# Andrews University Digital Commons @ Andrews University

## **Faculty Publications**

12-24-2022

## **Global South Research Collaboration: A Comparative Perspective**

Abdoulaye Gueye University of Ottawa, abdoulaye.gueye@uottawa.ca

Edward Choi Yonsei University, edward.choi@yonsei.ac.kr

Carolina Guzmán-Valenzuela University of Tarapacá

Gustavo Gregorutti Andrews University, ggregoru@andrews.edu

Follow this and additional works at: https://digitalcommons.andrews.edu/pubs

Part of the Educational Leadership Commons

### **Recommended Citation**

Gueye, Abdoulaye; Choi, Edward; Guzmán-Valenzuela, Carolina; and Gregorutti, Gustavo, "Global South Research Collaboration: A Comparative Perspective" (2022). *Faculty Publications*. 4690. https://digitalcommons.andrews.edu/pubs/4690

This Article is brought to you for free and open access by Digital Commons @ Andrews University. It has been accepted for inclusion in Faculty Publications by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact repository@andrews.edu.

# Global South Research Collaboration: A Comparative Perspective

Abdoulaye Gueye, Edward Choi, Carolina Guzmán-Valenzuela, Gustavo Gregorutti

#### Abstract

Research collaboration has become a major research topic in the social sciences. While this literature has mainly focused on collaborative dynamics in the Global North, more recent studies have examined these dynamics within the Global South. This article expands the scope of analysis by comparing the level of co-publications by Global South-based scholars with Global South-based colleagues and that between academics at Global South institutions and researchers in Global North universities. It shows that academic partnerships within the Global South are less common than instances of collaboration between the Global South and Global North. The relatively weak Global South collaborative dynamics are at odds with most Global South leaders' encouragement of partnerships between scholars within the South. The article also demonstrates that collaboration seems to be largely informed by linguistic commonality and historical (colonial) relations of dependency. Contrary to expectations that US-based academics would be the primary partners for Global South academics due to US hegemony, the latter are more likely to collaborate with colleagues in European countries, more specifically countries that colonised their countries.

#### Résumé

La recherche collaborative est devenue un sujet de recherche majeur en sciences sociales. Alors que cette littérature s'est principalement concentrée sur les dynamiques collaboratives dans les pays du Nord, des études plus récentes ont examiné ces dynamiques dans les pays du Sud. Cet article élargit la portée de l'analyse en comparant le niveau de

**ABOUT THE AUTHORS:** ABDOULAYE GUEYE, University of Ottawa, Canada, email: Abdoulaye.Gueye@uottawa.ca; Edward Choi, Yonsei University, South Korea; CAROLINA GUZMÁN, University of Tarapacá, Chile and GUSTAVO GREGORUTTI, Andrews University, USA.

copublications par des universitaires du Sud global avec des collègues du Sud global et celui entre les universitaires des institutions du Sud global et les chercheurs des universités du Nord global. Il montre que les partenariats universitaires au sein du Sud global sont moins courants que les exemples de collaboration entre le Sud global et le Nord global. La dynamique de collaboration relativement faible du Sud global est en contradiction avec l'encouragement de la plupart des dirigeants du Sud global aux partenariats entre universitaires du Sud. L'article démontre également que la collaboration semble largement influencée par les points communs linguistiques et les relations historiques (coloniales) de dépendance. Contrairement aux attentes selon lesquelles les universitaires basés aux États-Unis seraient les principaux partenaires des universitaires du Sud en raison de l'hégémonie américaine, ces derniers sont plus susceptibles de collaborer avec des collègues des pays européens, plus précisément des pays qui ont colonisé leur pays.

#### Introduction

There is a growing body of literature on research collaboration through co-publication between scholars within the Global South. The broad consensus is that authors are increasingly co-producing research with peers rather than publishing alone. Although this trend is more visible in Europe and the United States (US), it is apparent in many regions of the Global South (Moody, 2004; Owusu-Nimo, 2017; Pohl and Lane, 2018). While the literature on academic collaboration previously focused on science, technology, engineering, and mathematics (STEM) subjects, coverage has recently expanded to include the social sciences and humanities (Babchuk, Keith and Peters, 1999; Gingras, 2016).

Our study highlights research on these trends in Latin America, East Asia, and sub-Saharan Africa. Previous studies tended to focus on a single region in the Global South (Arunachalam and Jinandra Doss, 2000; Gueye, 2018; Gueye et al., 2019; Guzmán-Valenzuela and Gómez, 2019; Hammond, 2019; Pineda, Gregorutti, and Streitwieser, 2020). While they make unique contributions, they do not reflect the historical and economic complexity of the Global South which spans countries with divergent historical narratives, different official languages and economies, and scientific undertakings that reflect different stages of development.

This article addresses three key questions, namely: (1) What trends are evident in academic collaboration in the Global South? (2) Are scholars in

formerly colonised countries inclined to collaborate with scholars based in the Global North? (3) Have efforts to promote South-South academic collaboration resulted in a high level of co-authorship between researchers based in different regions?

