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ABSTRACT

While decolonialization of knowledge production is not a new concern, the debate in ICT4D has gained traction following a growing attention to the issue in ICT4D journals and conferences. This paper aims to contribute to this debate by analyzing underrepresentation of Global South - based scholars in ICT4D research output. The study aspires to provide a foundation for critical self-examination of our research practices. The study is a literature review of papers published in the top three ICT4D journals and ICT4D papers published in the top IS journals over 10 years (2011-2020). The findings show that most of the papers are published from authors in countries ranked as very high- or high development with a significant lower representation of authors from countries ranked as low development. Moreover, there is, despite the field's acknowledgement of the concern, no substantial improvement over the studied time period. While we do not argue that we have a solution for the continuation of historical patterns of underrepresentation of colleagues based in the Global South, we end the paper with offering some suggestions on how to move forward.

Keywords: Inclusion, decolonization, research, publications, representation

INTRODUCTION

Decolonization of knowledge production, where academic research holds a privileged position, has been debated within development studies and post-colonial studies for the past thirty years (Crawford, Mai-Bornu, & Landström, 2021; Rutazibwa, 2018; Schöneberg, 2019; Ziai, 2012). Klose (2014) explains decolonialization as the process through which colonial rule and power over political, economic, cultural and social spheres is dissolved and where power and self-

determination is transferred or (re)transferred to national indigenous people. A decolonization process of knowledge production subsequently needs to support researchers to critically engage with existing power relations, and challenge past preferential treatment of Western ontologies, epistemologies and theories, as well as academic practices serving to uphold historical biases. A decolonialization effort thus entails disrupting the West's historical privileged position of determining what forms of knowledge are accepted and valued, which also ultimately decides whose knowledge counts. Istratii, Hirmer and Lim (2018) argues that decolonialization requires an attitudinal shift that entails embracing a deep humility and acknowledgment of that "we have no authoritative grounds for imposing our worldviews as normative on our interlocutors" (Istratii et al., 2018, p.9). Decolonizing academic knowledge production, also calls for critical reflections pertaining research practices and research ethics. Extractive and exploitative research practices has received significant attention by development studies scholars (Eriksson Baaz & Utas, 2019).

The fields of Information Systems (IS) and Information and Communication Technologies for Development (ICT4D) has also starting to engage more consistently with the issue of Western dominance in scholarly knowledge production and circulation (Adam & Myers, 2003; Lazem et al., 2022). In a recent editorial in the *Information Technology for Development Journal*, Khene and Masiero (2022) argues that decolonizing ICT4D research will requires us to do things differently "[…] decolonizing ICT4D is a practice of research, which deconstructs Western-based concepts and rebuilds them through Indigenous value systems." (p.446). If there is agreement that there is room for improvement concerning how ICT4D engages with justified criticism of Western biases, there seems to be less consensus pertaining how to concretely approach an alternative imagined future. One suggested remedy is to strengthen the meaningful participation and representation of scholars from developing country contexts, not only as local research assistant, but as authors and co-authors (Bai, 2018). Few articles have done a systematic global study on the levels of (under-)representation of researchers based in a developing country context (see e.g., Bai, 2018; Williams, Lenstra, Ahmed, & Liu, 2013); Both Bai (2018) and Williams et al (2013) conclude that scholars based in the Global South, developing contexts are under-represented.

Mindful that historical patterns of Western biases within ICT4D cannot be reduced solely to the level of representation of scholars from contexts classified as low development in the UNDP Human Development Index, we argue that it is *one* important tool if we wish to broaden the

