

Ethics of Quantification and Randomised Control Trials in International Development: A Decolonial Analysis

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ABSTRACT

In this article, we examine the ethical implications of randomised control trials (RCTs) as a practice of quantification in international development. Often referred to as the “gold standard” for the evaluation of development interventions, RCTs are lauded for their ability to generate supposedly objective, unbiased, and rigorous evidence to inform policy decisions for poverty alleviation. At the same time, critiques of quantification within and beyond development challenge claims of objectivity and neutrality, raising epistemological and ethical questions regarding the role of quantitative research, the numbers they produce, and the processes triggered by practices of quantification. Building on these critiques, this study develops a decolonial analysis of the RCT methodology. We argue that RCTs, by enacting the coloniality of being, knowledge, and power, serve to perpetuate global coloniality, and its core organising principle, namely colonial difference. The study contributes to ongoing conversations addressing the ethical stakes of knowledge production and (de)coloniality.

Key words: Ethics of quantification, Randomised Control Trials (RCTs), Coloniality/Modernity, Decolonial thinking, International Development.

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1 Introduction

This article concerns the ethical dimensions of randomised control trials (RCTs) in international development, increasingly lauded as the “gold standard” for evaluation of poverty alleviation interventions (Webber and Prouse, 2018). RCTs, whose entry into development is often traced to the founding of the Poverty Action Lab (J-PAL) at Massachusetts Institute of Technology in the United States in 2003, aim to measure the effects of specific interventions by comparing outcomes between randomly allocated “programme” and “control” groups (J-PAL, n.d.-a). In the last two decades, the RCT methodology has been increasingly adopted to tackle different development challenges, spanning from health to education and micro-finance, and by numerous actors, ranging from multilaterals to newer organizations focused specifically on evidence and evaluation (such as 3ie, a global membership organisation constituted and financed by donors across the world). It is claimed that all these different applications “have in common a high level of scientific rigor, openness to accepting the verdict of the data, and a focus on specific, concrete questions of relevance to the lives of the poor” (Banerjee and Duflo, 2011, p.16). The faith in the methodology led the Royal Swedish Academy of Science to award the 2019 Sveriges Riksbank Prize (more commonly known as the Nobel Memorial Prize in Economics) to RCTs’ main proponents, Abhijit Banerjee, Esther Duflo and Michael Kremer, “for their experimental approach to alleviating global poverty” (The Nobel Prize, 2023).

According to its proponents, the main benefit of the RCT approach stems from its ability to provide empirical, objective and unbiased evidence through the isolation and quantification of the effects of development interventions through which, it is presumed, policymakers will be better able to make informed, unbiased decisions and ensure judicious use of limited donor resources in their efforts to reduce poverty. RCTs thus appeal to a broad array of stakeholders, from donors and policymakers to academics and practitioners, and are increasingly implemented in places targeted for poverty intervention (Bédécarrats et al., 2019). At the same time, nascent critiques point to ethical concerns of quantitative practices, such as “datafication” in international development, highlighting their extractive and commodifying tendencies (Cieslik and Margócsy, 2022). Others argue that RCTs and similarly privileged (quantitative) methods often used in international development fail to respect the dignity of those they are intended to benefit (Abimbola, 2023). These critiques resonate with a growing body of research which draws attention to the ethical dimensions of quantitative research methods (Cortina, 2020; Zyphur and Pierides, 2017, 2020) and practices of quantification (Islam, 2022; Islam & Greenwood, 2022). Taking as a starting point that quantification inherently concerns questions of ethics (Espeland and Yung, 2019), such work challenges the assumed neutrality and objectivity of quantification and exposes questions of values and power inherent in these practices.

In this article, we build on the intersections of these debates to further advance current understandings of the ethical dimensions and implications of quantification in international development, looking specifically at RCT methodology. This

contribution is needed because most existing critiques of RCTs in development, arising primarily from within economics and development studies, target their microlevel focus, prioritization of the empirical over theoretical, and methodological limitations (e.g., Kvangraven, 2019), related to discrete aspects such as bias and external validity (e.g. Dimova, 2019). While important, we contend that approaching RCTs as a social practice of quantification enables us to unsettle the *logic-then-ethics* (Zyphur and Pierides, 2020b) priority underpinning these critiques, thus opening space for needed ethical analysis of RCT methodology. Accordingly, building on existing debates on the ethics of quantification (Islam, 2022; Zyphur and Pierides, 2017, 2020; Islam and Greenwood, 2022; Cortina, 2020; Espeland and Yung, 2019) and responding to calls for the integration of ethical considerations in addressing grand challenges (Jain, Kourula and Riaz, 2022), we critically examine the ethics of RCTs, here understood as a social practice of quantification in poverty alleviation and international development. Our interest here is to go beyond a focus on the ethics *in* RCT methodology, usually understood as compliance to established ethical standards and guidelines, and explore the ethics *of* RCT methodology (see Islam and Greenwood, 2022), thus examining the implications and consequences of their procedures and the worldview they sustain.

Our critical examination of RCTs is informed by decolonial perspectives. While there is a growing interest in decolonial scholarship in critical streams within both international development (e.g. Kapoor, 2023; Melber et al., 2023; Patel, 2020) and management studies (Alcadipani et al., 2012; Allen and Girei, 2023; Dar et al., 2021; Hamman et al., 2020; Jammulamadaka et al., 2021; limki, 2018; Prasad, 2003), the contribution that decolonial scholarship offers to ethical analyses of quantification remains broadly unexplored. Decolonial scholarship is a heterogeneous family of perspectives that share a commitment to unmask and contrast coloniality, broadly understood as an “octopus constituted by hetararchies of domination, control, and exploitation” (Ndlovu-Gatsheni 2015, p. 487), grounded on the same racial/racist hierarchy that fuelled colonialism. Coloniality is thus the most general form of domination that maintains and sustains a Euro-North American-centric modern world (Quijano, 2000). Importantly, decolonial scholarship emphasises that coloniality is not a consequence of modernity, but rather it constitutes it, it is its darker side, and it names the experiences and perspectives of those who have been subjected, through various historical epochs, to the changing standards of modernity (Fanon, 2001; Ndlovu-Gatsheni, 2013). In this sense, coloniality survives colonialism (Maldonado-Torres, 2007), perpetuating and expanding its worldview, logics and practices in our current world.

By bridging debates on the ethics of quantification with decolonial thought, we aim to enlighten the contribution that decolonial scholarship offers to critiques of quantification coming from different fields, such as international development and business ethics. In doing so, we also aim to contribute to a growing body of interdisciplinary scholarship employing decolonial perspectives to unveil the reproduction of lingering colonial legacies in knowledge production, within and outside academia and to imagine alternatives.

More specifically, this study makes two intertwined contributions. Firstly, it enlightens novel ethical dilemmas inherent in RCTs in international development, which go beyond highlighting their discrepancy with established ethical guidelines (see, for

instance, Abimbola, 2023). While we agree that these existing concerns are important, our study suggests that RCTs' ethical dilemmas lie in their epistemological and ontological reliance on and complicity with coloniality, and as such, they reproduce the colonial difference, contributing to the de-humanisation and dispossession of those they claim to help. Secondly, by developing a decolonial analysis, we contribute to advancing ethical critiques on quantification as a social practice. Existing studies have already pointed out that quantification is performative and that, rather than representing, constructs realities (e.g., Mennicken and Espeland, 2019; Islam, 2022). Yet, which realities do they construct and for whose benefit? This study suggests that the quantification of the social perpetuates the divide between humans and the 'Other', thus ultimately reproducing coloniality. Fundamentally, by exposing the colonial underpinnings of modernity and its quantitative practices, we demonstrate how modern practices of quantification operating across colonial power relations, such as RCTs, rely on and reproduce the colonial difference, contributing to ongoing conversations addressing the ethical stakes of knowledge production and (de)coloniality (Banerjee, 2021; Naude, 2019).

Our paper will develop as follows: first, we briefly trace the rise of RCTs in development, establishing the scope of their influence. In the following section, we engage literature on the ethics of quantification, including in the context of RCTs and international development. We then introduce our analytic frame, highlighting decolonial concepts that inform our analysis. Next, drawing on examples of RCTs from academic and grey literature, we illustrate how RCTs' processes of quantification -- capture, specification, and appropriation (Islam, 2022) -- enact the coloniality of being, knowledge, and power. In the ensuing section, we show how RCTs, through their performativity, (re)produce coloniality. We conclude the article by discussing possible avenues to contrast the logics of coloniality in research and suggesting future research trajectories.