#### Collaboration... a Polysemic Notion that is Difficult to Assess

As noted by Mullins (1970), Babchuk, Keith and Peters (1999), and more recently Kotiranta et al. (2020), academic collaboration takes varied forms, including co-authorship, funding ventures, data co-collection, and grant co-application. This article focuses on co-authorship and joins the long list of studies that use bibliometric tools such as SCI, Scopus, and Web of Science to analyse academic collaboration. We chose this approach because it is relatively easier to access, track, record, and verify than other forms of collaboration (Katz and Martin, 1997; Gonzáles-Teruel et al., 2015).

Much of the research on academic collaboration has been concerned with the rationale that drives it. Numerous studies have identified material gain as a major motivation (Guzmán-Valenzuela, 2019). This takes the form of the reputational advantages of differentiated capital such as knowledge, social networks, skills, and resources that a single individual would find difficult to access (Goffman and Warren, 1980; Pravdic and Oluic-Vukovic, 1986; Kyvik and Teigen, 1996; Thorsteinsdottir, 2000; Beaver, 2001; Bozeman and Corley, 2004; Tanga and Shapira, 2011; Bozeman, Fay and Slade, 2013; Woldegiyorgis, Proctor and De Wit, 2018; Eduan and Yuangun, 2019). However, some scholars challenge the link between collaboration and material gain. Duquel et al.'s (2005) analysis of data from three locations on two continents (Kenya, Ghana, and Kerala, India) demonstrated that Kenya has the lowest level of research productivity even though the number of academic collaborations is highest among the three countries, while Kerala claims a high research output despite a low level of academic collaboration.

Another focus of research on collaboration is the factors or criteria that render it possible, including individual characteristics. For example, Wang et al. (2009) posit that the level of social capital determines the likelihood of collaboration. Researchers with strong forms of social capital (e.g., working at a prestigious university, having a high-quality degree) are more likely to receive invitations to or initiate collaboration. Wang et al. also highlight language proficiency as an example of social capital that expands opportunities for collaboration. However, Lee and Bozeman (2005) contend that high levels of research productivity fuel collaboration. They attribute the frequency of academic collaborations to reputation in terms of the quality of an individual's research output.

Collaboration is also contingent on structural factors. Powell (1956) was among the first scholars to highlight the increasing complexity of scientific disciplines as driving academic collaboration. These fields of study are becoming increasingly specialised, differentiated into sub-fields and disciplines, and interconnected. Collaboration thus becomes a crucial means to research the totality of the aspects connected to a single area of study. Scholars from different specialties pool their scientific skills to research a specific subject and co-construct knowledge. Luukonnen et al. (1992) also note that collaboration is dependent on the structure of each discipline. For example, the experimental sciences are more likely to encourage collaboration than non-experimental disciplines. Omenn (2006) asserts that collaboration reduces redundancy as well as duplication in research as research questions become more complex and call for command of several knowledge domains. Collaboration encourages researchers to make unique contributions to the research process.

The literature also highlights the ethical dimensions of collaboration. For example, Obamba and Mwema (2009) note that transnational organisations that promote collaboration between the Global South and North frame such as an act of solidarity with developing countries that have historically been excluded from global production and exchange of knowledge. However, several challenges hamper such partnerships. Universities in the Global South generally suffer from a shortage of resources and, in the absence of adequate funding, they might struggle to sustain partnerships and remain on an equal footing with their northern counterparts. Indeed, many scholars (e.g., Canto and Hannah, 2001; Maselli et al., 2006; Gutierrez, 2008; Obamba and Mwema, 2009) assert that North-South partnerships are inherently one-sided by design and typically favour the needs and interests of the North.

Governments and other organisations have adopted various strategies to address these challenges. The French government has used its network of Institute de recherche pour le développement [Research Institute for Development (IRD)] offices in Africa, Latin America, and Asia to tie funding to the participation of local scholars who might otherwise not have the level of resources and other forms of capital (e.g., social networks) required to join international collaborative academic initiatives. The European Union launched a programme aimed at funding research in Africa in the 1990s, and the Carnegie Corporation based in New York offers research grants to bridge the research gap between the North and South.

Ethical considerations have also prompted African scholars based in the Global North to collaborate with scholars in their home countries where local resources supported their education and contributed to their success (Gueye, 2018; Gueye, Okyerefo, Diedhiou, and Adamnesh, 2019). Collaboration with scholars based in Africa is thus regarded by the African diaspora as a moral duty.

Finally, distance, measured in varied ways, can encourage or discourage collaboration between organisations. Abramo et al. (2009) note that collaboration between Italian universities and Italian enterprises "decreases with increasing [physical] distance" between them. Kabo et al. (2014) consider another aspect of distance and examine the extent to which architectural design impedes or encourages collaboration within the same research organisation. Revising the concept of "functional proximity", they invite us to distinguish between what is referred to as obstructive distance and open distance, rather than understanding distance only in metric terms.

Obstructive distance refers to the isolation of people who work in separate spaces. People may work nearby, but they are distant from one another because they are separated by physical barriers such as walls and doors. Open distance spaces connect people by omitting physical barriers that obstruct the visibility of others. Kabo et al. argue that an open architectural layout encourages casual contact and translates to a "functional proximity", which is conducive to the initiation and success of collaboration.

