Adult Education Research in Countries of the So-Called Global South: Bibliometric Analyses in the Journal-Based Publication Space of Adult Education Research

Inaugural dissertation

Author: Tim Roor (Student ID: 7328120)

Supervisor: Prof. Dr. Michael Schemmann

Co-Supervisor: Prof. Dr. Silke Schreiber-Barsch

Department of Education and Social Sciences

Faculty of Human Sciences

University of Cologne

This dissertation was accepted by the Faculty of Human Sciences at the University of Cologne in July 2025.

Danksagung

Mit der Einreichung meiner Dissertation schließe ich das wohl intensivste Kapitel meines Lebens ab. Es umfasst so viele Handlungsstränge und Protagonisten, dass es sich fast wie ein ganzes Buch anfühlt. Das Projekt „Dissertation“ sprengte Grenzen – berufliche wie private, zeitliche ebenso wie soziale. So sind wissenschaftliche Wegbegleiter zu zentralen Personen in meinem Leben geworden, denen ich weit mehr anvertraue als nur methodische Probleme und den Frust der Datenerhebung. Gleichzeitig können Freunde und Familie mittlerweile von sich behaupten, eine gewisse Expertise in wissenschaftsbezogener Fallberatung erworben zu haben.

Obgleich mich bei den folgenden namentlichen Nennungen die Angst beschleicht, jemanden nicht ausreichend verdient hervorzuheben, möchte ich mich bei einigen Personen ausdrücklich bedanken.

Zunächst gebührt mein Dank Herrn Prof. Dr. Michael Schemmann, der mich seit Beginn meines Masterstudiums im Jahr 2016 zunächst als Professor und Lehrer, anschließend als Vorgesetzter in meiner Tätigkeit als Wissenschaftliche Hilfskraft und schließlich als Mentor und Doktorvater begleitet hat. Ich bin ihm sehr dankbar für das Vertrauen, das er mir im Lehrbetrieb und in meiner wissenschaftlichen Arbeit entgegengebracht hat. Er ließ mir die Freiheit, meine Interessen auszuloten und neue Wege zu beschreiten, gab mir aber auch stets Halt und Sicherheit, wenn mich diese Freiheit zu überfordern drohte.

Mein herzlicher Dank gilt ebenso Frau Prof. Dr. Silke Schreiber-Barsch, die diese Arbeit als Zweitgutachterin begleitet hat.

Darüber hinaus bin ich dem viel zu früh verstorbenen Prof. Dr. John Field zutiefst dankbar für seine intensive Beratung während seines Deutschlandbesuchs im November 2023 – wenige Monate vor seinem Ableben. Forschung kann ein sehr einsamer Prozess sein, doch die Erfahrung, auf ehrliches Interesse gepaart mit wertvollen Hinweisen zu stoßen, gab mir in einer schwierigen Phase Zuversicht.

Meiner Kollegin Gwennaëlle Mulliez gebührt ein ganz besonderer Dank. Seit 2019 teilen wir uns ein Büro mit Blick auf den Dom – Freud und Leid aus dem Lehrbetrieb

ebenso wie die Erfahrung, wie steinig der Weg der Dissertation sein kann. Du warst mir immer eine Stütze an schlechten Tagen, hast mir zugehört und mich unterstützt, wenn ich inhaltlich oder emotional nicht mehr weiterwusste. Das werde ich dir nie vergessen.

Auch bei Eva, Thomas, Jana, Jakob, Julia, Lisa, Anna und allen anderen Bürobegleiter:innen bedanke ich mich für offene Ohren und vielfältige Unterstützung.

Anna ist auf dem Weg der Dissertation von meiner Partnerin zu meiner Frau geworden. Sie hat mich in den verletzlichsten Momenten begleitet, mir Mut zugesprochen und mich an meine Stärke und Ausdauer erinnert. Ohne sie stünde dieser Text heute womöglich nicht.

Mein tief empfundener Dank gilt auch meiner Familie – meinem Vater, meinen Schwiegereltern, meiner Großmutter, meinen Tanten und meinem Patenkind – für all die Geduld, wenn wieder einmal deutlich mehr Zeit in die Forschung als ins Private geflossen ist.

Gleiches gilt für meine Freunde Christoph, Johanna, Aisling, Pascal, Phil, Matthes, Sonja, Volker, Lars, Felix und viele mehr, bei denen ich zuletzt häufiger durch Abwesenheit aufgefallen bin. Dennoch wurden sie nie müde, sich bei mir zu melden, um ein Lebenszeichen oder einen Zwischenstand zu erfragen. Es bedeutet mir viel zu wissen, dass die in die Forschung investierte Zeit nicht den Preis der Freundschaft hatte.

Diese Arbeit widme ich jenseits des Horizonts meiner Mutter Petra, meinem Großvater Klaus und meiner Großmutter Helene.

Table of Contents

List of Figures

List of Tables

1 Introduction

Since the advent of internet technology in everyday scientific life, scientific publishing can no longer be regarded as a linear chain of information, but rather as an interactive communication network. In the market for scientific communication, pairs of actors (authors and readers) interact as generic stakeholders who need accessibility and findability to pursue their goal of generating questions and answers and ultimately applying these in feedback loops within or outside of science. Roosendaal & Geurts (Fig 1; 1999, p. 13) develop a tetrahedral model from the four dimensions that arise here, which systematizes the central forces in scientific communication along market mechanisms and transaction modes (vertical axis) and content aspects (horizontal axis).

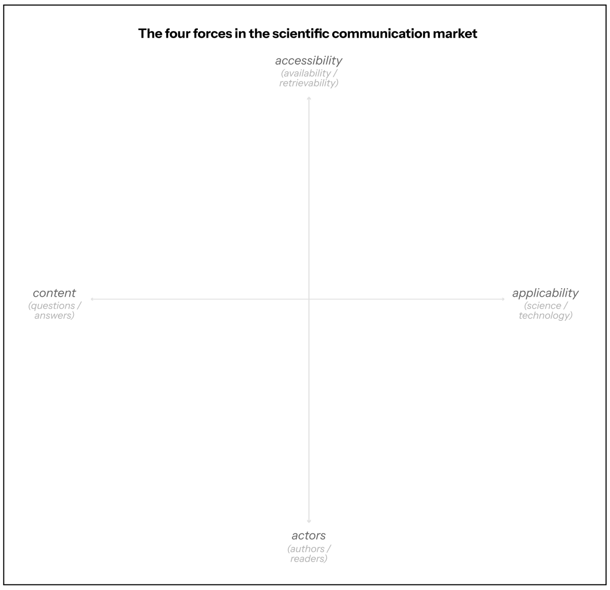

Figure 1: The four forces in the scientific communication market (Roosendaal & Geurts, 1999, p. 13)

At the same time, the system of scientific communication can be regarded as a functional system (Fig. 2), the structure of which is determined by the system of forces presented. The authors differentiate four central functions—registration, awareness, certification and archiving—along two axes: While the vertical axis describes scientific observation processes (registration vs. awareness), the horizontal axis organizes mechanisms of scientific judgment (certification vs. archiving). These functions can be further classified according to concreteness (concrete vs. abstract) and objectivity (objective vs. subjective), which shows that registration and archiving can be exter-

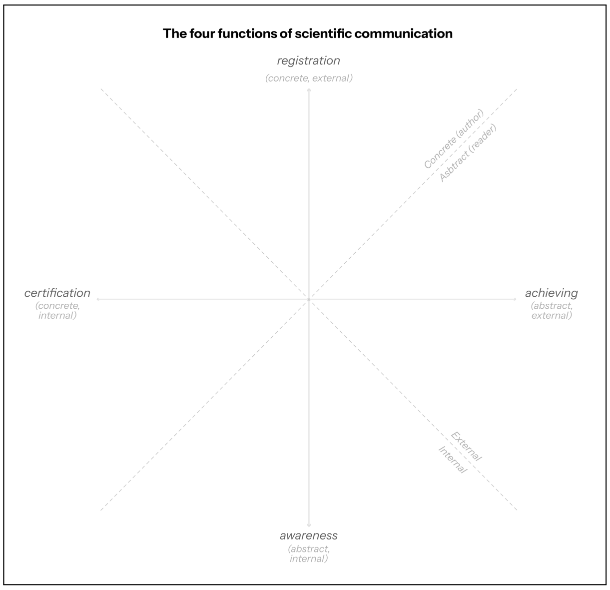

Figure 2: The four functions of scientific communication (Roosendaal & Geurts, 1999, p. 14)

nalized, while certification and awareness must remain within the scientific system as intrinsic, discourse-dependent processes.