2 Background: The rise of RCTs in international development

With origins in the field of medicine, RCTs have become the "gold standard" for evaluation in international development over the past several decades. Their rise to prominence can be attributed to the neoliberalisation and associated fragmentation of the field of development aid over the 1980s and 1990s (de Souza Leão and Eyal, 2019), which created the conditions for RCTs to flourish. Leading proponents of RCTs, or randomistas, offered their method as a pragmatic alternative to heated debates on aid and development effectiveness, eclipsing questions of whether aid (in the large, programmatic sense) works and focusing instead on micro-level interventions. An RCT targets narrow, concrete, answerable questions and, by comparing the results of the programme and control groups, aims to establish a causal link between the intervention and the identified outcome variables (Bédécarrats Guérin, and Roubaud, 2019). The strict adherence to procedure, grounded in mathematical theory, gives way to claims of mechanical objectivity, neutrality, and disciplinary rigor. The underlying assumption is that what worked in one place can work in different places. Thus, by scaling up specific interventions that RCTs proved effective, it is believed possible to address poverty alleviation at a global scale. In addition to their focus on concrete interventions at the household, school, or individual level, RCTs -- with their emphasis on measurable results, based

on faith in numbers -- offered a new way to justify development projects to donors and demonstrate their return on investment.

At the same time, RCTs offer a simplicity that appeals to policymakers; through randomisation and simple comparison of averages, they can generate what is perceived as trustworthy evidence that is easily translatable (Bédécarrats Guérin, and Roubaud, 2019). Further, their utility is not restricted to a single sector; RCTs can be applied to a range of fields, from agriculture and microfinance to health and education. With finite resources to address development challenges, the argument goes, RCTs are the most rigorous and reliable method for determining what is effective and thus where to target limited resources. While each independent RCT may not effect change at the policy level, the accumulation of evidence over time, through multiple RCTs, will eventually influence policy and ultimately solve development challenges (Banerjee and Duflo, 2013). Thus, the fact that they appeal to a variety of actors and are able to respond to different agendas helps us understand their widespread adoption in the last two decades, consistent with broader trends in the embrace and valorisation of quantification in society (Mau, 2019; Porter, 2020).

Ideologically, RCT methodology has come to dominate the development policy and evaluation field, proliferating funder, implementer and government spaces (Bédécarrats et al., 2019; Ouma, 2020). Alongside this, scholars have pointed to the emergence of a lucrative RCT industry over the past decade, amounting to hundreds of millions of dollars, numerous organisations, and tens of thousands of individuals involved in RCT implementation across the globe (Bédécarrats et al., 2019). RCTs also mobilise new forms of expertise, reshaping development knowledge and the actors involved in its production; in short, RCTs (and experimentation) “are remaking the connections between individual actions, antipoverty interventions and the programming of development” (Webber and Prouse, 2018, p. 183).

3 Ethics of quantification and the challenge of modernity

Our study of RCTs builds on existing debates on the ethics of quantification (e.g. Espeland and Yung, 2019; Islam, 2022), which draw attention to the political and ethical dimensions of the “production and communication of numbers” (Espeland and Stevens, 2008, p.401). Such debates are situated within a broader study of quantification, which, for many years, has explored and revealed the performativity of numbers, that is, how they shape the world and how individuals relate to it. While most notably focused within sociology, studies of quantification span various domains of social life and organization, including the realms of administration and governance, democratic rule, economy and economization, and the personal, among others (Mennicken and Espeland, 2019). In the context of business and management, quantification has received arguably the most attention in accounting, where researchers have, for example, situated accounting practices historically to demonstrate how they function to construct “governable” individual subjects (Miller and O’Leary, 1987), explored quantification in colonial administration (Power and Brennan, 2022), and in development NGO management (Girei, 2015, 2023).

Such studies highlight the inherent sociality of quantification, how it is “fundamentally social -- an artefact of human action, imagination, ambition, accomplishment, and

failing” (Espeland and Stevens, 2008, p. 431) and, in doing so, reveal its ethical implications and possibilities. As a practice that is used to evaluate merit, allocate limited resources, and represent identities, quantification concerns questions of fairness, rights, and obligations of society and thus is fundamentally a matter of ethics (Espeland and Yung, 2019). The recognition of this has led to a growing body of work within and beyond business and management studies that engages ethical questions and implications of quantification. In examining the ethical dimensions of numbers, such work has demonstrated how practices of quantification have the capacity to shape and constrain opportunities, challenge or reinforce existing power structures, and render people and objects (in)visible (Espeland and Yung, 2019; Islam, 2022, Power and Brennan, 2022). Other work has explored the ethics of quantification in specific domains, for example, in corporate environmental discourses (Järvinen et al., 2022) or in the context of metrics and business ethics (Islam and Greenwood, 2022). Another important focus in ethical considerations of quantification concerns quantitative *research* specifically (e.g., Cortina, 2020). Here, scholars have highlighted how the assertion that quantitative research represents social realities objectively and neutrally is due to researchers’ (and positivism’s more generally) inability to acknowledge the value-laden dimension of their research as well as their active role in constituting the social realities they claim to represent (Zyphur and Pierides, 2017, 2020).

Within the domain of international development, research has begun to expose the (un)ethical dimensions of quantification and quantitative research (though not necessarily framed around the “ethics of quantification”). Abimbola (2023), for example, writes about the failure of “evidenced-based” global health practices and methods, rooted in quantification, to respect the dignity of patients as knowers, thus reinforcing epistemic power imbalances and undermining health equity. Others have challenged the supposed novelty and promise of datafication in international development, drawing on historical examples to reveal long-standing patterns of data extraction, accumulation, and commodification in service of (colonial) exploitation (Cieslik and Margósy, 2022). Regarding RCTs specifically, critics writing in and from the African context have described RCTs as a “manifestation of imperialistic tendencies among economists” (Muller, 2020), which perpetuate a long history of involuntary and unethical experimentation on Africans (Hoffman, 2020; Ouma, 2020).

Indeed, practices of quantification were central to the project of colonisation and, more specifically, to colonial governance. Through their study of annual reports of the British South Africa Company, Power and Brennan (2022) illustrate how quantification, mobilized through accounting practices, contributed to the dehumanization of native Zimbabweans. In doing so, they challenge the supposed neutrality of tools such as annual reports, revealing how they instead functioned to sanitize and mask exploitation. Other work has established connections between statistical practices and colonial governance, for instance, demonstrating how the British, through census activities in India, created new social categories to facilitate colonial control, which in turn served to construct or reify damaging notions of difference (e.g., caste) (Cohn, 1996). Ultimately, the expansive quantification of human experience in service of colonial governance facilitated the emergence of what Kalpagam (2010) describes as a new quantificatory episteme, establishing new domains for intervention and helping to shape the modern statistical worldview.

In addition to highlighting the ethical dimensions of quantification during colonisation, such research underscores how colonised contexts (which largely overlap with places targeted for development and poverty alleviation) have a particular relationship to modernity and its practices of quantification. While extant literature on the ethics of quantification understands quantification to be a core feature of modernity, facilitating a “peculiarly modern ontology” (Espeland and Stevens, 2008, p. 432), it has thus far not engaged with the ways in which modernity is constituted by coloniality, and the associated ethical implications of this particularly across colonial power relations. Further, while research on quantitative practices in the domain of international development has importantly highlighted ethical concerns, it remains relatively marginalised,ⁱ demonstrating the need for continued systematic investigation of the ethics of quantification in development. To address this, we draw on decolonial critique, which recognises coloniality as the flip side of modernity, to analyse the ethical dimensions of RCTs in development.

4 On the contribution of decolonial scholarship

As previously established, quantification is a distinctive feature of modern science and many of the existing critiques of quantification in management and organisation studies imply a critique of modernity/rationality and their conceptualisation of knowledge and truth. Decolonial scholarship, however, problematises Western critiques of modernity/rationality, for their firm grounding on European subjects and the history of European ideas, and their failure to engage the “colonial difference” (Mignolo, 2002), a cardinal anchor of decolonial thinking. This is understood as both an organising principle of the current geopolitical order and an epistemic location (Mignolo, 2002, p. 90).