While these understandings of distance are important to consider in a discussion on academic collaboration, we adopt a more inclusive definition of distance along the lines of Zitt, Bassecoulard, and Okubo (2000) who introduce the notion of index affinity and frame distance in physical, cultural, historical, and ideological terms. Thus, a country may be far from or in proximity to another depending on a myriad of factors such as physical distance, but also historical and cultural ties, or lack thereof. Therefore, we understand distance as more of a cultural concept that goes beyond but does not exclude physical measurement. We conceive of it as the degree of ties between countries or regions. A shared language, history (using colonisation or ersatz thereof such as occupation), border, and ideology are conducive to the development of affinity between two countries. Such commonalities may even explain the proximity of two countries even when they are physically far apart. In this way, shared characteristics may be a stronger predictor of academic collaboration than physical distance.

#### Method

To answer the research questions, we used bibliometric data on collaborations among, within, and involving the three sub-continents of Latin America, sub-Saharan Africa, and East Asia. For each sub-continent, we gathered data from two sources, a local database, and Scopus. The local databases are the Scientific Electronic Library Online (SciELO, a popular journal index in Latin America, especially in the social sciences and humanities), the Korean Citation Index (KCI) (For a brief presentation on SciELO and KCI, see Alexander Maz-Machado, Bibiani Munez-Nungo, David Gutiérrez-Rubio and Carmen Leon-Mantero (2020)) and Codesria, respectively, for Latin America, Korea, and sub-Saharan Africa. Codesria is a Pan-African research institution founded in 1973 whose mission is to revitalise social science and humanities research in Africa and multiply the creation of publishing outlets to showcase this research. It is also a strong advocate for Africa/Africa and South/South collaboration through workshops, research grants, and the creation of journals.

We applied several inclusion/exclusion criteria during data collection. The period covered spans 2013 to 2018. Only peer-reviewed journals in the social sciences were considered. Readers should be aware of the risk of duplication in our data compilation. Indeed, some articles could be counted twice or more when they are co-authored by scholars based on more than two sub-continents. As a result, the article will appear as co-authored, for instance, by Africa-based and Latin-America-based academics, but also by Africa-based and Europe-based academics.

A brief methodological note on the concept of the Global South and Global North is warranted. The concepts of North and South have become

contentious in the social sciences (Klob, 2017). A traditional conception of the South is based on geography. Countries within Europe and North America constitute the North, and those outside are referred to as the South. However, this traditional view is increasingly challenged (Rigg, 2015). For some scholars, the South is less defined by geography than by a country's position in the hierarchy of epistemological domination/ subordination. According to this view, the world is divided into periphery and core countries with the latter having the highest academic reputation. This framework is supported by Santos (2009; 2016; 2018) as well as Santos, Nunes and Meneses (2008) and Santos and Meneses (2019) who challenge the traditional understanding of the Global South/North and invite us to consider, for example, Portugal, Spain or Italy as countries of the Global South even though they were colonial powers in Africa, Asia, and Latin America. Although these countries were preeminent several centuries ago, they regard them as having an academically inferior position in the hierarchy of epistemological domination/subordination.

While emergent definitional understandings of the Global North/ South are salient to gain deeper insights into the power dynamics that define cross-national academic collaborations, we retain a concept wherein the notions of geography, economic emergence, and inclusion in worldwide-decision making (in forums such as the G7 summit) together define the South, notwithstanding its limitations. Although Portugal, Spain, and Italy have a lower status than most Western European countries, they participate in the colonial enterprise as former colonial empires and reap the benefits of being part of Europe. Indeed, the euphemism of "colonial complicity" advanced by Keskinen et al. (2009) or the characterisation of "colonialism without colonies" proposed by Osterhammel (2010) to describe some European countries, including the Scandinavian countries, does not entirely grasp the identity of these three countries that were colonial powers and are part of a dominant European Union. Instead, a reductive and classical conception of the South - with an emphasis on geographical location, subordinated historical position in global geopolitics, and emerging economies (Connell, 2007) - is deployed here through a synecdochic conception of this category as encompassing Latin America, sub-Saharan Africa, and East Asia.

The inclusion of Korea in the Global South also warrants explanation, due to its higher economic standing compared to Latin American and sub-

Saharan African countries. Its inclusion is mainly justified by its historical trajectory and in particular its history as a colonised and occupied country. Korea was colonised by Japan in the 19<sup>th</sup> century and occupied by a US military government following Japanese rule. While the cultural and historical heritage that Korea shares with Japan warrants brief discussion in this article on patterns of academic collaboration, we focus our discussion on the cultural affinity between Korea and the US, and its impact on academic collaboration. Under US control and with financial assistance, Korea has undergone profound cultural restructuring, particularly in the academic sphere. The US academic culture has pervaded Korea's higher education system, resulting in strong ties between the countries' academic systems that remain evident today.