In this way, forces and functions create a field in which specific publication cultures become recognizable, but which can differ greatly between the individual scientific disciplines (e.g., Rosenbaum, 2016). The environmental interdependency of disciplinary publication-related science systems in connection with the externally outsourced functions also causes their changeability. As the proposed system shows, scientific publishing is highly dependent on external actors who perform essential system functions, while epistemic content and quality aspects are negotiated in the scientific "inner circle."

In the following, the scientific communication system of adult education research is examined in terms of its strengths and functional fields, using empirical findings from the discipline to reveal aspects of change and desiderata.

In adult education research, as in all other scientific disciplines, the function of certification is currently guaranteed by peers via the peer review process. Certification is therefore an internal function of scientific disciplines to make corruption, nepotism and direct manipulation of findings more difficult (Nylander et al., 2019). Taylor et al. (2001) have shown in an analysis of peer review comments in an international journal of adult education research that implicit evaluation norms have emerged in the discipline that evaluate qualitative research along standardized criteria. While peer review ensures methodological transparency and theoretical grounding, the focus on established evaluation criteria can restrict alternative methodological approaches and standardize the publication process. Fejes and Nylander (2018, p. 764) also focus primarily on the role of reviewers as intermediary gatekeepers of the discipline, with corresponding epistemic power. Peer review is thus not only a method of quality assurance, but also an instrument for controlling science and, from a micro-sociological perspective, a crucial key function for legitimizing academic positions.

In the practice of the discipline, the double-blind procedure has established itself as the dominant variant of peer review, although newer approaches such as open review are also being used. Regardless of which procedure is chosen, the objectification of quality control measures, including in adult education research, remains a myth. Rather, the anonymity of the reviewers leads to a “pseudo-neutral” evaluation structure that is structurally asymmetrical: The evaluations themselves appear formally objective, but they obscure the social and scientific position of the evaluators (Nylander et al., 2019, p. 57). Regardless of the discipline, then, the peer review process is currently discussed as an instance that is under increasing pressure (e.g., Seeber, 2024, p. 4). This is due to the business models of commercially oriented academic publishers, whose economic interest is based on the “Author pays the cost” model and who record higher profits with an increased volume of publications. However, this factor does not yet appear to be relevant with regard to adult education research. If one considers the nine adult education journals with the greatest influence in terms of impact factor (IF) (Substudy 1), it is striking that, in addition to non-profit publishers, most of these journals are published by Taylor & Francis, Springer and Sage. These established scientific publishers are commercially oriented, but there have been no noticeable reductions in peer review turnaround times in the last 10 years, and the growth in the number of articles is moderate, so there are no signs that suggest a decline in quality (Hanson et al., 2023; Seeber, 2022).

The other internal function of scientific communication, according to Roosendaal and Geurts, is awareness. It is a central condition for the effectiveness of scientific knowledge and describes the process by which a scientific contribution becomes visible and perceptible within the research field, so that follow-up communication, further development or critical discussion are possible in the first place. Scientific discoveries can only become part of the scientific knowledge system if they are actually registered as noteworthy. Accordingly, awareness is a prerequisite for any form of reception and integration of new knowledge.

Awareness is a subjective function because its effectiveness depends to a large extent on how and by whom a contribution is perceived, what is considered relevant in a field, and which insights receive attention. These processes of attention are not neutral or equally distributed, but depend on social, institutional and media contexts. At the same time, awareness is abstract because it does not take place in a clearly definable, institutionally determined act. In contrast to registration or certification, which are manifested in clearly identifiable actions and decisions (e.g., a submission, an evaluation), awareness is a process-oriented, often diffuse event that unfolds over longer periods of time, through various channels and social mechanisms.

In adult education research, awareness is prominently discussed in terms of the role of citation networks, the so-called “invisible colleges” (Larsson, 2010; Larsson et al., 2019). On the one hand, citation practices in adult education research are an expression of collegial recognition; on the other hand, they are also a mechanism of symbolic evaluation and exclusion. Larsson et al. (2019), for example, show that citations can function as a kind of currency in a publication economy, the structure of which is largely shaped by databases such as Scopus. These databases mainly index journals from the Anglophone world, thus creating a geographically and linguistically distorted visibility. As a result, citation networks are heavily concentrated on adult education researchers from the US, the UK, Canada and Australia, while other regions are systematically marginalized. For young researchers in adult education research, the relevance of belonging to citation networks can also be a central challenge. Based on bibliometric and network analytical data in the field of adult education, Fejes and Nylander (2018, pp. 768f.) define an essential publication strategy for young researchers to increase their awareness in the field. They should publish their work in the format of specialist articles and in English, in renowned and indexed journals, conduct qualitative studies with a theoretical basis in socio-cultural, critical-pedagogical or poststructuralist approaches, and strategically connect to existing scientific networks through co-authorship with established, ideally Anglophone colleagues.

The external functions of registration and archivation are not discussed in adult education research. The archiving of scientific results in the form of written documents such as papers, contributions to anthologies and monographs is carried out, as in other research disciplines, by publishers and the respective national libraries. Registration, on the other hand, requires direct interaction with the scientific community and ensures the priority and citability of scientific products. In the context of the digitization of scientific publication and communication, digital object identifiers (DOIs) are the most important authority for the registration of scientific text and data products. DOIs serve as globally unique, persistent identifiers for digital publications and their metadata, ensuring their findability, citability and visibility in scientific communication (Turki et al., 2023). DOI agencies such as Crossref or DataCite assign DOI prefixes to member organizations (e.g., publishers, universities) and are responsible for registering and managing the associated metadata (Hendricks et al., 2020). Although many of these agencies are formally non-profit, membership and DOI fees can represent structural hurdles (Beigel, 2024, p. 12; Turki et al., 2023, p. 2). The technological registration instance DOI therefore represents the technical prerequisite for tracking the visibility and impact of scholarly publications and is thus closely linked to awareness, despite its externality in the functional system of scientific communication. From a market-oriented, subsidiary perspective, the externalization of both functions makes sense so that (adult education) research can concentrate on content generation. The price of outsourcing is that the commercially oriented external actors are dependent on business models that in turn have a fundamental influence on the actual internal functions of scientific communication.

Along the lines of the systematic approach of Roosendal and Geuerts (1999), it becomes clear that the boundaries between external and internal functions of the communication system of adult education research are increasingly overlapping. External market players such as publishers, database operators and DOI agencies not only play a role in registration and archiving, but also have a structural influence on internal functions—especially on awareness.

It could be argued that the dependence of adult education research on external actors is limited by the diversified publication culture within the discipline, which varies even more widely between nations and world regions (Rubenson & Elfert, 2019). Current data on scientific publishing in the most central or even parent discipline of educational science for adult education research (Schmidt-Hertha & Tippelt, 2014) show, for example in Germany, that the "polyphony" of scientific communication via monographs, anthologies and journals is gradually moving towards a journal-based "homophony,"[1] and this—as can be seen above—can lead to a greater market orientation.