With regard to the former understanding, the colonial difference refers to the experiences of modernity of “the damnés” (Fanon, 2001), i.e. those who, depending on the historical moment, are constructed as needing to be civilised, modernised and developed, thus “those who have been, and continue to be, subjected to the standard of modernity (Ndlovu-Gatsheni, 2015, p. 488). Here modernity is conceived as a constructed and changing set of coherent narratives elevated as universal truth, that benefits those that sustain it “through knowledge and war, military and financial means” (Mignolo, 2018:105); while coloniality is its darker and hidden side, made of control, domination and exploitation. Coloniality is not a consequence of modernity, it is constitutive of it; from a decolonial perspective, it is not possible to understand modernity without understanding coloniality and vice versa (hence the descriptor “coloniality/modernity”). The colonial difference, then, refers to a principle that divided the coloniser and the colonised, the conquerors and the conquered and continues to divide those who shape and enjoy ‘progress’ and those for whom, that progress, means dispossession and oppression,

The second articulation of the colonial difference sees it as an epistemic location. Here the colonial difference refers to all those subaltern epistemic locations whose existences have been denied or belittled, and subjected to the western gaze and standard. By placing the colonial difference as the privileged epistemic location, decolonial scholarship aims not only to undo the totalising claims and universalist pretensions of modernity (Mignolo, 2010), but also to emphasise the epistemic value of the locus of enunciation. As Grosfoguel (2007) notes, in Western science and

philosophy, the ethnic/racial/gender/sexual epistemic location is hidden and concealed from the analysis, which allows the generation of narratives about universal truth and knowledge. Thus, situating the colonial difference as the privileged epistemic location means enlightening the geo-politics and body-politics of knowledge (Grosfoguel, 2007), and moving from modern universal knowledge toward decolonial/pluriversal knowledges.

The colonial difference lies at the heart of coloniality. This is conceptualised as a matrix of power, an entanglement of multiple and heterogeneous global hierarchies (“heterarchies”) of sexual, political, epistemic, economic, spiritual, linguistic and racial forms of domination and exploitation organised around a racist hierarchisation of humanness (the colonial difference) (Grosfoguel, 2007; Quijano, 2000), thus perpetuating the divide between “being and not-being human” (Maldonado-Torres, 2016: 19) in our current world.

Coloniality does not exist only at a geo-political level (global coloniality/coloniality of power), its structures and dynamics of oppression, exploitation and domination also shape identities (coloniality of being), and ways of knowing and knowledges (coloniality of knowledge). These different domains of coloniality should not be understood as silos, but rather as interlocking threads of the same global-scale mesh, the same matrix of power which structure the day-to-day life of citizens across the globe, although in very different manners depending on the coordinates determined by the colonial difference. These three notions (coloniality of being, knowledge and power, see also Jimenez et al., 2022)) represent entry points for a decolonial analysis of RCTs, and, more broadly, of quantification practices.

In the following section, we draw on and expand on these notions to develop a decolonial ethical critique of RCT methodology. While this is not an empirical analysis per se, and it is beyond this article’s scope to examine the merits or limitations of particular RCT studies, we draw on examples of RCTs so as to identify the ethical stakes of their methodology from a decolonial perspective. While the sector and context may vary across the RCT examples we employ, the methodology underpinning them is considered universal and strictly adhered to in the various settings where it is employed. Our analysis and critique focus on the practices of quantification enacted by RCTs. As we shall see, decolonial notions of colonial difference and modernity/coloniality shed light on distinctive and novel ethical dimensions and questions of quantification.

5 Revealing the (un)ethics of RCTs

In this section, we structure our analysis around Islam’s (2022) three-fold model of quantification, which identifies three core sub-processes of quantification -- capture, specification and appropriation. As we shall see in the following pages, each of them enlightens different ethical issues at stake, which can be analysed from different perspectives and normative models. We engage with these three sub-processes employing the analytic of coloniality and its threefold constitutive arms (being, knowledge and power) in order to demonstrate the ways through which RCTs and their quantification practices enact coloniality and reproduce the colonial difference.

Illustrating Capture

Capture concerns the process through which, when quantifying social realities, the variables under study are artificially detached from the lived experience where they originated and exist (Islam, 2022). As we have seen in the previous pages, at the core of RCTs is the quantification of the lived experience of the target population. For instance, RCTs have been widely used to assess the effectiveness of interventions to foster girls' and women's empowerment. Putting aside questions of how women's empowerment comes to be a focus of development interventions in the first instance, the assumption here is that women's empowerment is something that can and should be quantified, that it is indeed possible to quantify something as complex, processual, and elusive as "empowerment." One RCT study from Uganda, for example, examined the impact of a policy intervention combining vocational training with information on reproductive health on girls' economic and social empowerment (Bandiera et al., 2018). A footnote in the appendix of the published study results explains how women's empowerment is quantified. It is derived from measures on economic empowerment, quantified in terms of entrepreneurial ability and employment status; control over one's body, quantified through true/false statements about HIV, pregnancy, and sexual health knowledge; and beliefs and aspirations, operationalized through a "Gender Empowerment Index" that entails questions about who in the household should be responsible for various activities, as well as a question on suitable age for marriage for a woman. Thus, through a series of approximately 30 questions, women's empowerment becomes a "thing that holds," a quantifiable variable that is assessed at several points before and after the intervention.

In another example from South Africa (Dowdall et al., 2021), researchers measured the impact of a reading intervention on child development. In addition to the operationalisation of child development through traditional scales, this study also relied on observation of child-caregiver interactions to assess outcomes such as caregiver discipline, mental state talk, and sensitivity with the child. Thus, through the "scoring" of video recordings by "blind coders", highly sensitive and subjective phenomena come to be concretised and represented in numeric form.

Capture: enacting the colonality of being

RCTs, in order to show their predictive value, must be based on a small number of discrete variables that are measured and compared across different groups. Units of analysis are necessarily narrow, typically the individual or other small groupings (households, schools). Results are taken to emerge from the summing of discrete micro-events, linked hierarchically and causally. The parcellisation of social realities, and the consequent reduction of the social and subjectivities to individual, discrete and measurable units which underpin RCTs, requires the disjoining of individuals from their contexts (material, socio, cultural and historical) and, more generally, from their social identities and fabric. By their very nature, RCTs transfigure human beings into anonymised figures, resulting in objectification and dehumanization of the very groups that development is ostensibly aiming to help. For instance, the detachment of the experience (e.g. empowerment) from the subject and the contexts where it occurs might produce experiences of alienation, which would counter or even defeat any "objectively measured" empowerment.

Objectification is a dehumanising process because it denies human beings self-expression and self-determination, rendering them tools for someone else's

purposes (Nussbaum, 1995). Within a quantitative research process, such as an RCT, some human beings (the researchers, the knowers) maintain their humanity, and are able to exercise their self-determination and agency. Other human beings become and are treated as objects, and within RCTs, this happens through the enactment of different objectifying strategies. For instance, objectification happens when “the objectifier treats the object as lacking autonomy, self determination and [...] agency (Nussbaum, 1995, p.257). This was a widespread and legitimised research practice during colonial times, where colonial “Others” were constructed as objects of research, with dehumanizing consequences: “the objects of research do not have a voice and do not contribute to research or science...an object has no life force, no humanity, no spirit of its own, so therefore ‘it’ cannot make an active contribution” (Smith, p. 64). This kind of objectification seems unproblematically implied in modern practices of quantification, including RCT methodology. For instance, a recent systematic review of RCTs reveals that the great majority of research participants were not aware they were taking part in a research/experiment (Hoffman, 2020; Jörget al., 2016). Thus, the RCT, embedded in global (colonial) power relations, acts as an objectifier that, by depriving participants of the possibility to make an informed choice on equal terms, treats them as objects lacking autonomy, self-determination and agency. This, we contend, represents a fundamental (un)ethical dilemma of RCTs.