voices that contribute to our understanding of social phenomena around the world. The aim of this paper is to both contribute to the foundation upon which we engage in debates on decolonization and efforts of widening the intellectual horizon and territory of ICT4D. We do so by taking stock of progress in terms of a more equitable representation of scholars based in low-developing context in ICT4D publications over ten years 2011-2020. The study thus seeks to answer the question, has the ICT4D community's rounds of critical self-examination resulted in real change, where change is measured as in an increase of scholars based in low development contexts that contribute to our joint body of knowledge. We utilize the Human development index categories, which range from very high, high, medium to low, as way to capture developmental differences between countries. In the study we analyze three key ICT4D journals and eight top IS journals between the years 2011 and 2020. Although we acknowledge that a broader decolonialization effort is dependent on multiple factors, such as access to research funding and institutional support including administrative support in resource weak environments to be able to enter equitable partnerships, as well as a critical engagement with the dominance of the English language and barrier to successfully competing globally. By analyzing progress, or lack of progress, in terms of representation, we have a foundation for engaging in not only in critical self-examination, but a conversation on how to move forward.

ENGAGMENT WITH POST-COLONIAL THOUGHT AND PRACTICES IN ICT4D

Historically ICT4D research has often drawn upon the modernization theory which postulates that "underdeveloped countries do not have the ability to break out of traditional and outdated modes of production, because they lack the knowledge or resources to do so" (Sein & Harindranth, 2004, p.16). The strong influence of modernization theory in development work in general has been criticized by Escobar (1995) who argues that the modernization agenda is responsible for the poverty crisis in many countries. The debate has resulted in calls for widening "the intellectual territory of ICT4D" (Kreps & Bass, 2019, p.1), where indigenous and regional research paradigms and theories are actively explored. Kreps and Bass (2019) argues that the ICT4D discipline will be enriched by actively engaging with both pre- and post-colonial Global South research paradigms and theories. While acknowledgment of the ICT4D discipline's past limitations, is not new; "openly decolonial takes are recent in the history of ICT4D research" (Khene & Masiero, 2022, p.443). The last few years' a growing body of papers discussing

decolonialization of ICT4D theory, methods and research practices indicates that the issue has indeed gained a foothold in the discipline (see e.g., Bai, 2018; Jimenez & Roberts, 2019; Jimenez, Vannini, & Cox, 2022; Kreps & Bass, 2019; Lin, Kuo, & Myers, 2015; Masiero, 2022; Tsibolane & Brown, 2016).

Although a broader engagement with post-colonial concerns appears to be a relatively recent phenomena, some previous works have attempted to explore the nature of neglect of postcolonial lenses and the implications on IS and ICT4D research. Failure to include non-westerns frameworks risk resulting in a mismatched, impoverished and ill-equipped theoretical tool box which fails to acknowledge local challenges in the Global South (Mama, 2007). For example, of the 104 theories included in *Theories Used in IS Research Wiki* (Larsen & Eargle, 2015) 87 originate from the United States and no theories originate from Africa, South America, Central America, Asia or the Pacific Islands (Davison & Diaz Andrade, 2018). Tsibolane and Brown (2016) argues that a post-colonial lens would allow ICT4D researchers to more actively engage with the role of historical and ongoing asymmetric power relations in contemporary development challenges. As post-colonial theory is a macro critical theory, it will by default challenge researchers to acknowledge the ongoing legacy of unequal distribution of power. Masiero (2022) argues that ICT4D has much to gain from adopting a wider theoretical toolbox, and that a post-colonial subaltern theory approach "offers a vocabulary to articulate and deconstruct hegemonic oppression, ultimately challenging a well-established Western hegemony in IS" (p.14).

THE IMPORTANCE OF EQUITABLE REPRESENTATION

Walsham and Sahay (2006), argues in a review of 13 journals and 2 conference proceedings, 2000-2006, that the ICT4D field needs to engage with the issue of skewed representations. Although representation is not systematically examined in their study, the researchers conclude that the ICT4D research landscape is "narrow" and that "[m]any of the authors writing about Latin America, Africa, and Asia are located in North America and Western Europe." (p.20). This is also further corroborated by a more recent study on the maturity of the ICT4D field which found the same pattern (Strand & Hatakka, 2022). Walsham and Sahay (2006) concludes that the field would benefit by including local researcher.