Based on bibliometric data from the *FIS Bildung* literature database, which focuses on educational science, a quantitative increase from 46% to 62% can be seen for the two survey periods 2010–2013 and 2018–2021 in the total number of all recorded publications in journal articles, while contributions to edited volumes and monographs declined by 6.3% and 9.7%, respectively (Schmidt-Hertha et al., 2024, p. 182). When differentiating between the publication behavior of professors and non-professorial academics, it also becomes clear that this development does not depend on the career path of the academics (ibid., p. 183). The survey of dissertations in educational science also indicates that the proportion of publications in journals will continue to rise in the future, and that book contributions will fall to a similar extent, as the proportion of cumulative dissertations is rising sharply (Martini, 2024, p. 209). The increase in journal publications is also accompanied by a tendency toward publishing in multiple authorship in educational science (Schmidt-Hertha et al., 2024, p. 196). Based on data from Web of Science (WoS), it can also be seen internationally that the number of educational science journals and the number of articles published therein (107.46%) increased rapidly between 2011 and 2020, and that open access (OA) publications also increased sharply as a result (Sezig et al., 2022). This development is embedded in a "second journal growth boom period in history" (Gu & Blackmore, 2016, p. 714) of the entire scientific cosmos, driven by internet technology.

[1] In a replica entitled "Polyphonie vs. Homophonie – Über eine Publikationskultur im Wandel" (Polyphony vs. Homophony – On a Changing Publication Culture), the author took a closer look at the emerging process of change in the publication culture of educational science and adult education research. The replica can be accessed here: Roor, T. (2025). Polyphonie vs. Homophonie – Über eine Publikationskultur im Wandel. *Debatte – Beiträge zur Erwachsenenbildung, Sonderheft 2*, 72-86. https://doi.org/10.3224/84743088.06.

However, based on data from FIS Bildung, the quantitative increase in the number of journals in educational science is not accompanied by an increase in publications; on the contrary, the number of publications has been declining since 2010 (Schmidt-Hertha et al., 2024, p. 181). To explain this observation with the general decline in educational research publication practice is too simplistic. Rather, a science policy control effect seems to provide the more plausible explanation. For example, since 2010, the German Research Foundation (DFG) has placed a stronger focus on publications of particularly high scientific quality and international visibility, and less on the pure quantity of publications (Kleiner, 2010).

The data-based descriptions presented here of a changing educational science publication culture, with a particular focus on publication venues, suggest that the standardization or uniformity of scientific publishing is being driven by an increasing focus of the discipline on journals. This tendency toward standardization may also prevail in the traditionally diverse humanities and social science disciplines. Such a development implies a decrease in the diversity of publication formats in favor of a stronger focus on journal publications that are subject to stricter formal and content-related standards. Scientific journals often set specific requirements regarding the structure, format and content of articles to ensure a high degree of comparability and quality control. These normative requirements promote a more homogenous presentation of scientific findings and limit the diversity of publication formats. At the same time, the standardization of publication formats contributes to the efficiency and international comparability of scientific communication, which in turn can increase the visibility and influence of research (Bornmann & Marx, 2011). To draw an interim conclusion, it can be assumed that a stronger homogenization of adult education research—as expressed through a focus on international journal publications, and thus more closely following an "internationally networked publication culture" (Stollfuß et al., 2021, p. 1)—is accelerating the increasing influence of commercially oriented external actors with regard to scientific communication via publications.

The consequences of this are becoming increasingly apparent in adult education research, as evidenced by research projects that make use of bibliomancy's methodological repertoire. Bibliometrics broadly refers to the statistical or simply quantitative description of literature, for example referring to its subject matter, formalities, language, country of publication or year of origin (Broadus, 1987, p. 375). In adult education research, bibliometric questions have received increased attention in the last 10 years. The standard work in this context is the edited volume *Mapping out the Research Field of Adult Education and Learning* by Fejes and Nylander (2019). As the title suggests, bibliometrics is not primarily used in the discipline to measure individual research performance, but rather as a method of holistic coverage of the discipline via bibliometric data. In terms of content that is widely researched through the analysis of bibliometric metadata, bibliometric analyses show that adult education research is structured along two structuring opposites: education versus work as the object of research, and cognition versus politics as the level of analysis, with sociocultural perspectives on learning occupying a key mediating position in the citation network (Nylander et al., 2019). In addition, the most cited publications show a strong thematic concentration on critical-emancipatory, poststructuralist and social-theoretical approaches, while economically or quantitatively oriented research remains comparatively marginalized (ibid.). As explained above in the context of the function of "awareness," bibliometric data that focuses on the authors of adult education research papers show that attention and visibility in the field is distributed asymmetrically. The most cited authors are predominantly from the Global North, particularly from the US, Canada, the UK and Australia (Fejes & Nylander, 2019; Larsson et al., 2019). In addition to institutional affiliation, factors such as gender and editorial roles, which function as forms of scientific and administrative capital, influence scientific reception.

Overall, the "anglophone bias" (Fejes & Nylander, 2017) is particularly striking, which states that "knowledge produced in places other than Anglophone regions is largely invisible in broader scientific discussions, either because it is not published in these journals in the first place or because it does not receive much scientific attention" (ibid., 2017, p. 6). The present work assumes that this distortion effect is increasingly intensifying in a homogenizing publication landscape that is increasingly focusing on journal publications and is shaped by commercially oriented publishing houses. The effects of this on linguistically, geographically and economically disadvantaged adult education researchers are still completely unknown. This dissertation seeks to address this desideratum by focusing on adult education research from countries of the so-called Global South[2] in a current international publication culture. While previous field surveys of adult education research have focused exclusively on the "seen," the "unseen" has remained in the shadows. Thus far, adult education research has not systematically recorded which publication paths are chosen by adult education researchers from the Global South, what visibility they achieve, or what topics they address.

The category "global South" replaces the category "developing countries," which used to be prominent in adult education. In general, however, it should be noted that all terms used to describe countries in need of "development" have shortcomings. Axis descriptions — developed/undeveloped, non-industrialized/industrialized, rich/poor — are crude and laden with value (Black, 2007, p. 16). The nomenclature "Global South/North" is considered the least pejorative, but it still has significant problems. For example, the terms are not established in legally binding documents or foreign policy, as countries continue to use the term "developing" (Barros Leal Farias, 2023, p. 663). However, what seems far more important for scientific use is the indication that this classification is not protected against the reproduction of hierarchies, since it can also be used to ascribe superiority or inferiority to certain countries, cultures or population groups. The problem here lies not in the pure designation or its material indicators, but in the intersubjective meanings attributed to certain regions, such as stereotypical ideas about intelligence or developmental capacity (ibid.). The classification also has no direct geographical basis; Australia and New Zealand are assigned to the "North," for example, although both countries are in the southern hemisphere:

> The terms Global South and Global North are used to make transparent the continuing power inequalities between various regions of the world. Although not strictly accurate development markers (think Australia and New Zealand), their use highlights the differences in economic and social growth. (Weiss, 2009, p. 272)

[2]The terms *so-called Global South* and *so-called Global North* are used to indicate their historically contingent, politically charged, and discursively constructed character. These designations are neither geographically precise nor analytically neutral, and they risk reifying essentialist binaries and global hierarchies. The qualifier "so-called" is employed to mark this conceptual unease; where it is omitted for reasons of readability, its critical intent remains implicit. This usage follows scholarly conventions attentive to the contested and unstable nature of such global categorizations (e.g., Waisbich et al., 2021).