But perhaps the aspect that makes these denials most conspicuous is the random allocation of human beings to different groups, which, as discussed previously, is a distinctive feature of RCT methodology. Hoffman (2020), drawing on the fact that informed consent was included in the International Covenant on Civil and Political Rights as one of the “inalienable rights” of human beings, points out that “involuntary experimentation arguably violates the personhood of some of the world’s most vulnerable people – impoverished black and brown people, many of whom are women” (p. 8). It should not be overlooked that “even in the US nearly all RCTs on the welfare system are RCTs done by better-heeled, better-educated and paler people on lower income, less-educated and darker people” (Deaton, 2020, p. 43). Such arguments highlight how RCTs effectively continue reproducing the hierarchies created by European colonisation, and based on the assumed level of humanity of the identities in question, where “the ‘lighter’ one’s skin is, the closer to full humanity one is, and viceversa” (Maldonado-Torres, 2007, p. 244). In this sense, Maldonado-Torres (2016) speaks of a “sub-ontological colonial difference” (p.16), a product of the coloniality of being, which deprives those on the colonized side of the colonial difference of their humanity and renders them “objects” of study rather than subjects. This is precisely the logic at the heart of Césaire’s assertion that “colonization = ‘thingification’” (2000), where the colonised subject is reduced to a “thing”, enabling their objectification.

Similar arguments have been proposed by postcolonial scholars, who have widely debated how the Other has been systematically and instrumentally constructed as ontologically different from Europeans (Said, 2003; Loomba, 1998; Kebede, 1994; Mudimbe, 1988). Such an ontological alterity, dehumanisation of the Other, has justified and served, for centuries, systems of oppression and domination such as slavery and colonialism, which, importantly, were also supported by the endless “scientific” evidence that colonised people were incapable of being in charge of their own lives. RCT methodology appears to be grounded on a similar postulate: in their

effort to better the lives of ‘the poor’ through evidence-based scientific knowledge, they turn ‘the poor’ (research participants not accidentally located in the Global South) into objects, depriving them of their agency. In this sense, capture in RCTs embeds and enacts the coloniality of being, and thus represents a fundamental ethical challenge of RCTs.

Illustrating Specification

Specification refers to the process by which choices are made as to how something should be quantified, drawing attention to the role of researchers in the various stages of the research process itself, starting with the definition and operationalisation of the variables under study. For instance, empowerment, a concept often included in RCTs in the Global South, is conceptualised, operationalised and measured in many different ways. A recent study has tracked how measures of “women empowerment” in the Global South have changed from the 1960s until now, highlighting significant (synchronic and diachronic) variations in the theoretical and methodological frameworks employed to measure it (Desai et al, 2022). A systematic review of the literature reached a similar conclusion, highlighting the lack of consensus on how to measure women’s empowerment in the Global South (Pratley, 2016). These findings weaken claims regarding RCTs’ objectivity and methodological rigour and expose the variety of “specification” processes underpinning different studies. In this regard, Zyphur and Pierides (2017) point out that measurements, rather than being objective and universal, are produced by researchers themselves, on the basis of their values and interests.

The crucial point for us is to highlight that the specification process is based on primarily Western-based researchers’ choices on what to include and what to exclude in the measurement, which are inevitably enactments of their overarching epistemological and theoretical frameworks. Furthermore, while the final measures themselves may be disclosed, the processes by which these measures are determined, including decisions about what to include or exclude in the measurement, are not made transparent. Indeed, when RCTs drive the assessment of development interventions, a wide array of social variables are quantified and measured according to operationalisation processes which often are not fully disclosed in published outputs (see for instance Banerjee, Karlan and Zinman, 2015). Even in cases where there may be more disclosure, for example, in the child development study described above, which goes further in addressing this through their published study protocol (Dowdall et al., 2017), the specification process is usually confined in the hands of the “expert”, while the participants are often excluded from such a process.

Specification: enacting the coloniality of knowledge

The ethical stakes of specification concern dynamics of inclusion and exclusion enacted by RCTs, which affect both the outcome (e.g. the metrics chosen) and those involved (e.g. researchers and participants) (Islam, 2022). A decolonial lens reveals such dynamics of inclusion and exclusion as reflective and constitutive of colonial epistemic hierarchies. Fundamentally, specification may be understood as an epistemological process related to how we know. As we discussed earlier, RCTs and their quantifying practices are grounded in and validated by “modern science”, or what Ndlovu-Gatsheni, 2015, p.488) call “a singular Euro-North American-centric epistemology that claims to be universal, disembodied, truthful, secular, and scientific”. In unveiling the constructedness of the western scientific canon,

decolonial scholars, such as Mignolo (2007), invite us to reflect on what it has meant for “the wretched of the earth” (Fanon, 2001). In other terms, they invite us to think about the construction of the universal, objective and neutral scientific canon from the perspective of those on the other side of the colonial difference. From this perspective, what we can observe are centuries of repression and appropriation of a myriad of knowledge systems, constructed as localised, particular, irrational, lacking and endlessly framed through the western gaze. Mamdani speaks of “history by analogy”, where the western/modern/capitalist canon is considered both an analytical concept and a universal value, while the “Others” are framed as residual and make sense only with reference to it (2004, p.9-11). In this sense, the heterogeneous decolonial debates intersect and overlap with Pan-Africanist scholarships in their shared commitment to a new epistemic foundation, where “nobody is at the centre of human experience, and there is no human who could be defined as the centre of creation (Mudimbe, 1988, p.194).

Drawing on the notion of the colonality of knowledge, specification processes enacted by RCTs, seem to reproduce patterns and structures of knowledge production forged through colonality and premised on the colonial difference, which determine who is viewed as a producer and bearer of knowledge and what ways of knowing and kinds of knowledge are (de)valued (Cook-Lundgren, 2022). As discussed previously, choices about how to measure are grounded in and legitimised by a system of knowledge (modern/western science) that, on one side, claims objectivity, neutrality and universalism as its guiding principle, and on the other, perpetuates the repression of alternative ways of knowing. Importantly, as discussed earlier, such experiments, are usually funded and implemented by western actors, legitimised to make choices and decisions for those inhabiting spaces targeted for development, and who are excluded from these knowledge generation processes.

The notion of colonality of knowledge thus raises questions which intersect epistemological and political issues, calling us to reflect on “who generates which knowledge and for what purpose” (Ndlovu-Gatsheni, 2015, p.490). Focusing on the African continent, scholars have suggested that the continent is “saddled with irrelevant knowledge” (Ndlovu-Gatsheni, 2015, p.490), where even national researchers, educated from and within the assumedly universal western episteme, have “little capacity to work in surrounding communities but who could move to any institution in any industrialised country, and serve any privileged community around the globe with comparative ease” (Mamdani, 1993, p.15). Small groups of powerful actors are making decisions about where to deploy RCTs, delineating “populations” and “samples” to target, defining categories and measures for study. All of this contributes to framing or shaping reality (Islam, 2022), a reality which we argue reproduces the colonality of knowledge. Specification, reimagined through the colonality of knowledge, thus reveals ethical challenges related to the politics of knowledge production and enduring knowledge hierarchies that valorise particular ways of knowing and forms of knowledge – and their “knowers” – while marginalizing others.

Illustrating Appropriation

Appropriation concerns the labour of “making numbers” as well as the utilisation of the metrics and data produced by RCTs. As alluded to earlier, the “work” of RCTs entails numerous organizations and thousands of individuals across the globe, and

tends to adhere to a “strict division of labour” between researchers, project managers, and field staff (Bédécarrats et al., 2019a; Bédécarrats et al., 2019b). More concretely, RCTs are typically commissioned or conceived of by an array of donors, academics, and/or policymakers in the global North, who then work with organizations in places targeted for development to implement the RCT. For example, the authors of the Uganda study mentioned above are almost exclusively affiliated with Global North institutions such as the World Bank and the London School of Economics. The labour required to implement an RCT is significant, as it entails translation and testing of survey instruments, lengthy interviews with thousands of participants per study, and follow up interviews for “quality checks,” – typically carried out by residents of those places, often hired on precarious contracts. A study examining the experiences of staff involved in implementing an RCT in Botswana described job insecurity owing to short-term contracts as a challenge to RCTs (Bonsu et al., 2017). This is consistent with the corresponding author’s experiences of working on RCTs in Kenya and Rwanda, where the individuals doing the critical work of “data collection” were hired on temporary contracts at near subsistence wages. Following data collection, the “data” is then fed back, often via a research manager or data analyst, to the academics or other “experts” leading the RCT study, for analysis and packaging for academic, policymaker, or practitioner consumption. Thus, the people who provide the “data” as well as those who “do” most of the work of the RCT (i.e., data collection) are removed from design and analysis questions, and also data ownership.