Three studies have attempted to provide a systematic overview of representation of scholars from developing country contexts in ICT4D research, but neither approach the topic as a process. In a

study on community informatics, Williams et al., (2013) analyzed the first author affiliations in 563 studies presented in journal articles, book chapters and conference between 1990 and 2011. They found a mismatch between the authors' location and where the studied projects were located, as well as a clear preference for English speaking research sites. Among the developing country context all of the top-ten research sites were former British colonies. Most papers were contributed by authors based in North America, followed by Asia, Europe, Africa, Oceania and Latin America. The most productive countries were USA (40%) and UK (10%), followed by India (10%), Australia (5%), Canada (4%) and South Africa (3%).

Bai (2018) ask the question if the Global South has become an intellectual playground for Western scholars. In a review of ICT4D research articles published between 2015 to 2017 in three key ICT4D journals, Bai's (2018) concludes that the level of representation and role of Global South based researchers is complex, but that scholars from the Global South are still underrepresented. Scholars from the Global South played an important role and are active contributors to the ICT4D field. Authors from the South alone or as an equal number of authors from the North and South represent 72.2% of the studies that were reviewed. The role of Global South- based scholars is also evident in that they were first authors in 65.8% of the studies. A deeper analysis however showed that the Global South based scholars are represented by authors from a few countries which arguably are not considered low development. South Africa alone contributed 57% of the authors from Africa and South America as a region is made up of 50% of scholars from Brazil (Bai, 2018). Bai (2028) concludes that authors from low-income countries are extremely rare.

In a recent study analyzing the ICT4D field's academic maturity, under-representation of scholars based in low-developing contexts was noted (Strand & Hatakka, 2022). Of the 20 universities that published the most papers, eight were from Africa, seven from Europe, three from North America and two from Asia. After a closer examination, these numbers changes character, as of the eight universities from Africa, six are based South Africa, which has a HDI classification as high. The other two university are based in Cameroon and Ghana. The Asian universities are located in Thailand and Singapore. These universities are based in countries ranging from medium to very high development contexts.

As all three studies only present snapshots of levels of representation, and utilizes different empirical source data, it is impossible to deduct the ICT4D field's development trajectory on the issue of more equitable inclusion of scholars based in low development contexts.

METHOD

This study is based on a literature review of papers published between 2011-2020 in the three top ranked ICT4D journals (Heeks, 2010) as well as ICT4D papers in the Senior Scholar´s basked of eight (SSB8J) journals (AIS, 2011) . The selection of journals followed the guidelines of journal selection by Webster and Watson (2002) to include both the top sub-field (ICT4D) specific journals as well as the top journals from the parent field of IS. For the three ICT4D journals we included all papers except for editorials and book reviews, for the SSB8J we did a search for specific ICT4D focused papers using the keywords 'ICT4D', 'ICTD', 'Developing countries' and 'Developing country'. After the search we read the abstract of the papers to determine if it was ICT4D focused or if ICT4D was just mentioned cursorily. A total of 862 papers were included in this study (see table 1).

Table 1: Selected journal and number of papers 2010-2020

Journal	**Number of papers**
EJISDC	406
ITD	267
ITID	133
ISJ	19
JIT	13
JAIS	8
MISQ	6
EJIS	4
JSIS	3
ISR	2
JMIS	1

After the selection of paper had been made, we coded all the papers in Microsoft Excel. Codes used were:

- Journal name, year published, volume and issue.
- Title of the paper.
- Authors (both main and co-authors).
- Author university (only the first listed university was noted if the author was affiliated with multiple universities. If the author was not affiliated with any university, we used the code N/A instead).
- The country of the authors' university affiliation.
- The continent of the authors university.
- Number of citations for each paper (number of citations is based on google scholars, and mapping of number of citations for all papers was done during one week in September 2020).
- Development ranking of the authors university country. We used the 2020 HDI ranking (UNDP, 2022), listing the countries as very high development, high development, medium development, or low development.