In adult education research, the Global South is often viewed from the perspective of the Global North, both historically and to some extent today. In the context of globalization, this view often follows a “conventional deficit rationality” (Torres, 2002, p. 3). This concept describes a predominant view of the Global North that views education in the Global South primarily through the prism of deficiencies, such as illiteracy or a lack of schooling, thereby ignoring the diverse, complex and culturally embedded educational practices, knowledge productions and learning cultures that exist there at the same time. While in the past two decades, postcolonial reflexive perspectives on adult education and adult education research have increasingly revealed the deficit perspective toward the Global South, Grotlüschen and Buddeberg (2020) have exemplified it through the concept of southering. In the context of adult education research, especially in the context of international comparative studies such as the Programme for the International Assessment of Adult Competencies (PIAAC), this refers to the unintended tendency to depict countries of the Global South as educationally deficient on the basis of literacy concepts and test procedures shaped by northwestern countries. This occurs by decontextualizing their results, ignoring local educational realities, and placing the countries in hierarchal rankings.

When addressing the explained desideratum, it is therefore particularly important—based on my scientific contextualization in the Global North—to situate the category of the Global South in a context of globalization and colonization and to reveal the perspectives from the Global South. Furthermore, the desideratum is also rooted in the method of bibliometrics itself, mainly due to the increasing power of commercial actors in the field of scientific communication, as already explained. Bibliometric analyses that rely exclusively on journals indexed in Scopus or WoS, as has been the case in bibliometric research in adult education to date, inadequately capture the knowledge production of the Global South, as these databases systematically favor journals from industrialized countries (Ràfols et al., 2015). The neglect of local publication outlets can lead to distorted conclusions, for example, with regard to international research collaborations (Boshoff & Akanmu, 2017). Local and non-mainstream journals are essential because they not only support young scholars and provide access to research in regions with limited resources but also address topics that are neglected in high-ranking journals (Chavarro et al., 2017). Research topics that are highly relevant to the Global South—including regional educational issues, indigenous knowledge systems or socio-political challenges—often find no place in established journals. Institutional repositories play a role as an alternative, but their use remains limited due to a lack of incentives (Raju & Raju, 2009). At the same time, the high pressure to publish favors the proliferation of questionable journals, which often have low quality standards but still influence academic careers in some contexts (Omobowale et al., 2014).

A comprehensive analysis of a research discipline therefore requires consideration of publication outlets beyond the mainstream to avoid bibliometric, epistemological and sociodemographic distortions. The assessment of what is outside the scope of current databases and indices requires a comprehensive understanding of the business model of commercial scientific publishers in the field of international journal publications. The areas not controlled by these actors form the as-yet neglected publication spaces of the non-mainstream.

The business model in question is fundamentally based on the sociological phenomenon of OA. From the aspects of the changing publication culture in adult education that have been identified, characterized by an increasing digitalization and internationalization of research outlets, the establishment of OA and, as a result, the gradual move away from traditional (monographic) print publications, and in which commercially oriented publishing house actors are gaining more influence over internal functions of the adult education research communication system within scientific disciplines, the potential arises for more profound marginalization of adult education research from countries of the Global South. This impression is reinforced when considering the natural science disciplines, which have been undergoing this process of change for some time. Here, a culture of scientific publishing often emerges that has developed from a pure communication practice into a performance-oriented and economically influenced system in which bibliometric indicators and institutional guidelines decisively determine publication output, while OA, as a solution, opens new avenues of access, as well as financial and qualitative challenges (Padmalochanan, 2019).

The central research question of this dissertation is "How do scholars from countries of the Global South position themselves in the increasingly journal-based publication landscape of adult education research?" The focus on countries of the Global South implies that access for researchers in economically weak locations is becoming more difficult in the changing publication culture, and that as a result, important global perspectives, questions and debates are being removed from the discipline's body of knowledge. To answer this question, it is necessary to understand the journal-based publication space in more depth in its historical, economic and sociological structures in order to be able to define different dimensions of the space in which, finally, work on adult education research from countries of the Global South can be identified and analyzed. Central to this context is OA as the concept that determines the publication culture and space. To understand the emergence of this space not only from the perspective of the commercially oriented external actors, but also from that of the system of science, macro-sociological theory perspectives are drawn upon alongside neo-institutionalism (NI) and world-systems theory, introduced in a basic way that allows large-scale structural changes to be analyzed (2.1). To make the perspective of the representatives of the Global South in the field of communication and production of science clear, adult education research is then placed in the context of postcolonial theory (2.2). While NI serves to explain OA from a historical (3.1) and contemporary (3.2) perspective, the pitfalls of the phenomenon of OA only become apparent from the perspective of the Global South (3.2). Three spheres of the publication space characterized by OA emerge from Chapter 3 in its entirety, which are systematizing for the underlying sub-studies: the mainstream circuit, the area of the legitimate non-mainstream, and the illegitimate area of predatory publishing (PP).

In this study, bibliometric methods are used to methodologically and methodically capture the aforementioned publication spaces of the adult education journal-based publication culture (4.1) and combined with text mining to analyze topics. In conjunction with postcolonial theory and insights from the analysis of the subject of OA, it becomes clear that to capture adult education research from countries of the Global South, it is necessary to implement bibliometrics decolonially (4.2). The three sub-studies are then presented. Sub-study 1 (5) explores the publication space of "narrow" adult education research classified as "mainstream" and asks "How often can adult education researchers from countries of the so-called Global South place their work in indexed international journals of adult education research, what visibility do their contributions achieve, and what topics do they address?" Sub-study 2 (6) is dedicated to the non-mainstream area from a topic-centered perspective, comparing it with the mainstream circuit and considering adult education research from a broad perspective. It addresses the power-reflexive macrosociological-developmental question of how the thematic priorities of adult education researchers from the Global South are related to their positioning and visibility in the global publication system. Sub-study 3 (7) examines the illegitimate publication space of predatory journals (PJs). The aim is to explore how the phenomenon of predatory publishing manifests itself in international adult education research in terms of its occurrence, authors and the quality of contributions in potentially predatory journals (PJs). The macro-sociological world polity theories of the NI school, dedicated to the global diffusion of institutional patterns (Meyer & Ramirez, 2005), along with the power-sensitive economic world system theory according to Wallerstein (1974), here serve as the theoretical framework for sub-studies 2 and 3. The work concludes with a summary of findings (8) and a reflection on the explored field of adult education research in countries of the Global South, with implications for the discipline of adult education research, both internally and externally.

2 Framing in terms of basic and objective theory

The overarching aim of the studies on which this dissertation is based is to explain the changing journal-based publishing system of adult education research through the sociological institution of OA as its central catalyst and to analyze the positioning of the Global South in this OA-influenced publishing space. In the sense of a basic theoretical framework that enables a cross-disciplinary and cross-domain perspective and conceptualizes social reality (OA) on an abstract level (Dörner & Schäffer, 2012, p. 16), three theoretical perspectives are used: NI (2.1.1), its macrophenomenological variant of world polity (2.1.2), and world-systems theory (2.1.3) frame the universalistic macrostructure of (world-)scientific-societal action and can be used to classify deviations that are grounded in scientific culture. These three theories are first presented in a basic way.

The discipline-related subject of this work is the perspective on adult education research in countries of the Global South. Theoretically, the view of the group of actors in adult education research is framed by postcolonial theory (2.2). During the presentation of the conceptual framework (3.1 & 3.2), the perspectives of fundamental theory are discussed in more detail in intermediate steps; the underlying conceptual framework is then viewed critically from the perspective of actors from the Global South (3.3).

2.1 Sociological neo-institutionalism

NI was founded historically as a theory of American organizational science in the 1980s and has been increasingly adopted in Europe since the mid-1990s (Schäfer, 2009, p. 37). NI can be assigned to the organizational theories that, viewed from a higher level, pursue the purpose of explaining and understanding organizations—their emergence, their existence and their functioning. However, it is not possible to determine a specific object of these organizational theories due to a multitude of prevailing definitions of the central term "organization" within the social science research strand. Even after an in-depth examination of neo-institutionalist approaches themselves, it can be seen that they do not represent a closed theory but can be subdivided into different varieties of sociology as well as political and economic sciences (Schaefers, 2002, p. 835). In contrast to the economic-historical review of the OA movement presented in Section 3.1, the following refers to the sociological NI.