While all Latin American and sub-Saharan African countries are considered here, Korea is the only East Asian country included. This is certainly a limitation, which is in part explained by our lack of resources and time. However, the focus on Korea makes sense. Firstly, as our findings confirm, Korea is a suitable country to test our major argument on historical proximity's contribution to international collaboration considering the high level of co-publications by Korea-based academics. Secondly, Korea meets our criterion for inclusion as a Global South country because of its history of subjugation by Japan, not to mention its historical occupation by the US military government.

#### Diversity and Inequality in the Global South's Collaborative Dynamics

The analysis of research production and collaboration in Latin American and African countries, and Korea from 2013 to 2018 reveals a diverse pattern of co-publications between the three sub-continents. Our South America-based scholars report 98 705 co-authored publications (two or more authors) while the total number of co-publications reported by Africa- and Korea-based academics is 18 304 and 7 136, respectively.

When considering the combined data (i.e., the local database and Scopus), the distribution of co-publications reveals two key characteristics. On the one hand, across all regions, we observe a higher representation of co-authored articles between scholars based in the same country or region than articles co-authored between local and foreign scholars. In the case of sub-Saharan Africa, co-authored articles by local scholars account for 52% of the total number of academic collaborations. In Korea and Latin America,

this proportion is roughly 62% and 87%, respectively. These numbers demonstrate that the region or country is still the primary arena of academic collaboration in the case of most Global South academic communities. We cautiously assume that Korea is representative of many if not most countries in Asia in terms of dominant patterns of academic collaboration.

The above patterns of data may be better understood through the lens of Wang et al.'s (2007) distinction between "collaboration cosmopolitanism" and "collaboration localism". Inspired by Gouldner's (1957) article on social roles, Wang et al. explain that "collaboration cosmopolitanism" refers to the inclination to build research partnerships with scholars outside of one's immediate environment, those located abroad. "Collaboration localism," describes the inclination to collaborate with another researcher located in the immediate environment. The authors further explain that "collaboration cosmopolitanism" is more common among scholars with more potent forms of social capital. They find that foreign-born students manifest a lower level of "collaboration cosmopolitanism" than their native-born peers, suggesting that personal ties outside one's comfort zone, which a relatively high level of acquisition of a new language translates to, is part of social capital.

Our understanding is that many scholars in Latin America, sub-Saharan Africa, and East Asia may not possess the mainstream social capital required or desired to facilitate research collaborations with their foreign counterparts. They have a collaboration localism orientation to research. Said differently, there is a sociocultural discontinuity (i.e., a disconnect between groups based on the forms of social capital they possess) or the absence of a collective social identity between scholars of these three regions and academics based in the Global North.

An example of sociocultural discontinuity can be found in Canto and Hannah's (2001) study on a research project linking Brazil and the UK. The authors show that while "the aggregate number of publications achieved by both groups appear to have increased significantly as a result of this link, none were co-authored by members of both groups" (Canto and Hannah, 2001, p. 36). They explain this finding by pointing to a linguistic divide: "The British participants were unable to speak Portuguese, and this prevented them from contributing directly to the Brazilian postgraduate course linked to the project" (ibid).

Wang et al.'s (2007) theoretical framework can also be applied to understand the research patterns of Global North scholars. Academics in the North also have a collaboration localism orientation; however, the degree to which each sub-continent exhibits such orientation is the point of interrogation. Indeed, Natanson and Gingras (2009:631) show that "Western social scientists tend to collaborate primarily with their national or regional counterparts who work on the same topic," and perhaps possess the same forms of social capital. Other scholars have noted that US academics are attracted to other US academics because of America's hegemonic stature. The rate of collaboration between US-based scholars and peers located in the US is nearly twice that between US and non-US-based researchers.

The pattern of collaboration in the Global South provisionally confirms that physical distance is as or more important than historical and cultural distance as a factor in the feasibility of collaboration. Engaging in research with colleagues in the same country or on the same sub-continent indeed serves as evidence of the connection between distance and collaboration (Zitt, Bassecoulard and Okubo, 2000; Abramo et al., 2009). Our data show that as distance decreases, the likelihood of academic collaboration increases, and this may be ascribed to the possible connection between distance and social capital. As distance decreases, there may be a greater likelihood that two countries share the same forms of social capital, especially in terms of language fluency. However, Guzmán-Valenzuela et al. (2022) show that in Latin America the proportion of co-publications is higher among scholars within the same country. At the same time, they note that the level of collaboration between scholars based in two or more different Latin American countries is lower than that between Latin-America-based scholars and colleagues outside this sub-continent. In a sense, their study offers evidence of physical proximity's contribution to collaboration, as it refutes this contribution. The study was based on data culled from the core collection of Web of Science, in addition to SciELO, and covers the period 2002-2018, whereas our research is based on data collected from Scopus. Besides the use of different databases, the different findings could be explained by the conceptual delimitation of the social sciences, which in certain databanks would include disciplines that others would exclude.

