphery and periphery peruse the state of affairs in the center, it will not be surprising at all if they, too, adopt the same discursive strategies in their own academic writing. That is, make sure to mention the local context, and by the way, do not forget to also talk about the United States.

So, what can be done? Recent debates suggest two possible directions that are not necessarily mutually exclusive. Cheruiyot and Ferrer-Conill (2020) made a case for decontextualization and encouraged researchers to emphasize more on theoretical development and discourse in place of foregrounding the geographical distinctiveness of their studies. The latter, they argued, serves only to preserve the inequality of knowledge production between influential minority world countries at the core and majority world countries at the periphery. Thus, geographical contextualization should have an assistive background role that supports theoretical explication and analysis. For this to happen, however, require sympathetic editors and reviewers. From a different perspective, scholars pointed out that any kind of research is "always context/historic dependent" (Rojas & Valenzuela, 2019, p. 652), so having a contextual mindset is useful for researchers to uncover the contingent conditions as to why certain relationships among variables occur in some countries but not in others.

In terms of academic writing, rather than saying that contextualization to the United States is "bad" for the field, it is more fruitful to encourage authors to read, think, and write with a more global mindset when setting up their studies and discussing its implications after reporting the findings. For example, authors of studies in East Asia (e.g., China, Korea, Taiwan) could contextualize their studies and findings to other countries in the region, such as in Southeast Asia, that are known to be underrepresented in the literature. By making this effort, authors are not only expanding the scope and contribution of their own studies from a comparative perspective, but they also help alleviate the inequalities of global visibility in communication scholarship, which is the case for works from Latin America (Ganter & Ortega, 2019) and the Global South more generally (Boczkowski & Mitchelstein, 2019). Such an endeavor would be even more effective if supported and encouraged by journal editors. Also required are reviewers who do not arbitrarily impose a U.S.-centric lens on non-U.S. studies. Sensitizing editors, reviewers, and authors about the politics of contextualization as well as the benefits of more holistic contextualization beyond the United States would contribute to these lofty goals.

Limitations and Further Research

It is necessary to acknowledge several limitations of this study. First, our sample comprised one specific segment of JCR generalist communication journals that are affiliated with U.S. academic

associations, except for CR. So, the findings cannot be generalized to all JCR journals in the communication category. Indeed, we purposefully engaged in the politics of contextualization because these journals and their affiliated U.S.-centric academic associations, more so than others, arguably constitute the most influential cog of the U.S. academic culture, where ideological hegemony shapes the writing of non-U.S. studies. Therefore, our sample comprised almost all minority world countries (e.g., the United Kingdom, Israel, and so on) in our analysis because they typically comprise the largest proportion of journal articles in JCR journals (Trepte & Loths, 2020). Future studies should address how scholars in semiperiphery and periphery countries contextualize their academic writing. This may require creative ways to select suitable study samples given the likely underrepresentation of their works in the major citation indices.

In this study, we coded only out-country contextualization in terms of whether the country or region was explicitly named in certain parts of the manuscript. An extension to this would be to count the relative citations of each article to U.S. and non-U.S. studies, which could reveal further potential imbalances in the dynamics of research visibility and invisibility in different parts of the world. Moreover, because of the complexity of the data and focus of the study, we did not examine the distinctions between single- and multiple-author studies or distinctions between the different kinds of comparative studies. These can be the subjects of future research. And finally, we found the online search functions of the respective journal pages to be less than reliable as they often returned many articles that did not fulfill our search criteria. Although we carefully filtered these out from our final study sample, it is possible that some articles that fulfilled our search criteria were not returned in the search results. It is also possible that relevant articles were not included in the sample because our search criteria were limited to the title and the abstract. Under the politics of contextualization, some authors might have made their local context "invisible" in the title and abstract. It is unclear whether this is a substantive number, so our conclusions should be read with this possible bias in mind.

To conclude, the goals of greater diversity and equality in the field of communication are noble and worthwhile, but in many respects, they are not compatible with the logics of academic publishing and the JCR where those with the relevant structural advantages and resources reap much of the rewards. In this study, we showed how the politics of contextualization in academic writing sustain the omnipresence of the United States in non-U.S. studies. By engaging in greater reflexivity in our writing and elevating the presence of underrepresented countries and regions, it is possible for each of us to make a small contribution to rebalance the inequality of international representation in our discipline.

References

Arendt, F. (2013). News stereotypes, time, and fading priming effects. *Journalism & Mass Communication Quarterly, 90*(2), 347–362. doi:10.1177/1077699013482907

Bennett, K. (2014). *The semiperiphery of academic writing: Discourses, communities and practices*. London, UK: Palgrave Macmillan.

Boczkowski, P. J., & Mitchelstein, E. (2019). The politics of contextualization in the contextualization of
        political communication research. *Political Communication, 36*(4), 676–679.
        doi:10.1080/10584609.2019.1670903

Bourdieu, P. (1988). *Homo academicus* (P. Collier, Trans.). Cambridge, UK: Polity Press.