Appropriation: enacting the coloniality of power

The ethical stakes of appropriation concern the “work” of RCTs as well as who uses, or owns, the measurements and for what purposes. While RCTs ostensibly function to inform policy decisions, precisely how this happens – or whether it happens at all – is less readily apparent. What is apparent is the way in which data generated through RCTs is appropriated for particular uses that have nothing to do with the people RCTs are purporting to help. For example, the “data” generated through RCTs is written up into academic publications for outlets in the Global North that facilitate promotion and tenure for the researchers involved (Opalo, 2024). While this, of course, is not the stated aim of RCTs, it nonetheless highlights one of the ethical stakes of appropriation.

Related to the notion of appropriation is the “expropriation of the labour of making numbers” (Islam, 2022: 202), that is, the countless people employed, often on precarious terms, to collect the information that becomes quantified. RCTs (and their stewards) thus exploit low-wage labour in the contexts where they are carried out in service of “making numbers.” Furthermore, the expropriation of labour involved in RCTs in the Global South raises distinctive ethical concerns, as it reproduces existing inequalities between national and international researchers. Previous studies have argued that research in the Global South tends to disproportionately benefit researchers from high-income countries, especially in terms of leadership and control of the research process, authorship and international profile (Carbonnier and Kontinen, 2015; Panin, 2022). National researchers’ involvement is often concentrated in data collection, with little or no influence over the other phases and or recognition for their labour, which led some authors to speak about “glorified field worker” (Parker and Kingori, 2016, p.4) and “ghost researchers” (Turner, 2010) to

highlight dynamics of exclusion and appropriation enacted by international research partnerships in the Global South.

Such inequalities and hierarchies that constitute the ethical stakes of appropriation in RCTs may be better understood as part of the coloniality of power. A key dimension of coloniality of power is the consolidation of capitalism as the predominant system and ideology of economic relations (Quijano, 2000). This capitalist world-system, inaugurated through and with colonialism, instituted a global racialised labour hierarchy based on the colonial racial classification of the world's population. Here again, the colonial notion of race was central to the articulation and organization of different forms of labour, underpinning the assertion that “race and racism are constitutive of capitalist accumulation at a world scale” (Grosfoguel, 2007, p. 218). This capitalist system entailed several related features: first, an international division of labour where capital in the metropole organised labour in colonised places, facilitated through authoritarian and coercive means; second, a racialised hierarchy in which whiteness was associated with the capacity for productive activity (i.e. work qua waged labour) and administrative activity, e.g. occupying “high-order positions in colonial administration” (Quijano, 2000, p. 537), while non-European races were associated with nonpaid or nonwaged labour. Colonised populations were coerced to work under exploitative conditions in service of European wealth. Simultaneously, colonisation entailed the destruction of African systems of economic relations in order to compel participation of the colonized, as suppliers of free or cheap labour, in the European capitalist system (Oyedemi, 2020). The coloniality of labour, then, organized around race, determined what Quijano (2000) describes as the social geography of capitalism, authorising who is capable of “mind work” and who is relegated to “menial labour”. Further, this technology of domination and exploitation – in its capacity to make race and labour appear naturally associated – has been remarkably enduring, continuing to shape global economic relations and underpinning the terms of engagement between imperial (or formerly imperial) powers and once-colonised places.

This orientation provides a relevant frame through which to position the articulation of foreign experts, national researchers and research participants in RCTs. More specifically, RCTs perpetuate the international division of labour, organised according to the colonial difference. On one side, there are the experts/experimentalists, typically western-based researchers, who control and use the data produced through RCTs to further legitimise their status (e.g. through publications, influencing policies, networking with powerful multilateral actors). On the other side are the national researchers and those employed to collect data, whose labour is expropriated and rendered invisible, and research participants who are even further removed from (and objectified by) this process. Regarding research participants specifically, despite the fact that data and numbers would not exist without them, they neither “own” nor directly benefit from them. Considering how participants' roles are constrained within RCTs, and their lack of voice and agency discussed earlier, we may understand RCTs to appropriate and expropriate “data” from their participants.

6 The performativity of RCTs: (re)making the colonial/modern world

In the previous section, we have highlighted the ethical stakes of RCTs by illustrating how, through processes of capture, specification, and appropriation, they enact the coloniality of being, knowledge, and power. This relates to what Islam (2022) terms retro-performativity to describe the way that numbers, rather than represent an ex-post vision of a reality “out there”, function as artefacts that cannot be separated from the practices employed to produce them. In this section, we expand on the issue of performativity – the idea that quantification shapes or constitutes social phenomena (Mennicken and Espeland, 2019; Islam, 2022) – to further illustrate how RCTs enact a particular kind of reality – one grounded in colonial difference, which reproduces and sustains coloniality/modernity and its structures of oppression and domination. Here we focus specifically on Islam’s (2022) notion of telic-performativity, which describes the ways in which processes of quantification shape future scenarios and possibilities, for instance, by employing numbers to designate targets or goals. Drawing on this understanding, we argue that telic-performativity is not only a constitutive aspect of RCTs -- indeed, shaping the direction of development agendas, on the basis of objective and neutral scientific evidence, is RCTs’ main, explicit aim – but also underpinned and constrained by colonial difference.

In their influential book, RCT pioneers Banerjee and Duflo (2013) see the persistence of poverty inescapably linked to wrong policies and suggest that RCTs, because of their scientific rigour, if accompanied by “openness to accepting the verdict of the data” (p. 35), represent a more effective way to fight poverty globally. They portray RCTs as neutral tools that provide data that speak for themselves, issuing clear verdicts on what works and what does not work in poverty alleviation. However, by situating RCTs and related narratives of poverty alleviation policies within the frame of coloniality, we see that RCTs and the “data” they generate, rather than being neutral and objective, significantly contribute to shaping future development scenarios imbued in coloniality/modernity. To support this claim, below, we focus on the denial of self-determination, and the perpetuation of the myth of the superiority of Western civilisation. We will show that these two cardinal facets of coloniality/modernity are embedded in the policy-making processes envisaged by RCTs proponents and supporters, and in this way illustrate the simultaneous retro- and telic-performativity of RCTs.

As discussed previously, the denial of self-determination is a distinctive feature of the colonial difference that constructs some individuals as subjects with agency and others as incapable of determining their own future and in need of tutorship. This happens, for instance, in the randomised allocation of participants, and their overall objectification, which shape retro-performativity. However, the denial of self-determination is even more conspicuous if we consider that the hypotheses tested through RCTs, which should provide clear directions to policy-makers, have been determined through a deductive process shaped and controlled by the researchers, who identify a question and various hypotheses/answers to the problem and determine which of these is the best. The idea that the question/problem could be formulated and understood in different terms (for instance, by the research participants/RCTs’ targets/“the poor”), or that the possible solutions might be multiple, multi-faced, shifting, and context-bound, are aspects not contemplated within this research design (Muller, 2020; Webber and Prouse, 2017). Similarly, the idea that the research participants might have their own views and thoughts on how

to address the question under examination is not accommodated within the epistemic hierarchy and method imposed by RCTs (Muller, 2020).