Furthermore, distance when understood as historical and cultural ties explains the pattern of collaborations. Latin America, sub-Saharan Africa, and East Asia largely consist of nations that experienced subordination under colonial powers. In the former two sub-continents, the limited linguistic diversity – with Spanish and Portuguese as the two official languages in Latin America, and French, English, and Portuguese predominant in sub-Saharan Africa – is due to their colonisation by Spain, and Portugal, France, and Britain. This colonial experience, with shared language as an outcome, may explain the cultural affinity developed among scholars based in the same sub-continent.

An accurate calculation of the extent to which linguistic affinity determines collaboration would probably require further data. However, our preliminary work suggests a correlation between cultural proximity and collaboration.

#### America's hegemony versus Europe's colonial kinship

Comparing the three regions reveals a certain dualism, specifically for the pattern of academic collaborations with foreign counterparts. In sub-Saharan Africa, co-authorship with European scholars is the second most common form of collaboration (5.7%) following intraregional collaborations, while Latin American academics' collaboration with their European counterparts, accounts for 18%. Collaboration with the US is slightly lower, amounting to 7.5% of the total number of coauthored papers by Latin American scholars, and roughly 5.5% of those by sub-Saharan African researchers. In the case of Korea, the pattern of collaboration is different. Whereas the share of collaboration with Europe is approximately 5.4%, the proportion of collaboration with the US is significantly higher at 34.7%.

Comparison of these differential proportions reinforces the relevance of the theory of cultural distance. The differential patterns of academic international collaborations (Latin America and sub-Saharan Africa have more academic collaborations with Europe than the US, while the opposite is true for Korea) can be ascribed to cultural affinity/matching versus cultural dissimilarity/discontinuity. Latin America and sub-Saharan Africa share a cultural identity with Europe in large part because of their colonial ties. Zitt, Bassecoulard and Okubo (2000) provide evidence that supports this view. Their comparison of the collaboration dynamics of 30 major scientific countries notes that French researchers were less drawn to Japanese colleagues for collaboration than they were to their peers in former French colonies in Africa. This is the case notwithstanding the fact that Japan and France have a similar academic reputation. Arguably, cultural affinity, a product of colonialism passed down by diverse political and cultural strategies, explains the prevalence of former Francophone colonies over Japan in France's network of collaboration.

A more specific example of how colonial ties inform collaboration is provided by Guzmán-Valenzuela et al. (2022) who found that collaboration among social scientists in Latin America and Spain is at especially high levels and has grown over time. A common language (Spanish) is thus important in this case. Latin American scholars who are eager to enhance their international reputation are likely to seek publication partners among European colleagues who speak the same language (Guzmán-Valenzuela et al., 2022).

Colonial ties, represented in ways besides language, may also explain the disproportionate share of collaborations between Europe and the two regions of Latin America and sub-Saharan Africa. For example, Europeanfunded and -led research networks have been established in former European colonies to support local research and encourage collaboration between Southern scholars and European colleagues. The French Institut de Recherche pour le Développement (IRD) is one such example. Formerly known as the Office de Recherche Scientifique et Technique d'outre mer (ORSTOM), IRD is a colonial-era organisation with dozens of offices mainly scattered in France's former colonies (i.e., Africa and Latin America). It disburses funding on condition that local scholars participate in research projects (Obamba, 2009). It is our understanding that organisations like the IRD and their presence in former colonies drive the high number of academic collaborations between European countries and former colonies.

In Korea's case, the disproportionately higher share of collaborations with the US may also be explained by cultural distance/affinity (as well as dependency theory). Korea's cultural affinity to the US is based on a long history of alliance/assistance, especially in the area of education.

The US' involvement in Korea grew after the Second World War, beginning with the temporary installment of the United States Army Military Government in Korea (USAMGIK). The USAMGIK immediately effected a plan of nation-building with a focus on uprooting Japanese imperialist elements from the country, not to mention containing the threat of communist ideology in the eastern part of Asia (Kyu Lee, 2006). As Kyu Lee points out, it "brought about a marked improvement in contemporary Korean higher education, by introducing American educational philosophy, administration, and culture". The US supplied Korea with professors who would take charge of restructuring its higher education system.

While US educational ideologies were entering the nation, another phenomenon that is related to the discussion at hand can be observed, the exodus of Korean immigrants to the US. For most of the period from 1960 to 2015, Korea was among the top five sources of the US' international student population. In 2015, it was third among the top sending countries. Furthermore, Korea ranked third among the countries, following China and India, whose nationals had earned a doctorate in non-science and engineering disciplines from a US university between 2005 and 2015. This is a point to consider, especially given the small size of Korea's population compared to other countries whose citizens are awarded US degrees.

Furthermore, a high and growing number of academic and other Korean leaders holds a degree from the US. Cho (2010) shows that between the 1930s and the 1960s, the proportion of Korean faculty members who received their PhD from a Korean University declined from 30% to less than 10%, while those who received the same degree from a university abroad other than the US also decreased from about 35% to approximately 18%. In contrast, the proportion of Korean faculty with a PhD from a US institution grew from 35% in the 1930s to approximately 75% in the 1960s. This indicates growing ties between the US and Korea, a historical contingency that has translated into robust academic cooperation.