Burrows, R. (2012). Living with the H-Index? Metric assemblages in the contemporary academy. *The
        Sociological Review, 60*(2), 355–372. doi:10.1111/j.1467-954X.2012.02077.x

Canagarajah, A. S. (2002). *A geopolitics of academic writing*. Pittsburgh, PA: University of
        Pittsburgh Press.

Chan, M. (2019). The practicalities of a contextual approach in comparative political communication
        research. *Political Communication, 36*(4), 666–670. doi:10.1080/10584609.2019.1670901

Chang, L., Jacobson, T. L., & Zhang, W. (2013). A communicative action approach to evaluating citizen
        support for a government's smoking policies. *Journal of Communication, 63*(6), 1153–1174.
        doi:10.1111/jcom.12065

Cheruiyot, D., & Ferrer-Conill, R. (2020). Pathway outta pigeonhole? De-contextualizing majority world
        countries. *Media, Culture & Society, 43*(1), 189–197. doi:10.1177/0163443720960907

Chou, C. P., & Chan, C.-F. (2017). Governance and academic culture in higher education: Under the
        influence of the SSCI Syndrome. *Journal of International and Comparative Education, 6*(2), 63–
        75. doi:10.14425/jice.2017.6.2.63

de Albuquerque, A., de Oliveira, T. M., dos Santos Junior, M. A., & de Albuquerque, S. O. F. (2020).
        Structural limits to the de-westernization of the communication field: The editorial board in
        Clarivate's JCR system. *Communication, Culture and Critique, 13*(2), 185–203.
        doi:10.1093/ccc/tcaa015

Demeter, M. (2019a). The winner takes it all: International inequality in communication and media studies
        today. *Journalism & Mass Communication Quarterly, 96*(1), 37–59.
        doi:10.1177/1077699018792270

Demeter, M. (2019b). The world-systemic dynamics of knowledge production: The distribution of
        transnational academic capital in the social sciences. *Journal of World-Systems Research, 25*(1),
        111–144. doi:10.5195/jwsr.2019.88

Demeter, M. (2021). Taking off camouflage identities: Why peripheral scholars strive to look like their
        Western peers in order to being recognized? *Journal of Multicultural Discourses, 16*(1), 53–68.
        doi:10.1080/17447143.2021.1912054

Eggermont, S. (2004). Television viewing, perceived similarity, and adolescents' expectations of a romantic partner. *Journal of Broadcasting & Electronic Media, 48*(2), 244–265. doi:10.1207/s15506878jobem4802_5

Ergin, M., & Alkan, A. (2019). Academic neo-colonialism in writing practices: Geographic markers in three journals from Japan, Turkey and the US. *Geoforum, 104*, 259–266. doi:10.1016/j.geoforum.2019.05.008

Ganter, S. A., & Ortega, F. (2019). The invisibility of Latin American scholarship in European media and communication studies: Challenges and opportunities of de-westernization and academic cosmopolitanism. *International Journal of Communication, 13*, 68–91.

Goyanes, M., & Demeter, M. (2020). How the geographic diversity of editorial boards affects what is published in JCR-ranked communication journals. *Journalism & Mass Communication Quarterly, 97*(4), 1123–1148. doi:10.1177/1077699020904169

Hassid, J. (2012). Safety valve or pressure cooker? Blogs in chinese political life. *Journal of Communication, 62*(2), 212–230. doi:10.1111/j.1460-2466.2012.01634.x

Hyland, K. (2018). *Metadiscourse: Exploring interaction in writing*. London, UK: Bloomsbury Academic.

Kim, J. (2011). The birth of academic subalterns. *Journal of Studies in International Education, 16*(5), 455–476. doi:10.1177/1028315311407510

Kim, Y.-C., Shin, E., Cho, A., Jung, E., Shon, K., & Shim, H. (2019). SNS dependency and community engagement in urban neighborhoods: The moderating role of integrated connectedness to a community storytelling network. *Communication Research, 46*(1), 7–32. doi:10.1177/0093650215588786

Lauf, E. (2005). National diversity of major international journals in the field of communication. *Journal of Communication, 55*(1), 139–151. doi:10.1111/j.1460-2466.2005.tb02663.x

Lecheler, S., Bos, L., & Vliegenthart, R. (2015). The mediating role of emotions. News framing effects on opinions about immigration. *Journalism & Mass Communication Quarterly, 92*(4), 812–838. doi:10.1177/1077699015596338

Li, S. S. (2019). Competing for the audience's time: Comparing science news with health news and political news. *Journal of Broadcasting & Electronic Media, 63*(4), 635–655. doi:10.1080/08838151.2019.1689009

Lillis, T., & Curry, M. J. (2010). *Academic writing in global context: The politics and practices of publishing in English*. Abingdon, NY: Routledge.