Banerjee and Duflo (2013) clearly state that RCTs are powerful tools “which give researchers, working with a local partner, a chance to implement large-scale experiments designed to test **their theories**” (p.14, emphasis added). These theories, once tested, should be used to inform policies that provide clear model behaviours of “the poor” through policy-making. In their view:

“The government (or a well-meaning NGO) should make the option that it thinks is the best for most people the default choice, so that people will need to actively move away from it if they want to. So people have the right to choose what they want, but there is a small cost of doing so, and as a result, most people end up choosing the default option” (p. 66)

From this quote, and many others in the book, poverty alleviation is conceived of as a reengineering of the various domains of societies, such as education, health, economy and so on, in a way that relies on passive acceptance of top-down policies. However, the problem the authors envisage in such an ideal process is the governments’ inadequacy and corruption (p. 235-264). A possible solution that they identify “to break the vicious cycle of bad institutions is to import change from the outside” (p.240), going as far as subcontracting to foreign powers, countries or cities, although they recognise that political leaders might not be willing to enter into such an agreement. It is beyond the scope of this article to analyse the strategies they identify to change the political and institutional contexts of “developing” countries (including Power to the People, p. 247). Here, our interest is to show that the ideological framework that supports and justifies RCTs, and the way policy-making is envisaged, rests on colonial difference, that continues to perpetuate coloniality/modernity and its corresponding inequalities. For instance, taking again as an example Bandiera et al.’s study (2018, p. 34), in their conclusion, the authors claim:

“Africa has been a laggard relative to other developing regions in terms of how quickly it is converging to the low fertility, late marriage and high career participation norms that characterize women’s lives in developed nations. There is thus a case to be made for cost effective programs like this to help women in Africa accelerate convergence towards these norms. What our results suggest is that such progress is possible.” (Bandiera et al., 2018, p.34).

This quote is interesting not only because it shows RCTs’ telic-performative intent (the possible progress for Africa) but also because of how such a progress is envisaged, namely a stringent convergence toward developed nations’ norms, values and lifestyles. The quote reveals the Eurocentric assumptions underpinning this particular study (though, we would argue, also characterizing much of mainstream international development), according to which African progress can only be possible if it converges towards “developed” countries’ models. Mobilized through the RCT, such assumptions take on a performative nature, helping to (re)make the world according to these Eurocentric/colonial/modern views.

Ultimately, a decolonial engagement with RCTs as a practice of quantification reveals how RCTs rely on, and reproduce, colonial difference. In other words, they require and construct “objects” to be studied and at the same time, through their performativity, they reproduce colonial difference and in doing so (re)make a colonial/modern world to be intervened upon by policymakers, practitioners, and others occupying the privileged side of the colonial difference.

7 Concluding reflections

In this paper, we have drawn on decolonial critique to highlight the ethical dimensions of a practice of quantification in international development – RCTs. Working specifically with the concept of coloniality/modernity, we have argued that RCTs enact the coloniality of being, knowledge, and power, which represents a fundamental ethical challenge. While previous research on the sociology and ethics of quantification has established that numbers make reality and can reinforce or challenge existing power relations (Espeland and Stevens, 2008; Espeland and Yung, 2019; Islam, 2022; Mennicken and Espeland, 2019), we advance these arguments by demonstrating how quantification enacts not just any reality, but a specific kind of reality in the context of RCTs – a colonial reality, which relies on colonial difference and reproduces the colonial matrix of power.

From a decolonial perspective, RCTs can be seen as yet another revitalisation and perpetuation of modernity/coloniality, where salvation (poverty alleviation/development) implies and requires western knowledge and intervention. This modern tale, however, conceals and disguises its darker side, namely the practices of subjugation (of human beings and ways of knowing) it implies and enacts. In this sense, decolonisation is a form of liberation and, as such, requires an “ethical commitment” to those oppressed and dispossessed by modernity/coloniality (Mignolo, 2018, p.139). This decolonial view offers interesting avenues to address existing calls for business ethics to question the scientism dominating the field, and to engage more deeply with its largely neglected liberating potential (Bell et al., 2020).

The ethical implications of this extend beyond the specific case of RCTs to practices of quantification operating across colonial power relations, whether targeting the Global South or oppressed communities in the Global North. Further, by highlighting the ethical challenges of RCTs, we show that even quantitative practices “centred on humans and their conditions” which attempt to “address relevant worldly problems on practical terms” (Zyphur and Pierides, 2017:, p.13-14) can remain ethically fraught, due to their embeddedness in coloniality/modernity. This suggests that attempts to render quantitative (business ethics) research more ethical simply by focusing on worldly problems and the human condition will remain insufficient if they do not attend to the colonial underpinnings of quantification.

Through our integration of decolonial perspectives and the ethics of quantification, we contribute to a growing literature in business ethics on the ethical stakes of quantification (Islam, 2022; Zyphur and Pierides, 2017, 2020; Islam and Greenwood, 2022; Cortina, 2020; Järvinen et al., 2022), most notably by exposing coloniality as the flip side of quantification’s modern ontology and epistemology, as well as its implications for quantification across colonial power relations. Further, we contribute

to ongoing debates within business ethics that seek to expose the coloniality and ethical stakes of knowledge production (Khan and Naguib, 2019; Naude, 2019) and of various instantiations of modernity such as CSR (Ozkazanc-Pan, 2023) and deliberative democracy (Banerjee, 2021). Lastly, through our systematic engagement with decolonial critique to expose the ethical limitations of RCTs, we join with critical development scholars working to reveal colonial continuities and ethical challenges in the contemporary practice of development (Abimbola; 2023; Cieslik and Margócsy, 2022; Hoffman, 2020; Ouma, 2020).

As Zyphur and Pierides (2019) remind us, taken for granted assumptions and practices of quantification are not “timeless or ahistorical,” but rather created by humans, a product of particular historical conditions. This insight is crucial, because it points to the possibility of their contestation and transformation. In the remaining paragraphs, we reflect on such possibilities, specifically what it means to think decolonially about ethics and quantification. To be clear, we are not advocating a universal grand solution to the colonial/modern problems of quantification, as doing so would be to reproduce the colonial logics we are writing against. Rather, following Jain, Kourula and Riaz (2022), we consider “humble solutions,” or perhaps more accurately, humble ideas, that might move us towards more ethical practices in relation to quantification and the grand challenges of our time.

One particularly fruitful concept offered by decolonial scholars is that of transmodernity (Maldonado-Torres, 2007), which may be understood as an “invitation to think modernity/coloniality critically from different epistemic positions...a radical dialogical ethics to initiate a dialogue between humans and those considered subhuman” (p. 261). A distinctive feature of transmodernity is, in fact, the centrality of “thinking from and with subalternised racial/ethnic/sexual spaces and bodies” (Grosfoguel, 2011), following “the intellectual guidance of the damnés” (Mignolo, 2007), of those positioned on the exploited and oppressed side of modernity. This implies ethical and epistemological approaches grounded on the acknowledgement that human beings, especially if marginalised or oppressed, are “the experts of their own condition” (Abdelnour and Abu Moghli, 2021, p. 11).

A second distinctive feature of transmodernity is the rejection of abstract universality, countered with the notion of “diversality” (Mignolo, 2007, p.90), which acknowledges the plurality of decolonial responses to Eurocentric modernity coming from different subaltern epistemic locations (Grosfoguel, 2011). Transmodernity, then, destabilizes western claims to universality and associated notions of expertise, replacing logics of control and domination with those of co-construction and reorienting us toward the perspectives and agency of the subaltern. This implies “an extraction from domination”, an active engagement with and enactment of the “*potentiality* of de-subjugation, the open possibility of liberation and reinvention (Abdallah, 2024, p.7). Decolonial perspectives offer a fertile ground for addressing business ethics neglect of its liberating potential (Bell et al., 2020), which we mentioned previously. In more practical and immediate terms, Tilley (2018) and Murrey and Jackson (2020) advocate for methods grounded in relationality and co-creation, challenging conventional researcher-researched relationships and taking seriously those typically subordinated or objectified by social science practice, including quantitative

research. Such a method implies relinquishing control and seeking alternate perspectives in terms of the questions we ask, the methods we choose to use, and what we do with our data. This does not necessarily imply a wholesale rejection of quantification, but it would imply a questioning and a letting go of quantification as we currently know and practice it. This is because a key commitment of decolonial scholars is to advance radically different perspectives “that displace Western rationality as the only framework and possibility of existence, analysis, and thought” (Mignolo, 2018, p. 17). Thus, drawing on the notion of transmodernity, future critical research on quantification and its ethics could explore, for instance, what quantification might mean or look like from different epistemic locations/cosmologies.

More broadly, decolonial perspectives suggest that coloniality traverses the life of us all, and there is not a privileged position to confront it. Doing research is always an exercise of power, and decolonial scholarship invites us to unsettle the colonial logics that are nurtured and perpetuated by our compliance with established conventions that regulate knowledge production (Abdallah, 2024). A way to unsettle those mechanisms is to engage with the worldviews, experiences and cosmologies of those on the oppressed side of the colonial difference, so as to unveil the logic and processes of oppression and destitution, and simultaneously advance novel and more just ways of knowing, being and naming.