Advocates of sociological NI reject the notion of rationally guided action that prevails in other institutional theories; instead, they assign institutionalized rules, with their characteristics and modes of operation, a significant role in the context of organizational decision-making processes (Walgenbach, 2014, p. 299). These institutionalized rules, which are characteristic of sociological theories, can also be found in NI. The distinctions between the macro level (e.g., national systems), meso level (e.g., organizational fields) and micro level (e.g., intra-organizational structures; Scott, 1994, pp. 84f.) serve as a categorization tool in neo-institutionalist theory. In the context of various journal-based publication outlets in adult education research, macro-institutional perspectives are particularly interesting because they allow for the analysis of collectivized organizational structures in the context of scholarly publishing with OA. While micro-sociological NI argues that organizations create their own institutions, macro-institutional approaches emphasize the influence of the institutional environment on the emergence and survival of organizations (Süß, 2008, p. 63). To gain access to the chosen theoretical framework, the central concepts of the institution, organization and environment in the neo-institutionalist understanding are explained in advance of the presentation of the elementary pillars of macro-sociological NI.

The neo-institutionalist understanding of “organization” is based on and expands upon Weber’s model of bureaucracy (1972). The model’s inherent understanding of the term is based on a technical-functionalist interpretation of organization (Walgenbach & Meyer, 2007, p. 15). In the bureaucratic understanding, an organization is to be understood as a social entity that has a rule-bound, impersonal administration and a functional division of labor, acting in accordance with the rules (Peter, 2010, p. 40). Central to Weber’s understanding of an organization is its formal structure, which serves as a “[...] technical-rational tool for coordinating the exchange relationship between an organization and its environment, as well as for controlling the activities in the organization” (Walgenbach, 2014, p. 295). Representatives of NI, however, do not consider the structure of organizations to be the primary instrument of market-based and rational decision-making processes; rather, they emphasize the influence of the social environment on the formal organizational structure, driven by social modernization processes (Scott & Meyer, 1991, p. 108). Although the basic perspective on organizations and their dependency relationships becomes tangible by supplementing the bureaucracy model, a clear-cut clarification of the concept of organization within NI has never been undertaken and is not possible due to various currents (Peter, 2010, p. 41; Kieser & Walgenbach, 2007, p. 1). However, macro-sociological NI can be most closely associated with the understanding of organizations as "open systems" in the sense of the "open systems view" (Preisendörfer, 2016, p. 150). Scott (1986), an American sociologist, pioneer of NI and representative of the "open systems view", defines an organization as: "[...] a coalition of changing interest groups that develops its goals through negotiations; the structure of this coalition, its activities and their results are strongly influenced by environmental factors" (Scott, 1986, p. 47). Scott understands organizations as dynamic structures that are fundamentally influenced by the environment (Preisdörfer, 2010; Scott, 1986, p. 171). Organizations as closed and mostly planned units are not the focus of interest in the context of the definition and other neo-institutionalist currents, but rather the social institutions that have incorporated them into their respective structures (Mense-Pertersmann, 2006, p. 71).

The concepts of "institution" and "institutionalization" are therefore central. In everyday contexts, institutions are understood as phenomena that have existed for a very long time and are usually associated with traditions (Hasse & Krücken, 2005, p. 13). Accordingly, in this understanding, marriage, family, insurance or established organizations such as universities are to be understood as institutions (ibid., p. 14; Jepperson, 1991, p. 144). In the context of sociological discourse, the focus is on the behavior-regulating effect of institutions. Overall, the term "institution" refers to a unit of habitualized forms of action and social interaction, the meaning and justification of which originate in the respective culture and whose lasting observance ensures the surrounding society (Gukenbiehl, 2016, p. 174). The term "habitual action" encompasses the decision-relieving character of institutions for both individuals and organizations. By opening up and excluding possibilities for action, they ensure that constantly recurring demands do not have to be renegotiated each time but can be solved in a kind of standardized, similar routine.

The derivative term "institutionalization" serves, on the one hand, as a root word to describe a process, but on the other hand, it also describes a state (Walgenbach, 2014, p. 297). Understood as a process, institutionalization in NI refers to the process in which social relationships, actions or obligations acquire: "[...] rulelike status in social thought and action" (Meyer & Rowan, 1977, p. 341). As a state, institutionalization describes the social circumstance in which systems of interpretation (institutions) created between people are regarded by individual and collective members of society as having arisen objectively and externally (Berger et al., 1974, p. 24; Walgenbach, 2014). Combining the conceptual dimensions of the institution and institutionalization, it can therefore be stated that, from a neo-institutionalist perspective, not only functional components of organizations, such as departments or specific role profiles, are constituted by institutionalized expectations and rules, but also intra- and extra-organizational actors at the individual level through "quasi-automated behavior" (Walgenbach, 2014, p. 298).

Finally, the equally fundamental concept of the environment in NI must be explained. As mentioned in the definition of organization, the environment of organizations influences them, and not the other way around. The environment of an organization consists of cultural systems through which organizational structures are defined and legitimized (Kieser & Walgenbach, 2010, p. 47); Scott (2008) even refers to organizations as "creatures of their environment" (Scott, 2008, p. 178). Institutionalized expectations are deposited in the social environment of an organization (Sandhu, 2012, p. 75). Structurally, the environment of organizations is divided into different areas, each with different, sometimes even contradictory, ideas of rationality when it comes to the "right" organizational design (Kieser & Walgenbach, 2010., p. 47). Therefore, in the further course of this paper, the term organizational or institutional environment will not be used, but rather the term "environments".

2.1.1 World polity

World polity theory (also known as world society theory, global NI, or the Stanford school of global analysis) is a sociological theory to explain global culture, organization and transformation processes (Boli et al., 2018, p. 1). The key concept connecting the theory of world polity to NI is that organizations are conceived as open systems that operate in their environment and take up certain expectations to secure their own legitimacy. This induces processes of homogenization and isomorphism. The world polity approach developed by John W. Meyer's research group at Stanford conceives of the environment as a world culture, with the world polity forming the main site of rationalization of this environment (Meyer, 1994, p. 41). In general, the authors understand world polity as the emergence of a global structure of order that does not replace nation-states but rather takes effect within them as an overarching politico-cultural horizon of expectation. This is visible, for example, in the continuous alignment of political structures, which Meyer refers to as structural isomorphisms (Meyer et al., 2005). The aforementioned culture of order has its explicit origin in Western society and, in accordance with other theories of "occidental rationalization" by basic principles such as belief in progress, secularization and instrumental rationality as basic principles of modern society, but it also extends them to include individualism, universalist norms of justice, voluntary and self-organized agency, or world citizenship (Matys, 2014, p. 94).

In contrast to rational-actor-theoretical approaches to international relations, which include the world-system approach, the world polity assumes that fundamental categories such as rationality, interests and goals are not objective or universal, but cultural constructions. These arise from a deeply rooted ontological core of world culture that determines what counts as an "actor," which goals are considered legitimate, and which means appear "rational." The neo-institutionalist concept of myth can be connected here, which in the context of the world polity functions as culturally charged ideas of legitimacy that prevail as global models, regardless of whether they are functional or effective. The concept of mass education is one such example of a modern myth: "Mass schooling is a legitimate institution in modern times, a proper 'myth', independent of its actual efficacy" (Caruso, 2008, p. 835). Even if, empirically speaking, mass education is often associated with high dropout rates, poor learning outcomes and the reproduction of social inequality, it remains an indispensable part of any society "that aspires to be called 'modern'" (ibid.).

From the perspective of world polity theory, the mass founding of nation-states after the Second World War and the worldwide spread of organizations, which increasingly permeate all areas of society, right down to the individual, are considered central empirical developments. However, these actors are not understood as autonomously acting units; their recognition depends largely on the extent to which they adapt to the globally institutionalized expectations and scripts of the (imaginary) world culture (Schemmann, 2008, p. 175).