Litt, E. (2012). Knock, knock. Who's there? The imagined audience. *Journal of Broadcasting & Electronic Media, 56*(3), 330–345. doi:10.1080/08838151.2012.705195

Matthes, J., & Schmuck, D. (2017). The effects of anti-immigrant right-wing populist ads on implicit and explicit attitudes: A moderated mediation model. *Communication Research, 44*(4), 556–581. doi:10.1177/0093650215577859

Meriläinen, S., Tienari, J., Thomas, R., & Davies, A. (2008). Hegemonic academic practices: Experiences of publishing from the periphery. *Organization, 15*(4), 584–597. doi:10.1177/1350508408091008

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine, 6*(7), 1–6. doi.org/10.1371/journal.pmed.1000097

Patriotta, G. (2017). Crafting papers for publication: Novelty and convention in academic writing. *Journal of Management Studies, 54*(5), 747–759. doi:10.1111/joms.12280

Peng, T.-Q., & Zhu, J. J. H. (2012). Where you publish matters most: A multilevel analysis of factors affecting citations of Internet studies. *Journal of the American Society for Information Science and Technology, 63*(9), 1789–1803. doi:10.1002/asi.22649

Riffe, D., Lacy, S., Watson, B., & Fico, F. G. (2019). *Analyzing media messages: Using quantitative content analysis in research* (4th ed.). New York, NY: Routledge.

Rojas, H., & Valenzuela, S. (2019). A call to contextualize public opinion-based research in political communication. *Political Communication, 36*(4), 652–659. doi:10.1080/10584609.2019.1670897

Swales, J. M. (2016). Reflections on the concept of discourse community. *ASp, 69*, 7–19. doi:10.4000/asp.4774

Trepte, S., & Loths, L. (2020). National and gender diversity in communication: A content analysis of six journals between 2006 and 2016. *Annals of the International Communication Association, 44*(4), 289–311. doi:10.1080/23808985.2020.1804434

Tsfati, Y., Tukachinsky, R., & Peri, Y. (2009). Exposure to news, political comedy, and entertainment talk shows: Concern about security and political mistrust. *International Journal of Public Opinion Research, 21*(4), 399–423. doi:10.1093/ijpor/edp015

Waisbord, S. (2019). *Communication: A post-discipline*. Cambridge, UK: Polity Press.

Waisbord, S., & Mellado, C. (2014). De-westernizing communication studies: A reassessment. *Communication Theory, 24*(4), 361–372. doi:10.1111/comt.12044

Wallerstein, I. M. (2004). *World-systems analysis: An introduction*. Durham, NC: Duke University Press.

Walter, N., Cody, M. J., & Ball-Rokeach, S. J. (2018). The ebb and flow of communication research: Seven decades of publication trends and research priorities. *Journal of Communication, 68*(2), 424–440. doi:10.1093/joc/jqx015

Wiedemann, T., & Meyen, M. (2016). Internationalization through Americanization: the expansion of the International Communication Association's leadership to the world. *International Journal of Communication, 10*, 1489–1509.

Appendix A

Appendix Table 1. Percentage of Articles by Country and Other Factors That Include ICC and OCC.

	N	C1 (ICC1)	C2 (ICC2)	D1 (OCC1)	D2 (OCC2)	D3 (OCC3)	D4 (OCC4)
Europe							
Austria	8	38%	75%	50%	50%	50%	13%
Belgium	22	23%	45%	27%	32%	14%	14%
Denmark	8	75%	75%	63%	63%	50%	38%
Finland	4	75%	100%	25%	25%	25%	50%
Germany	74	61%	62%	55%	39%	16%	14%
Italy	5	80%	60%	100%	100%	60%	60%
Netherlands	77	51%	57%	52%	53%	19%	23%
Norway	6	83%	100%	50%	50%	33%	33%
South Africa	3	100%	100%	67%	100%	67%	33%
Spain	14	71%	64%	71%	64%	21%	29%
Sweden	16	38%	75%	63%	56%	31%	38%
Switzerland	12	50%	75%	75%	50%	25%	8%
United Kingdom	23	57%	52%	78%	43%	22%	17%
Asia							
China	36	94%	97%	64%	61%	33%	25%
Korea	38	74%	87%	63%	34%	29%	21%
Singapore	15	87%	73%	53%	67%	13%	27%
Taiwan	20	80%	80%	70%	55%	25%	30%
Australasia							
Australia	15	60%	60%	67%	47%	33%	33%
New Zealand	6	67%	83%	33%	67%	0%	0%
Other							
Israel	57	86%	79%	61%	33%	39%	21%
Canada	17	76%	76%	88%	53%	35%	18%
Comparative	33	61%	70%	48%	67%	33%	52%
Research approach							
Quantitative	432	62%	68%	59%	49%	25%	22%
Qualitative	50	86%	88%	50%	54%	38%	38%
Mixed	27	85%	85%	70%	37%	30%	30%
First author institution							
Non-U.S.	433	76%	82%	66%	59%	38%	24%
U.S. based	76	64%	69%	58%	47%	25%	24%
First author education							
Non U.S.	344	58%	64%	58%	47%	24%	24%
United States	165	81%	84%	62%	53%	33%	25%
Time period							

2000–2005	73	85%	77%	67%	51%	33%	27%
2006–2010	96	69%	74%	56%	45%	32%	23%
2011–2015	132	59%	75%	58%	47%	24%	22%
2016–2020	208	62%	66%	58%	51%	24%	25%