ⁱ Interestingly, even in the few cases where these critiques seem to be received in the mainstream, such as Abimbola’s (2023) concerns around dignity, the response to this risks subsumption into the same epistemic model producing the indignity in the first instance. See, for example, IDinsight’s Dignity Initiative, which proposes quantitative evaluation of dignity through “rigorous measures of Felt Respect for Dignity” (IDinsight, 2022).

References

- Abdallah, C. (2024). Against mastery: Epistemic decolonizing in the margins of the Business School. *Management Learning*, forthcoming.
- Abdelnour S and Abu Moghli M (2021) Researching violent contexts: A call for political reflexivity. *Organization*.
- Abimbola, S. (2023). The art of medicine When dignity meets evidence. *The Lancet* 401(10374), 340–341.
- Alcadipani, R 2017 Reclaiming sociological reduction: Analysing the circulation of management education in the periphery. *Management Learning* 48(5): 535-551.
- Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., & Sulaiman, M. (2018). Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa. *American Economic Journal: Applied Economics* 12(1), 210-249.
- Banerjee, A. V. (2006) Making Aid Work How to fight global poverty—effectively. *Boston Review* 31(4).
- Banerjee, A.V. and Duflo, E. (2011) *Poor Economics: Rethinking Poverty and the ways to end it*. India: Random House India.
- Banerjee, A.V., Karlan, D., & Zinman, J. (2015). Six Randomized Evaluations of Microcredit: Introduction and Further Steps. *American Economic Journal: Applied Economics*, 7(1): 1-21.
- Banerjee, S. B. (2022). Decolonizing Deliberative Democracy: Perspectives from Below. *Journal of Business Ethics* 181(2), 283–299.
- Banerjee, S. B. (2022). Decolonizing management theory: A critical perspective. *Journal of Management Studies*, 59: 1074–1087.
- Bédécarrats, F., Guérin, I., & Roubaud, F. (2019a). All that Glitters is not Gold. *The Political Economy of Randomized Evaluations in Development. Development and Change* 50(3), 735–762.
- Bédécarrats, F., Guérin, I., Morvant-Roux, S., & Roubaud, F. (2019b). Lies, damned lies, and RCTs : A J-PAL RCT on rural microcredit in Morocco. Working Papers DT/2019/04, DIAL (Développement, Institutions et Mondialisation).
- Bell, E., Winchester, N. and Wray-Bliss, E. (2020) 'Enchantment in business ethics research', *Journal of Business Ethics*, 174(2), pp. 251–262.
- Bonsu, J.M., Frasso, R., & Curry, A.E. (2017). Lessons from the field: the conduct of randomized controlled trials in Botswana. *Trials* 18, 503.
- Carbonnier, G., & Kontinen, T. (2015). Institutional Learning in North-South Research Partnerships. *Revue Tiers Monde* 1(1), 149.
- Césaire, A. (2000) *Discourse on colonialism*. New York: Monthly Review Press.
- Cieslik, K., & Margócsy, D. (2022). Datafication, Power and Control in Development: A Historical Perspective on the Perils and Longevity of Data. *Progress in Development Studies* 22(4), 352–373.
- Chelwa, G. (2020). Pop Developmentalism in Africa. *CODESRIA Bulletin* 1, 3-5.

- Cortina, J. M. (2020). On the Whys and Hows of Quantitative Research. *Journal of Business Ethics* 167(1), 19–29.
- Cohn, B.S. (1996). *Colonialism and its forms of knowledge: The British in India*. Princeton University Press.
- Cook-Lundgren, E. (2022). Theorizing the persistence of local-foreign inequality in international development organizations through the analytic of coloniality. *Gender, Work & Organization* 30(2), 529-546.
- Dar, S, Liu, H, Martinez Dy, A, et al. 2021 The business school is racist: Act up! *Organization* 28(4): 695-706
- Deaton, A. (2020) Introduction: Randomization in the Tropics Revisited, a Theme and Eleven Variations. In Bédécarrats, Florent, Isabelle Guérin, and François Roubaud (eds), *Randomized Control Trials in the Field of Development: A Critical Perspective* (pp. 29-46). Oxford, 2020; online edn, Oxford Academic, 22 Oct. 2020
- Desai, S., Chen, F., Reddy, S., and McLaughlin, A (2022). Measuring Women's Empowerment in the Global South. *Annual Review of Sociology* 48, 507-27
- de Souza Leão, L., & Eyal, G. (2019). The rise of randomized controlled trials (RCTs) in international development in historical perspective. In *Theory and Society* 48, 383-418.
- Dimova, R. (2019) 'A debate that fatigues...: To randomise or not to randomise; what's The real question?', *The European Journal of Development Research*, 31(2), pp. 163–168. doi:10.1057/s41287-019-00198-3.
- Dowdall, N., Murray, L., Skeen, S., Marlow, M., DePascalis, L., Gardner, F., Tomlinson, M., Cooper, P. (2021). Book-sharing for Parenting and Child Development in South Africa: A Randomized Controlled Trial. *Child Development* 92(6), 2252-2267.
- Dowdall, N., Murray, L., Skeen, S., Gardner, F., Tomlinson, M., Cooper, P. (2017). The Benefits of Early Book Sharing (BEBS) for child cognitive and socio-emotional development in South Africa: study protocol for a randomised controlled trial. *Trials*, 18(118).
- Espeland, W. N., & Stevens, M. L. (2008). A sociology of quantification. *Archives Europeennes de Sociologie* 49(3), 401–436.
- Espeland, W.N. & Yung, V. (2019). Ethical dimensions of quantification. *Social Science Information* 58(2), 238-260.
- Fanon, F. (2001). *The Wretched of the Earth*. London: Penguin Classics.
- Girei, E. (2015) 'NGOs, Management and Development: Harnessing Counter-Hegemonic Possibilities', *Organization Studies*, 37(2), pp. 193–212. doi:10.1177/0170840615604504.
- Girei, E. (2023). Managerialisation, accountability, and everyday resistance in the NGO sector: Whose interests matter? *Critical Perspectives on Accounting*, 92(c).
- Grosfoguel, R. (2007). The epistemic decolonial turn: Beyond political-economy paradigms. *Cultural studies* 21(2-3), 211-223.
- Grosfoguel, R. (2011) 'Decolonizing post-colonial studies and paradigms of political-economy: Transmodernity, decolonial thinking, and Global Coloniality',

TRANSMODERNITY: Journal of Peripheral Cultural Production of the Luso-Hispanic World 1(1), 1-36

Hamann, R., Luiz, J. M., Ramaboa, K. K., Khan, F. R., Dhlamini, X., & Nilsson, W. O. (2020) Neither colony nor enclave: Calling for dialogical contextualism in management and organization studies. *Organization Theory*, 1: 1–21.

Hoffman, N. (2020). Involuntary social experimentation: Revisiting the case for a moratorium. *CODESRIA Bulletin*, 1, 7-13.

IDinsight, 2022. Why we must measure dignity in development. <https://www.idinsight.org/article/why-we-must-measure-dignity-in-development/>

Islam, G. (2022). Business Ethics and Quantification: Towards an Ethics of Numbers. *Journal of Business Ethics* 176(2), 195–211.

Islam, G., & Greenwood, M. (2022). The Metrics of Ethics and the Ethics of Metrics. *Journal of Business Ethics* 175(1), 1-5.

Islam, G., & Greenwood, M. (2023). Ethical Research in Business Ethics. *Journal of Business Ethics* 182 (1), 1–5.

J-PAL (n.d.-a). Introduction to randomized evaluations. Retrieved from: <https://www.povertyactionlab.org/resource/introduction-randomized-evaluations>

Jain, T., Kourula, A., & Riaz, S. (2022). Reimagining Grand Challenges as Grand Ethical Challenges: From Grandiose to Humble Solutions. *Journal of Business Ethics* 180(3): 836-840.

Järvinen, J.T., Laine, M., Hyvönen, T., & Kantola, H. (2022). Just look at the numbers: A case study on quantification in corporate environmental disclosures.