Since the mapping of the papers were straight forward, there were no need to crosscheck the mapping. For the analysis of the data set we used Pivot tables in Excel.

There are some limitations to our method. In our analysis we have only included paper from 2011-2020. In further developing the paper we should also include the paper for 2021 and 2022. When searching for papers in the SSB8J we have only use the keywords 'ICT4D', 'ICTD', 'Developing countries' and 'Developing country'. It is likely that we have missed papers in the journals due to our limited use of keywords.

RESULTS

Table 2 shows the distribution of the authors of papers based on the continent for their affiliated university. As can be seen in the table there is a fairly equal distribution of published papers from Europe (26% main- and all authors), Africa (26% main authors, 25% all authors), North America

(21% main author, 23% all authors) and Asia (19% main- and all authors). Two continents, Australia (4% main author, 5% all authors) and South America (3% main- and all authors) has a significantly lower number of publications compared to the rest. That authors from South America are so unrepresented in our data could potentially be because of language barriers. There are many Journals in Spanish or Portuguese where they may choose to publish instead.

Table 2: Authors affiliation by continent

Continent	**Main author**	**All authors**
Europe	26%	26%
Africa	26%	25%
North America	21%	23%
Asia	19%	19%
Australia	4%	5%
South America	3%	3%

If we map the authors affiliating university country to the development ranking (very high, high, medium, low) the data shows that the majority (57% main author, 59% all authors) of the papers are published by authors from countries ranked as very high development (see table 3). Authors from countries ranked as medium development account for 9-10% (as main authors and all authors respectively) of the papers and authors from countries ranked as low development only account for 6% of the papers.

Table 3: Development index

Development index	**No. of papers (main author)**	**%**	**No. of papers (all authors)**	**%**
Very High	490	57%	1236	59%
High	237	28%	526	25%
Medium	81	9%	202	10%
Low	50	6%	133	6%

When analyzing the level of representation of the four developing categories in the specific journals included in the study (see table 4 and 5), EJISDC stands out with a significantly higher degree of authors based in low development contexts compared to the other journals. 11% of the papers in EJISDC are from authors affiliated with a university in low development countries.

EJISDC also have the highest percentage of authors from medium development contexts (11%), although closely followed by ITD (9% main authors) and ITID (8% main author). The data also shows that the SSB8J do not have any ICT4D papers published from low development countries and only 4% of the papers are from authors from countries ranked as medium development.

Table 4: Development ranking per journal (main author)

	Very high	**High**	**Medium**	**Low**
EJISDC	42%	36%	11%	11%
ITD	68%	21%	9%	2%
ITID	69%	22%	8%	1%
SSB8J	85%	11%	4%	0%

Table 5: Development ranking per journal (all author)

	Very high	**High**	**Medium**	**Low**
EJISDC	45%	33%	11%	11%
ITD	67%	20%	9%	4%
ITID	72%	17%	9%	1%
SSB8J	86%	9%	4%	0%

If we look at the publishing authors countries development raking over the ten years of papers included in this study (table 6 and figure 1) it is difficult to see any clear trends. However, very high development country publications have decreased over the 10 years and low development ranked country publications has increased slightly. We can also see what looked like a trend from 2013-2017. The number of publications from authors in high development countries was lower for each year and with a corresponding increase in publications from scholars based in high, medium, and low development country contexts. After 2017 the trend was however the opposite (mainly due to a lower number of publications from South Africa).

The outlier in the data is from 2017 when “only” 43% of the papers were published by authors from very high development countries and 38% were from high development countries. Scholars

from low and medium development ranked country both accounted for 9% of the paper. It should be noted that in 2017, 23 papers were published from South Africa (ranked as high development), and of those 20 were published in EJISDC.