Turning to the role of international (non-)governmental organizations (IGOs, INGOs) in the context of establishing OA, the prominent role of these same actors in world polity theory should be emphasized: "IGOs and INGOs create, carry and embody the world culture in the world polity, diffusing policy scripts to states" (Beckfield, 2003, p. 402). In a comprehensive study, Boli and Thomas analyzed around 6,000 INGOs founded between 1875 and 1988. They show that the importance of INGOs for political action in various policy fields has been greatly underestimated so far, despite them being among the central actors in the world polity. Some, for example in the fields of sports, human rights or the environment, make world culture particularly visible, while the majority contribute to intellectual, technical and economic rationalization in an inconspicuous but powerful way—so deeply institutionalized that they are hardly perceived as actors, even though they exert central influences on definitions of reality, material infrastructures, everyday consumption, school books, and much more (Boli & Thomas, 1997). In the context of adult education, Jakobi (2009) has shown how the global dissemination of lifelong learning programs was supported by the agenda-setting of international and supranational organizations such as the Organisation for Economic Co-operation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO) or the European Union (EU).

The world polity approach is criticized for ignoring the internal logic and historical lines of development of national education systems. National peculiarities are treated as "residuals," and deviations from the global model are explained only in terms of the concept of decoupling. Consequently, the approach lacks the conceptual tools to analyze differentiated forms of staging global models at the national level (Adick, 2009, p. 275). Another criticism, and one that is particularly important in relation to the subject of this paper, concerns the economic and political dependencies that force many states (especially in the Global South) to adopt global standards—often not voluntarily or on an equal footing, but as a condition for financing, recognition or participation. The world polity theory takes hardly any account of the asymmetrical conditions under which global diffusion takes place, which makes its assumptions of universality appear questionable.

The constructivist world polity approach understands change as the result of cultural negotiation processes, which result globally in isomorphic structures and institutions. In contrast to this, the Wallersteinian world-system approach shares the basic assumption that there is a global macro-level of social organization with its own structures and dynamics that cannot be reduced to aggregated individual actions (Greve & Heintz, 2005). However, the way in which this global order is constituted and the role attributed to actors – in particular social movements – differ fundamentally. The materialist structural assumption of the world-system approach is presented below. In light of the global South as the subject of this dissertation, the addition of constructivist perspectives on macrosociological structural issues through a power and inequality-reflective perspective is of importance.

2.1.2 World-system approach

The world-system approach developed in the 1970s by Wallerstein (1976a) is understood as a form of analysis that examines the globalization of capitalist market relations and their political and cultural implications. According to Wallerstein, the world-system follows its own logic, driven by the principle of capital accumulation, which cannot be derived from the analysis of local processes. Wallerstein's aim to overcome disciplinary boundaries between sociology, political science, history and cultural studies is central to this. He advocates an "undisciplinary," historically informed approach (Wallerstein, 1998a, p. 107). Nevertheless, it has been critically noted that culture and politics remain largely subordinate to the economy in his approach. Even when Wallerstein wants to give culture a higher priority (Hack, 2005, p. 122), he still sees culture primarily as a means of legitimizing the system: "If anything, culture is a word that describes what constrains us [...] and is not a word that describes our ability to escape these constraints" (Wallerstein, 1990, p. 39).

In Wallerstein's materialist model, power and influence are primarily tied to the control of financial and military resources. The system tends toward stability, and even major deviations lead to "relatively small medium-range changes" (Wallerstein, 1998b, p. 12). In this way, the stable world-system takes the form of a capitalist world economy, which basically consists of a market and is mainly characterized by the goal of profit maximization (Schemmann, 2007, p. 53). According to Wallerstein (1976a; 1976b), a central structural feature of the capitalist world economy is its hierarchical structure, produced by the imperialist and colonialist practices of the West in the 19th century, into the rich center, the developing semi-periphery and the exploited periphery. The core regions concentrate capital- and technology-intensive production processes, which are characterized by high capital investment, low labor input, high profits and strong control over the means of production. These regions usually have stable state institutions, effective infrastructure, a developed financial system and privileged access to technological innovations (Wallerstein, 1976b, p. 351). In contrast to this are the peripheral regions, where labor-intensive, resource-based and low-paid forms of production prevail. They are integrated into the world-system not to develop autonomously, but to act as suppliers of cheap raw materials and labor for the centers. Wallerstein describes this as "unequal exchange," that is, a systematically structured relationship in which the periphery gives up more value than it receives in return. This is not a mere market imbalance, but "a structurally anchored form of exploitation within the world market" (Wallerstein, 1976b, p. 351). The semi-periphery adopts a mediating role here. It has characteristics of both poles: It exploits peripheral regions but is itself exploited by the center. For Wallerstein, it thus fulfills a stabilizing function in the world-system, since it can absorb social and political tensions and at the same time structurally block movements from the periphery to the center (ibid.).

This division is not random; it is the result of a long-term historical process of the formation of a global division of labor based on uneven development and asymmetric exchange relations. Wallerstein argues that it is precisely the function of the capitalist world-system to reproduce uneven development to ensure the accumulation of capital in the center (Wallerstein, 1976b, p. 351). What is crucial here is that not only countries but also economic activities are classified as "central" or "peripheral." Central activities are characterized by innovative strength, market power and political stability, whereas peripheral activities are standardized, labor-intensive and characterized by high competition and low profits (Panther, 2014, p. 6).

At the political level, the world-system is also characterized by hierarchies. The existence of an “interstate system” instead of a unified world state is essential for capitalism to function, since it fragments state intervention in the market and enables worldwide political and economic competition. Strong states intervene in weaker states in a targeted manner, for example, by forcing open markets or through regime change—phenomena that Wallerstein traces historically back to colonial rule (Wallerstein, 2004, p. 57).

While IGOs in the world polity act as carriers and mediators of a universalist world culture by formulating and disseminating legitimate policy scripts that increasingly integrate states into an egalitarian and decentralized world order, in the world-system approach the same actors play the role of embodiments and reproducers of power asymmetries, controlled by core states. Despite this fundamental difference, the combination of the world polity perspective according to Meyer and the world-system approach according to Wallerstein offers analytical potential. The world-system approach shows that institutional norm diffusion processes take place in the sense of a symbolic order based on an unequal distribution of resources and power asymmetries. Based on this finding, Schäfer (2000, pp. 356f.) defines world society as being characterized by a contextual dual structure in which the global homogenizing spread of Western institutions (e.g., education, bureaucracy, human rights) goes hand in hand with an asymmetrizing reproduction of structural inequality. She interprets this combination of normative uniformity and material hierarchization as a central mechanism of world society domination that systematically delegitimizes alternative models of order. In view of the subject-theoretical presentation of the postcolonial perspective on adult education research in countries of the “Global South” in combination with the concept of the worldwide dissemination of OA, a power-hegemonic sensitive basic theoretical localization that accounts for global norm-cultural assimilation phenomena is of particular relevance, since it clarifies the macrosociological foundation of postcolonial theory.

2.2 Postcolonial perspective on adult education

The critical examination of the consequences of European colonialism in contemporary social, political and cultural ways of thinking and acting is based on three scientific paradigms: postcolonial and decolonial studies and the epistemologies of the South. These can be seen as complementary tools for analyzing and overcoming colonial power structures (de Sousa Santos, 2021).

As the historically oldest of the three paradigms, postcolonialism emerged in academia in the 1960s during decolonization in Asia and Africa. Its focus is on the analysis of postcolonial dependency relations and neocolonial structures, but also on a broader critique of the foundations of modernity, including capitalism. Postcolonial theory is concerned with questions of social justice and inclusive societies (Venn, 2006, p. 8). In the context of postcolonial studies, the cultural critique perspective assumes that colonial domination was not only exercised through military and political control, but primarily through cultural dominance (Thiong'o, 1981, p. 16), taking the perspective of those who have suffered from the effects of institutionalized racism (Young, 2016, p. 4). In turn, the prefix "post" in "postcolonialism is not to be understood as a temporal marker for a clearly delineated transition after independence, but as a relational marker that highlights the ongoing impact of colonialism on a former colony (Tsang, 2021).