Jammulamadaka, N, Faria, A, Jack, G, et al. 2021 Decolonising management and organisational knowledge (MOK): Praxistical theorising for potential worlds. *Organization* 28(5): 717-740.

Jimenez, A., Vannini, S., & Cox, A. 2022. A holistic decolonial lens for library and information studies. *Journal of Documentation*. Forthcoming.

Kalpagam, U. (2014). Rule by numbers: Governmentality in colonial India. Lexington Books.

Kapoor I. (2023). Decolonising Development Studies. *Review of International Studies*, 49(3):346-355.

Kebede, M. (1994). Africa's Quest for a Philosophy of Decolonization. Amsterdam: Rodopi.

Khan, F. R., & Naguib, R. (2019). Epistemic Healing: A Critical Ethical Response to Epistemic Violence in Business Ethics. *Journal of Business Ethics*, 156(1), 89–104.

Kvangraven, I. H. (2020). Impoverished economics? A critical assessment of the new gold standard. *World Development* 127, 104813.

limki, r. (2018). On the coloniality of work: Commercial surrogacy in India. *Gender, Work and Organization*, 25(4), 327-342.

Lomba, A. (1998). Colonialism/postcolonialism. New York: Routledge.

Maldonado-Torres, N. (2007). On the coloniality of being: Contributions to the development of a concept. *Cultural Studies* 21(2–3), 240–270.

- Maldonado-Torres N. (2016). Outline of ten theses on coloniality and decoloniality. Retrieved on 13th April 2023 from Foundation Frantz Fanon: <https://fondation-frantzfanon.com/outline-of-ten-theses-on-coloniality-and-decoloniality/>
- Mamdani, M. (2004). *Citizen and Subject. Contemporary Africa and the Legacy of Late Colonialism*. Kampala, Fountain Editor.
- Mau, S. (2019). *The Metric Society: On the quantification of the social*. Cambridge: Polity.
- Melber, H., Kothari, U., Camfield, L., & Biekart, K. (2023). *Challenging Global Development: Towards Decoloniality and Justice*. EADI Global Development Series
- Mennicken, A., & Espeland, W. N. (2019). What's New with Numbers? Sociological Approaches to the Study of Quantification. *Annual Review of Sociology* 45, 223–245.
- Mignolo, W.D. (2002). The Geopolitics of Knowledge and the Colonial Difference. *South Atlantic Quarterly* 101. 57-96.
- Mignolo, W.D. (2007) DELINKING, *Cultural Studies* 21:2-3, 449-514.
- Mignolo, W. (2018) 'What Does It Mean to Decolonize?', in Mignolo, W. and Walsh, C. *On decoloniality: Concepts, analytics and praxis*. Durham: Duke University Press. P. 105-135
- Mignolo, W. (2018b). 'The Conceptual Triad. Modernity/Coloniality/Decoloniality, in Mignolo, W. and Walsh, C. *On decoloniality: Concepts, analytics and praxis*. Durham: Duke University Press. P. 136-152
- Miller, P. & O'Leary, T. (1987). Accounting and the construction of the governable person. *Accounting, Organizations and Society* 12(30), 235-265.
- Mudimbe, V.Y. (1988). *The Invention of Africa. Gnosis, Philosophy and the Order of Knowledge*. Bloomington and Indianapolis: Indiana University
- Muller (2020). Randomised trials as a dead-end for African development. *CODESRIA Bulletin*, 1, 14-20.
- Murrey, A. and Jackson, N. (2020) A decolonial critique of the racialized "localwashing" of extraction in Central Africa. *Annals of the Association of American Geographers*, 110(3), 917-940.
- Naude, P. (2019). Decolonising Knowledge: Can Ubuntu Ethics Save Us from Coloniality? *Journal of Business Ethics* 159(1), 23–37.
- Ndlovu-Gatsheni, S. J (2013) *Coloniality of Power in Postcolonial Africa. Myths of Decolonization*. Dakar: CODESRIA
- Ndlovu-Gatsheni, S. J. (2015) Decoloniality as the Future of Africa. *History Compass* 13, 485– 496.
- Ndlovu, M. (2018) 'Coloniality of knowledge and the challenge of creating African futures', *Ufahamu: A Journal of African Studies* 40(2), 95-112
- Ndlovu-Gatsheni, S. J. (2018). *Rethinking Development in the Age of Global Coloniality*. In B. Mporu & S. J. Ndlovu-Gatsheni (Eds.), *Rethinking and Unthinking Development* (pp.27–49). Berghahn Books, Incorporated.

Ndlovu-Gatsheni, S. J. (2019). Provisional Notes on Decolonizing Research Methodology and Undoing Its Dirty History. *Journal of Developing Societies*, 35(4), 481–492.

The Nobel Prize (2023) Press Release retrieved on 5th May 2023 at Nobel Prize Outreach <<https://www.nobelprize.org/prizes/economic-sciences/2019/press-release/>>

Nussbaum, M. C. (1995). Objectification. *Philosophy & Public Affairs* 24(4): 249-291.

Opalo, K. (2024). Academic research and policy research are two different things. Retrieved on 20 March 2024 from <https://www.africanistperspective.com/p/there-is-a-lot-more-to-policy-research>

Ouma (2020). Trust, legitimacy and community perceptions on randomisation of cash transfers. *CODESRIA Bulletin*, 1, 25-29.

Oyedemi, T. (2020). (De)coloniality and South African academe. *Critical Studies in Education* 61(4), 399–415.

Ozkazanc-Pan, B. (2019). CSR as Gendered Neocoloniality in the Global South. *Journal of Business Ethics*, 160(4), 851–864.

Panin, A. (2020). Economics experiments in Africa: How many and by whom? *CODESRIA Bulletin* 4, 23-27.

Parker, M., & Kingori, P. (2016). Good and bad research collaborations: Researchers' views on science and ethics in global health research. *PLoS ONE* 11(10), 1–19.

Patel, K. (2020). Race and a decolonial turn in development studies. *Third World Quarterly*, 41(9), 1463-1475.

Porter, T. (2020). *Trust in numbers. The pursuit of objectivity in science and public life.* Princeton: Princeton University Press.

Prasad, A (2003) *Postcolonial Theory and Organizational Analysis: A Critical Engagement* New York: Palgrave Macmillan.

Power, S. B., & Brennan, N. M. (2022). Accounting as a dehumanizing force in colonial rhetoric: Quantifying native peoples in annual reports. *Critical Perspectives on Accounting*, 87.

Pratley, P. (2016). Associations between quantitative measures of women's empowerment and access to care and health status for mothers and their children: A systematic review of evidence from the developing world. *Social Science & Medicine* 169, 119-131.

Quijano, A. (2000). Coloniality of power and Eurocentrism in Latin America. *International Sociology* 15(2), 215-232.

Quijano, A. (2007). Coloniality and modernity/rationality. *Cultural Studies* 21, 168–178.

Said, E. (2003). *Orientalism.* London: Penguin.

Smith, L. T. (2013). *Decolonizing methodologies: Research and Indigenous peoples.* London: Zed Books.

Tilley, L. (2017). Resisting Piratic Method by Doing Research Otherwise. *Sociology* 51(1), 27–42.

Turner, S. (2010). Research Note: The silenced assistant. Reflections of invisible interpreters and research assistants. *Asia Pacific Viewpoint* 51(2), 206–219.

Webber, S., & Prouse, C. (2018). The New Gold Standard: The Rise of Randomized Control Trials and Experimental Development. *Economic Geograph*, 94(2), 166–187.

White, H. (2013). An introduction to the use of randomised control trials to evaluate development interventions. *Journal of Development Effectiveness*. 5(1), 30–49.

Zyphur, M.J., Pierides, D.C. (2020). Statistics and Probability Have Always Been Value-Laden: An Historical Ontology of Quantitative Research Methods. *Journal of Business Ethics* 167, 1–18

Zyphur, M.J., Pierides, D.C. (2020b) Making Quantitative Research Work: From Positivist Dogma to Actual Social Scientific Inquiry. *Journal of Business Ethics* 167, 49–62

Zyphur, M.J., Pierides, D.C. (2017). Is Quantitative Research Ethical? Tools for Ethically Practicing, Evaluating, and Using Quantitative Research. *Journal of Business Ethics* 143, 1–16.