Table 6: Development ranking per year for main authors

	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020	
Very high	44	64%	60	64%	46	67%	53	65%	51	54%	53	50%	43	43%	47	55%	50	60%	43	56%
High	14	20%	25	27%	13	19%	22	27%	28	29%	31	30%	38	38%	28	33%	21	25%	17	22%
Medium	8	12%	5	5%	5	7%	4	5%	11	12%	15	14%	9	9%	8	9%	5	6%	11	14%
Low	3	4%	4	4%	5	7%	2	2%	5	5%	6	6%	9	9%	2	2%	8	10%	6	8%

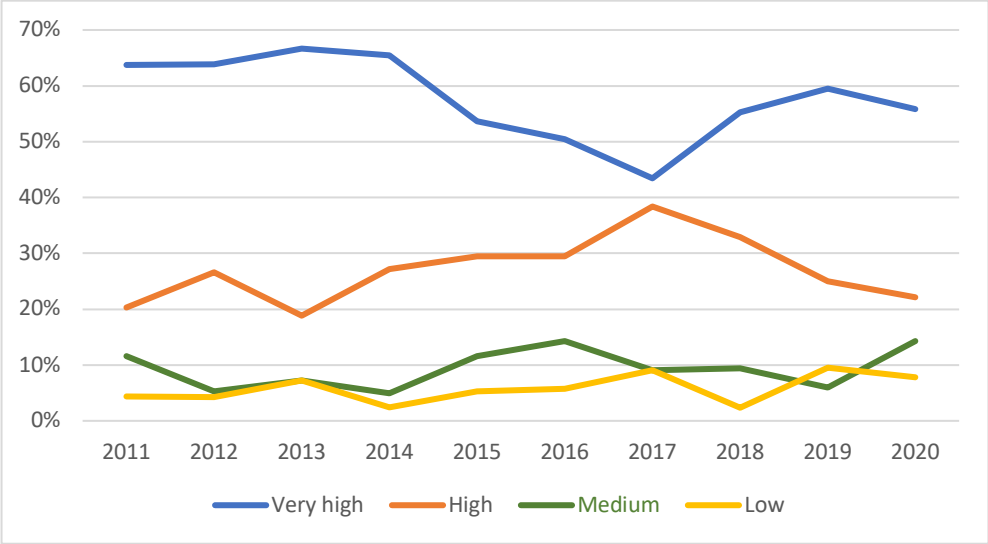

Figure 1: Development ranking per year

Finally, we also calculated the average number of citations based on development ranking (see table 7). Since we only included the top ICT4D and IS journals, we stipulated that due to recourse and institutional support constraints in lower development contexts the high quality required by the journals would impede publications from scholars based in low development contexts. However, if we see number of citations as a measurement for quality of the research, the few papers that gets published from countries ranked as low development are of a high international quality. While papers published by scholars based at universities in very high development ranked countries have the highest number of average citations (30,4), in "2nd place"

are papers from scholars based in low development contexts with 24 citations in average per paper. While we do not have any statistics on the number of papers that get rejected by the journals from the four development categories, we can at least say that those that get published are of as high quality as those published by authors based at resource rich universities.

Table 7: Average citations

Development ranking	**Average no. of citations (Main author)**
Very High	30,4
High	17,4
Medium	22,4
Low	24,0

DISCUSSION

By analyzing the level of representation of scholars based at universities in low development country contexts in ICT4D publications, the aim of this paper is to contribute to the on-going debate on decolonization of knowledge production within the field of ICT4D. Overall the study shows low representation of scholars affiliated with universities in countries ranked as low development. A clear majority of papers (57%) has a main author who is based at a university in a very high development country and if co-authors are included, that number increases to 59%. Only 6% of the papers are produced by scholars in low development ranked countries (for both main- and co-author). There is thus a considerable difference in the degree that scholars from low vs high development contexts are contributing to our body of knowledge. The difference in representation is even more noticeable given that low- and middle-income country are key places for our projects and data collection. Furthermore, there is no significant change over time. Representation of scholars based in low development country contexts remains low throughout the ten years this study covers. The past decade's debate on decolonializing ICT4D does thus not appear to have impacted our research practices and patterns of collaboration.