This point may need clarification in the cases of Latin America and Africa, which have higher rates of academic collaboration with former colonial powers. While linguistic continuity partly explains this, the Japan-Korea relationship is an example where linguistic discontinuity may explain the lower levels of collaboration despite colonisation. The key point is that Korea seems to have developed a stronger cultural affinity to the US than Japan, considering the various lines of reasoning we present in this article.

#### Whither South-South collaboration?

We observed a low level of co-authorship in Latin America, Africa, and Korea. The proportion of articles co-published by Africa-based researchers and their peers in Latin America stands at 0.5%. This is an aggregate of

data from Scopus and Codesria. Africa-Korea academic collaboration is also low at roughly 1.7% of the total number of co-authored articles. Aggregated data from SciELO and Scopus highlights an even lower rate of collaboration between Africa-based and Latin America-based scholars at approximately 0.01%. Similarly, according to SciELO and Scopus, Latin America-Asia co-authored articles make up 0.2%. Finally, the data aggregated from the Korean Citation Index and Scopus confirms the low level of South-South collaborations compared to South-North. Collaborations between Korean-based researchers in the social sciences and humanities and their counterparts in Africa stand at 0.2%, with those between Korea and Latin America at 0.3%.

This data suggests that there is room to enhance South-South collaborations. A step in the right direction might be to interrogate and critically frame the current power dynamics shaping academic collaboration patterns. Former colonial powers or forces of occupation continue to claim the largest share of research collaborative initiatives with the South. In sub-Saharan Africa, three-quarters of collaborations with European scholars involve France and UK-based British academics. Since the bulk of academic institutions in sub-Saharan Africa is located in former French and British colonies, this trend should not be surprising.

The theory of cultural distance/affinity is further confirmed on the basis that collaborations between former colonies and colonial powers are only outnumbered by local or intra-national collaborations. Koreans are more inclined to co-publish with US-based academics than scholars based in other Asian countries as well as those in other South regions. The same can be said of sub-Saharan Africa and Latin America. Scholars based in these regions engage their European colleagues (France, the UK, and Spain) in research more frequently than scholars in different South countries including those on the same continent.

#### Conclusion

The current publication dynamics of Global South scholars do not reflect the political discourse of South-South collaboration. In their search for academic partnerships, scholars in the Global South are looking within their own country or towards the US or Europe. Only occasionally do they consider colleagues from another Global South country as a research partner. In explaining these weak transcontinental and intracontinental collaborations, the cultural distance effect needs to be taken into account. Latin Americans, sub-Saharan Africans, and East Asians occupy a common space of relative subordination. However, these countries have weak historical ties and, while they may have a cultural affinity with one another in some cases, closer inspection reveals that this is mediated by Northern powers. Thus, the irony lies in a Western power acting as a broker among Global South countries that are critical of the epistemological hegemony of the West. If the term 'Global South' conveys a political identity, it is still overshadowed by the colonially-driven cultural affinity between the Global South and European or US imperial blocks.

The question of US hegemony and academic influence on the world stage is a further point for consideration. To what extent does US academic influence determine the internationalisation strategies of countries in the South? If this power alone was decisive, a potential scenario is possible where Latin American and sub-Saharan African scholars would copublish more with US scholars than those based in countries like France and Spain, whose academic stature has been overshadowed by the US since the end of the Second World War. This is, however, not the case and we believe that linguistic commonality, historical (colonial) relations of dependency, and the ongoing politics of cooperation likely nurture European countries' pre-eminence in transcontinental collaborators' networks. However, one could argue that since collaboration, like the tango, requires two partners, Europe's pre-eminence in the networks of transcontinental collaborators for researchers located in sub-Saharan Africa and Latin America could simply be the result of US-based academics having less interest in partnering with colleagues in these two regions than in Korea. It could also be argued that the proportion of Latin America and sub-Saharan Africa-based academics that trained in the US is significantly lower than that of Korea-based academics who earned their PhD in the US. Full-time doctoral training is an opportunity to build social capital, as candidates interact regularly with peers and professors at the same institution. The likelihood of collaboration increases when scholars occupy the same space, and as foreign students become familiar with the socio-cultural norms defining the academic cultures of their universities and programmes.