Colonial and neo-colonial structures not only shape economic and political contexts but also persist in educational processes (Quijano, 2007). In educational studies, post-colonial approaches identify the pervasive permeation of knowledge, academic practices and educational systems with colonial and neocolonial ideologies (Hickling-Hudson et al. 2003, p. 7). Practice-oriented educational research with a postcolonial framing, for example, emphasizes that centralized, universal approaches to education often fail without taking local contexts into account, and that identity and difference politics therefore play a central role in the planning and implementation of social developments and institutions, including adult education (McIntyre & Grudens-Schuck, 2004, p. 183; Hoff & Hickling-Hudson, 2011, p. 191).

In adult education in particular, the relationship between postcolonialism and the discipline must be considered from two perspectives, namely from the perspective of adult education as a pedagogical practice on the one hand, and on the other hand as an academic practice. To frame the former approach, it is first important to note that adult education embedded in the educational system continues to help cement the power of Western cultures in the present, for example in programs such as extension programs, citizenship education, literacy campaigns and lifelong learning. These programs are often based on colonial models of education that reproduce epistemic hierarchies and capitalist logics of production by presenting Western knowledge systems as universally superior and marginalizing non-Western perspectives (Boughton, 2016; Hanson & Jaffe, 2020; IAASTD, 2009; English & Mayo, 2012, p. 70).

The example of Germany highlights that education-related colonial power relations are also perpetuated in countries of the Global North. This can be seen, for example, in the fact that (non-)participation in adult and continuing education programs is significantly influenced by "double selectivity"[3] (Faulstich, 1981; Bremer, 2017, p. 115). If adult education practice does not address the structural disadvantage of migrants in the school system, the non-recognition of school-leaving qualifications and the systematic allocation to precarious employment and dequalifying fields of activity (Messerschmidt, 2017, p. 5), an essential aspect of social inequality remains untouched. The question also arises as to the implications of understanding the term "target group" primarily as a marketing tool and planning variable (Hufer, 2016, p. 72), particularly in terms of whether this reproduces colonial assumptions of superiority over a constructed cultural other (Wegner, 2015, p. 151). However, in line with Gramsci's concept of "In and Against" (Mayo, 2005), educational practices can both function within the framework of existing hegemonic structures and work against them. The latter is the goal of decolonial adult education, which is committed to thinking adult education decolonially and breaking away from a Euro- or Anglocentric focus, instead casting adult education as an important building block for democratic social change in the knowledge that it alone cannot be the panacea for the entire complex structure of social inequalities (Heinemann, 2023, p. 370).

[3] The concept of *double selectivity* refers to an educational phenomenon in which selection processes operate cumulatively across multiple societal levels—such as general schooling and vocational training—thereby reinforcing and stabilizing social inequalities in educational participation. Following Sebald (2020), this can be understood as a macrostructural pattern of selection that is stabilized through institutionalized pathways, cultural capital (Bourdieu), and milieu-specific orientations, and thus functions as a memory of social inequality.

Hanson and Jaffe (2020, pp. 342f.) differentiate between four main approaches (sentimental-, liberal-, emancipatory and emerging approaches) to the decolonization of adult education, which can be differentiated theoretically but cannot be clearly separated in practice. Sentimental approaches are characterized by a nostalgic glorification of pre-colonial knowledge systems or an uncritical affirmation of colonial developments. One example of this is museum education programs that glorify pioneering experiences without questioning their colonial implications (ibid., p. 371). Furthermore, liberal approaches see colonization primarily as a problem of exclusion and misrepresentation of marginalized groups and their knowledge. They therefore focus on diversity, inclusion and representation, both in terms of people and texts. However, they assume that the integration of marginalized groups into existing structures ultimately leads to comprehensive inclusion without fundamentally questioning these structures; extension programs follow this liberal approach (ibid., p. 341).

One of the central figures in critical and decolonial adult education is Paulo Freiere. His approach is based on dialogical and participatory education, which aims to promote the critical awareness (conscientização) of learners and enable them to actively transform their social reality (Freire, 1980). He criticizes the reproduction of social inequalities through traditional education systems and instead calls for a pedagogy of liberation based on the recognition and appreciation of the knowledge of marginalized groups (Dos Santos Costa et al., 2020, p. 99). Education is understood here as a means of emancipation that enables oppressed groups to question their position in the social power structure and develop strategies to overcome colonial structures through collectively organized learning processes. Freire thus represents an emancipatory approach to decolonizing adult education and sees education as a means of transforming social and political structures (Freire, 1970, p. 60).

Fourth, emerging approaches to the decolonization of adult education go beyond the mere inclusion of marginalized perspectives and focus on epistemic plurality and community-oriented educational practices (Hanson & Jaffe, 2020, p. 343). They break with Western knowledge hierarchies by integrating alternative forms of knowledge such as oral tradition, art or intergenerational learning processes into educational structures. Indigenous, Afrocentric and feminist movements serve as models for participatory, practice-oriented educational approaches that not only question hegemonic structures but actively transform them (Tuhiwai Smith, 2012; Preece, 2009, p. 588). Decolonization is thus understood as an ongoing, context-specific process that diversifies existing educational systems while also fundamentally changing their epistemic and power-political foundations (Hanson & Jaffe, 2020, p. 343).

From the perspective of adult education research, Grotlüschen and Buddeberg (2023) analyze how international educational assessments reproduce postcolonial power structures through epistemic violence (Spivak, 1994), othering (Said, 1978) and southering (Jansson, 2017) by setting the knowledge systems and educational standards of the Global North as universal. Their aim is to critically question the role of international large-scale assessments in perpetuating global educational inequalities and to make alternative, context-bound approaches to education visible. Similarly, Wickens and Sandlin (2007) examine in a postcolonial analysis how UNESCO- and World Bank-funded literacy programs perpetuate neocolonial structures in adult education. They show that these programs often follow the economic exploitation logic of the Global North and marginalize local educational approaches. Through the funding and control of these programs, the power to define educational goals and practices remains with Western institutions, which further perpetuates existing global educational inequalities. Gibb (2008) also applies postcolonial theories to critically question how Canadian language education and employment policies push adult immigrant women into essentialized and deficit-oriented subject positions. She argues that the combination of language standards and labor market-oriented competency models in adult education reproduces postcolonial power relations by constructing immigrants as deficit subjects who must conform to the norms of the Canadian (white-dominated) labor market. In this way, the politics of the knowledge economy and human capital theory ignores the colonial continuities that structure unequal educational opportunities and social exclusion, while perpetuating epistemic violence (Spivak, 1994) by devaluing alternative knowledge systems and learning biographies.

Although the examples of adult education's engagement with (post-)colonialism briefly presented here explore the discipline's active engagement with its colonial entanglement in the past and the present, it should be noted in this context that it is not only adult education practice itself that is entangled in postcolonial structures and relationships, but also the institution that claims to uncover this fact, as described above, namely academic adult education research itself. In the context of academic communication via publications (Chapter 1), adult education research is also affected by postcolonial influencing factors in a similar way to higher education research (Hamann, 2016, p. 770; Altbach et al., 2009, p. 10) or sociology (Brown et al., 2025). Trahar et al. (2019) locate academic writing in adult education and higher education research within the framework of an autoethnographic-reflexive writing format in the context of global power asymmetries. The authors argue for decolonizing academic understandings, forms of writing and publication practices in terms of both content and form. They do this not abstractly, but performatively: The authors write three letters (including one in Thai) to break with the common format of the journal article. They demand that other languages, other formats and other readerships be recognized as equal. They emphasize that “internationality” is often a code for Western/English—and thus for epistemic hierarchies (Trahar et al., 2019, p. 154). Writing in one’s own language is deliberately devalued by university incentive systems (e.g., bonuses in Thailand), while publication in SSCI journals is associated with financial and career-related benefits, a mechanism that perpetuates colonial knowledge hierarchies in the guise of neoliberal logics of performativity.