Our analyses also highlighted that there are significant differences between the journals. EJISDC has a higher degree of inclusion of scholars from low (11%) and medium (11%) development contexts than the other analyzed journals. In the SSB8J we did not find any ICT4D focused

papers with scholars from universities in low development countries, and only 4% from medium development countries.

While our study does not answer the question as to why scholars based in low development context are not better represented, there are other studies that may shed some light. The low representation of scholars based in low development countries may be a result of "brain drain", i.e., the migration of skilled professionals from low recourse setting to richer countries when such opportunity arises (Negash, Anteneh, & Watson, 2012). In a study of the ICT4D field's level of maturity, the vast majority of the most published and cited researchers in ICT4D, were based at universities in Europe or the United States (Strand & Hatakka, 2022), but many of them originate from low or medium developed countries. This is not surprising, and it is understandable that researchers move to resource rich environment which provide more favorable conditions for conducting research, such as supportive institutional environment, and regular funding opportunities, as well as access to established collaborative spaces. Another issue is related to the general conditions of academia in development contexts which impair research and research collaborations (Biljon & Naude, 2018). PhDs, which often have earned their degree at a university in the US or Europe, return to positions with little or no paid research time. While the later example is based on anecdotal evidence, our experience is that even high qualified individuals seldom have much time to conduct research and publish papers when they return to their home universities.

Another possible explanation is that scholars based in low development contexts choose other publications outlets than those included in this study. By only including the top ICT4D and IS journals, we have excluded e.g., region specific journals such as *African Journal of Information Systems* and *Asian Journal of Communication*. Inclusion of regional journals would probably change the results significantly. However, we argue that the journals included in this study are the key platforms for ICT4D research, and as such, it is reasonable to believe that most scholars aim to publish their work there.

Another and far less agreeable explanation relates to research practices and how local researchers are integrated and invited as co-producers of knowledge, either as main- or co-authors. The under-representation of scholars from low development countries research practices could thus

be a result of what could be called extractive research practices, which have been compared to continuation of colonialization.

> "Research here in the DRC is like the coltan and other minerals. Other countries that don't have access to it claim it and benefit from it. It is the same with research. The research would not be possible without us. Still it is people from the outside who profit from it, get visibility, funding and are called experts. At the same time we – the ones who provide access, adapt the methodology and questions and collect the data in very precarious circumstances – get little compensation and are not acknowledged. It is sort of a continuation of colonial relations." (Adedi Dunia et al., 2019)

We do not argue that extractive research practices are the reason behind the low representation of scholars from low development contexts in ICT4D, but more research is needed to explore to what degree our research practices are a barrier to greater representation of scholars based in low development contexts. As research practices in developing country contexts is a much too broad subject to address in this article, we refer the reader to Kouritzin and Nakagawa (2018) work in non-extractive ethics for research.

Finally, research conducted in media and communication studies, would suggest that one contributing factor may be the composition of the journals' editorial boards. Several studies in media and communication have argued that the composition of editorial boards is a key determinant of a journal content, as they are gatekeepers of what content is published (Demeter, 2018a; Goyanes & Demeter, 2020; Metz, Harzing, & Zyphur, 2016). Demeter (2018a) finds a clear correlation between the composition of the editorial board of a journal and its diversity of contributing authors. Although the causality is unclear, it is evident that journals that increased the national diversity of its editorial boards, also increased the national diversity amongst the contributing scholars. There are also indication that the journal's location impact the content of a journal (Demeter, 2018b). While we have not explicitly looked at the composition of editors, Bai's (2018) study included the same ICT4D journals as our study, and Bai found that 31.6% of the EJISDC editors and 37.5% of the ITD editors are scholars from less developing countries, compared to about 25% for ITID.

MOVING FORWARD

If we agree that under-representation is a problem in our field, how can we move from concern to concrete action? First, we do not argue that we have *the* solution, but will present some options that could be considered. Second, we acknowledge the irony in two researchers based at universities in very high development countries proposing a decolonialization agenda without the input of scholars from low development contexts. We welcome scholars from across the world, and scholars from low development contexts in particular, to ad items and revise the proposed actions points.