#### References

- Abramo, G., A. C. D'Angelo, and F. Di Costa. (2009). Research collaboration and productivity: Is there correlation? *Higher Education* 57(2), 155-171.
- Appadurai, A. (2000). Grassroots globalisation and the research imagination. *Public Culture* 12(1), 1-19.
- Aranachalam, S., and Jinandra Doss, M. (2000). Mapping International Collaboration in Science in Asia Through Co-Authorship Analysis. *Current Science* 79(5), 621-628
- Babchuk, N., B. Keith, and G. Peters. (1999). Collaboration in Sociology and Other Scientific Disciplines: A Comparative Trend Analysis of Scholarship in the Social, Physical, and Mathematical Sciences. *The American Sociologist* 30(3), 5-21.
- Beaver, D. (2001). Reflections on Scientific Collaboration (and its Study): Past, Present, and Future. *Scientometrics* 52, 365-377.
- Bozeman, B., D. Fay, and C. P. Slade. (2013). Research collaboration in universities and academic entrepreneurship: The-state-of-the-art. *Journal of Technology Transformation* 38, 1-67.
- Bozeman, B., and E. Corley. (2004). Scientists' collaboration strategies: implications for scientific and technical human capital. *Research Policy* 33, 599-616.
- Cho, J. J. (2010). Immigration through Education: The Interwoven History of Korean International Students, US Foreign Assistance, and Korean Nation-State Building. PhD dissertation, University of California, Berkeley.
- Comaroff J., and J. Comaroff. (2011). *Theory from the South: Or How Euro-America is Evolving Towards Africa.* London: Routledge.
- Canto, I., and J. Hannah. (2001). A Partnership of Equals? Academic Collaboration Between the United Kingdom and Brazil. *Journal of Studies in International Education* 5(1), 26-41.
- Connell, R. (2007). Southern theory: The Global Dynamics of Knowledge in Social Science. Cambridge: Polity.
- Duque, Ricardo B., Marcus Ynalvez, R. Sooryamoorthy, Paul Mbatia, Dan Bright S. Dzorgbo, and W. Shrum. (2005). Collaboration Paradox: Scientific Productivity, the Internet, and Problems of Research in Developing Areas. *Social Studies of Science* 35(5), 755-785.

Eduan W., and Yuanqun J. (2019). Patterns of the China-Africa research

collaborations from 2006 to 2016: a bibliometric analysis. *Higher Education* 77, 979-994.

- Gingras, Y. (2016). Bibliometrics and Research Evaluation: uses and abuses. Cambridge: MIT Press.
- Goffman, W., and Warren, K.S. (1980). Scientific Information Systems and the Principle of Selectivity. New York: Praeger Press.
- González-Teruel, A., González-Alcaide, G., and Abad-García, M. F. (2015). Mapping Recent Information Behavior Research: An Analysis of Co-Authorship and Co-Citation Networks. *Scientometrics* 103(2), 687-705.
- Gouldner, A. W. (1957). Cosmopolitans and locals: toward an analysis of latent social roles. I. Administrative Science Quarterly 2(3), 281-306.
- Gueye, A. (2018). L'engagement des universitaires africains expatriés dans l'enseignement supérieure en Afrique. *Revue d'anthropologie des connaissances* 12(4), 553-579
- Gueye, A., M. Okyerefo, P. Diedhiou, and A. Bogali. (2019). De la dépendance vis-à-vis de l'Occident à l'expression du besoin de diaspora intellectuelle africain. Dakar: Codesria.
- Gutierrez, D. (2008). Beyond Disappointment: Transforming Ideology and Practice in North-South Research Partnerships. *NORRAG News* 41, 19-22.
- Guzmán-Valenzuela, C., L. Ortega, M. Montero, and P. Perez Mejias. (2022). The New Knowledge Production in the Social Sciences and in the Arts and Humanities in Latin America. *Higher Education* April.
- Guzmán-Valenzuela, C. (2019). Values and the International Collaborative Research in Higher Education: Negotiating Epistemic Power Between the Global South and the Global North. In P. Gibbs, J. Jameson and A. Elwick (eds) Values of the University in a Time of Uncertainty, pp. 137-153. London, New York: Springer.
- Guzmán-Valenzuela, C., and C. Gómez. (2019). Advancing a knowledge ecology: changing patterns of higher education studies in Latin America. *Higher Education* 77, 115-133
- Hammond, Ch. D. (2019). Dynamics of Higher Education Research Collaboration and Regional Integration in Northeast Asia: A Study of the A<sub>3</sub> Foresight Project. *Higher Education* 78, 653-668.
- Jung, J., B. Bozeman, and M. Gaughan. (2017). Impact of research collaboration cosmopolitanism on job satisfaction. *Research Policy* 46, 1863-1872.