- Actively seek out and aim to widen the field's theoretical horizon. As suggested by e.g., Masiero (2022) a post-colonial subaltern theoretical lens may offer an alternative that can challenging the established Western theoretical hegemony in IS research.
- When we conduct research in low development contexts, inclusion of local scholars should become a default research practice. Not just as local research assistants, or "brokering researchers" (Adedi Dunia et al., 2019) but as authors of paper (Bai, 2018).
- Engage in bottom-up projects where local agents are initiators and active participants in all stages of the research projects. It is argued that researchers from high development contexts impose their perspective and people due to a lack of understanding of local contexts (Mama, 2007).
- As editors and authors of papers in of ICT4D journals, we need to be better to work with authors of papers from low development context. A good example of this is a special issue in EJISDC (Etoundi, Onana, Eteme, & Ndjodo, 2016) where all papers are authored by researchers from Cameroon. After the special issue, Cameroon researchers have also more frequently continued to publish in our top ICT4D journals, not just in EJISDC but also in ITD.

Finally, it is our hope that this paper will stimulate not only debate, but also to spur action that takes us as a research community beyond rhetoric on decolonialization knowledge production in ICT4D.

REFERENCES

Adam, M. S., & Myers, M. D. (2003). Have you got Anything to Declare? In *Organizational information systems in the context of globalization* (pp. 101-115): Springer.

Adedi Dunia, O., Bisimwa, S., Cirhuza, E., Eriksson Baaz, M., Ferekani, J., Imili, P., . . . James., V. (2019). Moving Out of the Backstage: How Can We Decolonize Research? Retrieved from https://thedisorderofthings.com/2019/10/22/moving-out-of-the-backstage-how-can-we-decolonize-research/#_edn2

AIS. (2011). Senior Scholars' Basket of Journals. Retrieved from https://aisnet.org/page/SeniorScholarBasket

Bai, Y. (2018). Has the Global South become a playground for Western scholars in information and communication technologies for development? Evidence from a three-journal analysis. *Scientometrics, 116*(3), 2139-2153.

Biljon, J. v., & Naude, F. (2018). *Collaboration towards a more inclusive society: The case of South African ICT4D researchers.* Paper presented at the IFIP International Conference on Human Choice and Computers.

Crawford, G., Mai-Bornu, Z., & Landström, K. (2021). Decolonising knowledge production on Africa: why it's still necessary and what can be done. *Journal of the British Academy, 9*(s1), 21-46.

Davison, R., M., & Diaz Andrade, A. (2018). Promoting indigenous theory. *Information Systems Journal, 28*, 759-764.

Demeter, M. (2018a). Changing center and stagnant periphery in communication and media studies: National diversity of major international journals in the field of communication from 2013 to 2017. *International journal of communication, 12*, 29.

Demeter, M. (2018b). Nobody notices it? Qualitative inequalities of leading publications in communication and media research. *International journal of communication, 12*, 31.

Eriksson Baaz, M., & Utas, M. (2019). Exploring the backstage: methodological and ethical issues surrounding the role of research brokers in insecure zones. In (Vol. 21, pp. 157-178): Taylor & Francis.

Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*. Princeton: Princeton University Press.

Etoundi, R. A., Onana, S. F. M., Eteme, A. A., & Ndjodo, M. L. F. (2016). Special issue on ICT for Africa development: An introduction and framework for research. *The Electronic Journal of Information Systems in Developing Countries, 76*(1), 1-11.

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.

Heeks, R. (2010). An ICT4D journal ranking table. *Information Technologies & International Development, 6*(4), pp. 71-75.

Istratii, R., Hirmer, M., & Lim, I. (2018). Editorial I: Conference Proceedings 'Decolonisation in Praxis', SOAS 2018. *The SOAS Journal of Postgraduate Research, 11*, 6-9.