80 ABDOULAYE GUEYE, EDWARD CHOI, CAROLINA GUZMÁN-VALENZUELA, GUSTAVO GREGORUTTI

- Kabo, F. W., N. Cotton-Nessler, Y. Hwang, M. C. Levenstein, and J. Owen-Smith (2014). Proximity effects on the dynamics and outcomes of scientific collaborations. *Research Policy* 43, 1469-1485.
- Katz, J. S., and Martin, B.R. (1997). What is research collaboration? *Research Policy 26*, 1-18.
- Keskinen, S., S. Tuori, S. Irni, and D. Mulinari (eds). (2020). *Complying with Colonialism: Gender,*–*Race, and Ethnicity in the Nordic Region*. London: Routledge.
- Kim, M. J. (1999). Korean international co-authorship in science 1994-1996. Journal of Information Science 25(5), 403-412.
- Kloß, S. Th. (2017). The Global South as Subversive Practice: Challenges and Potentials of a Heuristic Concept. *The Global South* 11(2), 1-17.
- Kotiranta, A., A. Tahvanainen, A. Kovalainen, and S. Poutanen. (2020). Forms and Varieties of Research and Industry Collaboration across Disciplines. *Heliyon* 6(3), 1-18.
- Lee, S., and B. Bozeman. (2005). Scientific Collaboration. Social Studies of Science 35(5), 673-702.
- Lee, J.K. (2006). Korean Higher Education under the United States Military Government: 1945-1948. *Radical Pedagogy*. http://radicalpedagogy. icaap.org/content/issue8-1/lee.html.
- Luukkonen, T., O. Persson, and G. Sivertsen. (1992). Understanding Patterns of International Scientific Collaboration. *Science, Technology, and Human Values* 17(1), 101-126.
- Maselli, D., J. A. Lys, and J. Schmid. (2006). *Improving Impacts of Research Partnerships*. Berne: Swiss Commission for Research Partnerships with Developing Countries.
- Maz-Machado, A., B. Munez-Nungo, D. Gutiérrez-Rubio, and C. Leon-Mantero. (2020). Patterns of Authorship and Scientific Collaboration in Education: The Production of Colombia in ESCI. *Library Philosophy and Practice* 6(12).
- Moody, J. (2004). The Structure of a Social Science Collaboration Network: Disciplinary Cohesion from 1963 to 1999. *American Sociological Review* 69(2), 213-238.
- Mullins, Nicholas. (1970). Theories and Theory Groups in Contemporary American Sociology. New York: Harper.
- Obamba, M. O., and Mwema, J. K. (2009). Symmetry and Asymmetry: New Contours, Paradigms, and Politics in African Academic Partnerships. *Higher Education Policy* 22(3), 349-371.

- Omenn, G. (2006). Grand Challenges and Great Opportunities in Science, Technology, and Public Policy. *Science* 314, 1696-1704.
- Osterhammel, J. (2010). *Colonialism: A Theoretical Overview*. Princeton: Princeton University Press.
- Owusu-Nimo, F., and Boshoff, N. (2017). Research Collaboration in Ghana: Patterns, Motives, and Roles. *Scientometrics* 110(3), 1099-1121.
- Pineda, P., G. Gregorutti, and B. Streitwieser. (2020). Emerging Decolonialized Research Collaboration: The Max Planck Society and the Leibniz Association in Latin America. *Journal of Studies in International Education* 24(I), 59-78
- Pohl, H., and Lane, J. E. (2018). Research contributions of international branch campuses to the scientific wealth of academically developing countries. *Scientometrics* 116(3), 1719-1734.
- Powell, C.F. (1956). International Scientific Collaboration. *Science and Society 20*(2), 111-117.
- Pravdic, N., and Oluic-Vukovic, V. (1986). Dual approach to multiple authorship in the study of collaboration/scientific output relationship. *Scientometrics* 10(5), 259-280.
- Rigg, J. The Global South. *Concepts of the Global South: Voices around the World* https://kups.ub.unikoeln.de/6399/I/voices012015\_concepts\_ of\_the\_global\_south.pdf
- Shrum, W., Genuth, J., and Chompalov, I. (2007). *Structures of Scientific Collaboration* Cambridge: MIT Press.
- Sousa Santos, B. (2018). *The end of the cognitive empire*. Durham: Duke University Press.
- Sousa Santos, B. (2016). Epistemology of the south and the future. From the European South: A Transdisciplinary Journal of Postcolonial Humanities 1, 17-29.
- Sousa Santos, B. (2009). A non-Occidentalist West: Learned Ignorance and Ecology of Knowledge. *Theory, Culture, Society 26*(7-8), 103-125.
- Sousa Santos, B., J. A. Nunes, and M. P. Meneses. (2008). Introduction: Opening Up the Canon of Knowledge and Recognition of Difference. In Sousa Santos, B. (eds) *Another Knowledge is Possible: Beyond Northern Epistemologies*, pp. xix-lxii.
- Sousa Santos, B., and M. P. Meneses (2019). Toward a Post-Abyssal World. In Sousa Santos B., and M. P. Meneses (eds. *Knowledge born in the struggle: Constructing the Epistemologies of the South*. New York: Routledge, pp. 241-245.

82 ABDOULAYE GUEYE, EDWARD CHOI, CAROLINA GUZMÁN, GUSTAVO GREGORUTTI

- Svein, K., and M. Teigen. (1996). Child Care, Research Collaboration, and Gender Differences in Scientific Productivity. *Science, Technology, and Human Values* 21(1), 54-71.
- Thorsteinsdottir, O. (2000). External Research Collaboration in two Small Science Systems. *Scientometrics* 49, 145-160.
- Wang, Q., Jiwon, B. Bozeman, and M. Gaughan. (2019). Collaboration Cosmopolitanism: What are the Effects on the Overlooked Majority of Scientists and engineers? *Higher Education 78*, 1011-1034.
- Woldegiyorgis, A. A., Proctor, D., and H. De Wit. (2018). Internationalization of Research: Key Considerations and Concerns. *Journal of Studies in International Education* 22(2), 161-171.
- Zitt, M., E. Bassecoulard, and Y. Okubo. (2000). Shadow of the past in international cooperation: collaboration profile of the top five producers of science. *Scientometrics* 47(3), 627-657.