Jimenez, A., & Roberts, T. (2019). *Decolonising neo-liberal innovation: using the Andean philosophy of 'Buen Vivir'to Reimagine Innovation Hubs.* Paper presented at the International conference on social implications of computers in developing countries.

Jimenez, A., Vannini, S., & Cox, A. (2022). A holistic decolonial lens for library and information studies. *Journal of Documentation*(ahead-of-print).

Khene, C., & Masiero, S. (2022). From research to action: the practice of decolonizing ICT4D. *Information Technology for Development, 28*(3), 443-450.

Klose, F. (2014). Decolonization and revolution. *European History Online*. Retrieved from http://ieg-ego.eu/en/threads/europe-and-the-world/european-overseas-rule/fabian-klose-decolonization-and-revolution

Kouritzin, S., & Nakagawa, S. (2018). Toward a non-extractive research ethics for transcultural, translingual research: perspectives from the coloniser and the colonised. *Journal of Multilingual and Multicultural Development, 39*(8), 675-687.

Kreps, D., & Bass, J. M. (2019). *Southern theories in ICT4D.* Paper presented at the International Conference on Social Implications of Computers in Developing Countries.

Larsen, K. R., & Eargle, D. (2015). Theories Used in IS Research Wiki. Retrieved from https://is.theorizeit.org/

Lazem, S., Giglitto, D., Nkwo, M. S., Mthoko, H., Upani, J., & Peters, A. (2022). Challenges and paradoxes in decolonising HCI: A critical discussion. *Computer Supported Cooperative Work (CSCW), 31*(2), 159-196.

Lin, C. I., Kuo, F.-Y., & Myers, M. D. (2015). Extending ICT4D studies. *MIS Quarterly, 39*(3), 697-712.

Mama, A. (2007). Is it ethical to study Africa? Preliminary thoughts on scholarship and freedom. *African Studies Review, 50*(1), 1-26.

Masiero, S. (2022). Decolonising critical information systems research: A subaltern approach. *Information Systems Journal*.

Metz, I., Harzing, A. W., & Zyphur, M. J. (2016). Of journal editors and editorial boards: who are the trailblazers in increasing editorial board gender equality? *British journal of management, 27*(4), 712-726.

Negash, S., Anteneh, S., & Watson, R. T. (2012). A PhD in information systems for emerging economies: The Addis Ababa University model. *Information Technology for Development, 18*(3), 270-276.

Rutazibwa, O. U. (2018). On babies and bathwater: Decolonizing international development studies 1. In *Decolonization and feminisms in global teaching and learning* (pp. 158-180): Routledge.

Schöneberg, J. (2019). Imagining postcolonial-development studies: Reflections on positionalities and research practices. In *Building development studies for the new millennium* (pp. 97-116): Springer.

Sein, M. K., & Harindranth, G. (2004). Conceptualizing the ICT Artifact: Toward Understanding the Role of ICT in National Development. *The Information Society, 20*(1), 15-24.

Strand, C., & Hatakka, M. (2022). *Understanding Evolution and Progress Towards Academic Maturity-A Review of Ten Years of ICT4D Research.* Paper presented at the IFIP working group 9.4 The Implications of Information and Digital Technologies for Development.

Tsibolane, P., & Brown, I. (2016). Principles for conducting critical research using postcolonial theory in ICT4D studies.

UNDP. (2022). Human Development Index (HDI). Retrieved from https://hdr.undp.org/data-center/human-development-index#/indicies/HDI

Walsham, G., & Sahay, S. (2006). Research on Information Systems in Developing Countries: Current Landscape and Future Prospects. *Information Technology for Development, 12*(1), 7-24.

Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, xiii-xxiii.

Williams, K., Lenstra, N., Ahmed, S., & Liu, Q. (2013). Research note: Measuring the globalization of knowledge: The case of community informatics. *First Monday*.

Ziai, A. (2012). *Postcolonial perspectives on'development'*. ZEF Working Paper Series.