In the context of academic writing and publishing, Alta’s theory of academic dependency—developed for the social sciences by Alatas (2003)—can be applied, which understands this as a form of structural inequality in global knowledge production, analogous to economic dependency theory: Academic dependency describes a state “in which the social sciences of certain countries are conditioned by the development and growth of the social sciences of other countries to which the former is subjected” (ibid., p. 602). Building on the concept of academic imperialism, academic dependency therefore assumes that Western powers directly controlled education and research in the colonies during the colonial era, as already described as an example for adult education research. In the present day, this influence is determined by a relationship of dependency that goes beyond mere cultural orientation, but rather describes a structurally inscribed dependency on theories, agendas, visibility and evaluation systems. Academic dependency is also perceived in adult education cooperation and development projects (Sun

& Kang, 2022, p. 14).

According to Alatas, academic dependency can be further structured into seven dimensions (2022, p. 18):

(i) Dependence on ideas refers to the central form of academic dependence, which describes the widespread adoption of Western theories in the social sciences of the Global South without due recognition of the different historical backgrounds and social circumstances, whereby independent theoretical developments are lacking and an imitative approach to knowledge perpetuates colonial dependency relationships (ibid., pp. 82f.).

(ii) Dependence on the media of ideas refers to the dependence on Western-controlled publication and distribution structures, whereby the selection of research topics, the language of academic communication and the methodological orientation are increasingly oriented toward the requirements of international (primarily Western) markets (ibid., pp. 85f.).

(iii) Dependence on the technology of education describes the continuing dependence of postcolonial science systems on imported teaching technologies, teaching materials and curricula, which predominantly originate from the West and can hardly be replaced by locally contextualized alternatives due to a lack of financial resources and the Western-influenced training of many educational actors (ibid., p. 86).

(iv) Dependence on aid for research and teaching refers to the structural dependence of many research institutions in the Global South on financial and personnel support from Western states and foundations, whereby research designs, problems and publication modes are significantly shaped by external funding logics (ibid., p. 87).

(v) Dependence on investment in education is reflected in the increasing establishment of joint study programs by Western and local universities, whereby educational content, institutional standards and academic mobility are primarily determined by the needs and interests of the “knowledge industries” of the North (ibid., p. 89).

(vi) Dependence of Third World social scientists on demand in the knowledge powers for their skills (brain drain) represents a dimension of academic dependence in which scientists from the Global South give up intellectual resources not only through migration, but also through their involvement in Western-designed research projects as subordinate partners; they are thus integrated into a functional division of knowledge work in which their expertise primarily serves the needs of Western knowledge centers (Alatas, 2003, p. 605).

(vii) Dependence on recognition refers to a form of academic dependence in which academic recognition of researchers and institutions in the Global South is essentially determined by externally defined prestige criteria such as journal and university rankings, which are controlled by Western centers of knowledge and thus systematically marginalize locally anchored forms of knowledge (Tenzin & Lee, 2022, p. 9).

As already explained in Chapter 1, and in light of the discipline-spanning influences of OA and the constellations of actors moving around it, it can also be assumed for adult education that the dependency dimensions (ii) and (vii) are already taking effect in the discipline, or that this dependency will continue to expand in the future. The ways in which this postcolonial dependency of the practice of the academic internal communication function awareness (see Chapter 1) is represented in adult education research at the level of journal publications—and which macro-sociological mechanisms contribute to the reproduction and legitimization of this hegemonically unequal structure—is illustrated on the one hand in the sub-studies of this thesis and on the other hand in the context of the theory-reflexive explanations of the OA movement in Chapter 3.

3 The current journal-based publishing system for adult education

The distinction between digital and non-digital forms of publishing has become obsolete; academic publishing is now embedded in a hybrid system of digital and analog practices. Furthermore, as indicated in the introduction to this publication, academic publishing is not just a technical or intellectual activity, but is closely interwoven with social, economic and political structures. Academic publishing can thus be described as a process of "social production" (Jandrić & Hayes, 2019, p. 389). It is closely linked to economic structures, as large commercial publishers such as Elsevier and Springer charge high fees for access to academic articles and pass on OA costs to authors (Björk, 2017a). At the same time, political power relations regulate access to knowledge, with researchers in less resourced regions relying on shadow libraries, for example, while wealthier institutions have privileged access to expensive academic databases (Jandrić & Hayes, 2019). Furthermore, the academic publishing landscape is culturally shaped by prestige dynamics that result in established institutions preferring to promote traditional forms of publication, while critical or marginalized voices are disadvantaged (Wark, 2012).

The aforementioned dimensions of influence have shaped an almost universal (i.e., cross-disciplinary) journal-based publication landscape, one that is particularly characterized by the politically and economically connoted OA movement and determined by differentiations in academic culture between center and periphery outlets. The three sub-studies of this dissertation will illuminate these three dimensions, with a focus on adult education research and the group of researchers from countries of the so-called Global South. In the following, the three dimensions are presented in detail as a conceptual basis and categorized in greater depth with the help of neo-institutionalist theories, which form the theoretical framework of this dissertation.

3.1 Open access as a historical and macro-sociological phenomenon of science[4]

From Gift Exchange to Market Logic: The Historical Genesis of the Journal Crisis

Although the American physicist Paul Ginsparg first provided the technical realization of a freely accessible online platform for scientific contributions in 1991 by creating the *ArXiv* server, where preprints of research papers in the field of physics were published (Deppe & Beucke, 2017, p. 12), the movement only gained momentum in the mid-1990s. The reason for this is the journal crisis, which originated mainly in scientific, technical and medical journals and can be described as a catalyst for the movement (Lorenz 2014, p. 34; Albert, 2006, p. 255).

Before the 1960s, there was no market for scientific works. Academic journals were mainly published by the professional associations of the respective disciplines and distributed according to the "gift exchange" principle (Hofmann & Bergemann, 2014). From a market economy perspective, the economic attractiveness of scientific academic journals could subsequently be increased by two factors, despite the comparatively small number of buyers. On the one hand, the sustained expansion of universities in the last third of the 20^{th} century should be noted (ibid.). In Germany, the focus on higher education is directly linked to the "Sputnik Shock" and Picht's essay on the "German educational catastrophe" (1964). Another reason for the emergence of an economic market for academic journals can be seen in the introduction of the Science Citation Index (SCI) by the Institute for Scientific Information (ISI) in 1963. The SCI is a scientific literature database that combines the previously coexisting citation registers into one large index and identifies the most relevant journals in the various disciplines by calculating their impact factor (IF)[5]. The SCI and the "core journals"

[4]The chapter presents a significantly more detailed and expanded English version of Sections "3.1 Bedingungen und Hintergründe der Entstehung der OA-Bewegung" and "3.2 Entstehung und Entwicklung der Open-Access-Initiative" from my co-published article with Schemmann "Veränderungen des Hochschulsystems am Beispiel der Open-Access-Bewegung. Möglichkeiten und Grenzen einer neo-institutionalistischen Perspektive auf Steuerung" in the edited volume *Steuerung von Bildungseinrichtungen. Theoretische Analysen erziehungswissenschaftlicher Organisationsforschung*, edited by M. Alke and T. C. Feld. https://doi.org/10.1007/978-3-658-35825-9_10.

[5]The ISI was founded by Eugene Grafield in 1945. The institute collects citation and other data to measure academic influence and has been available online since 1979 (Khan & Ho, 2012, pp. 122f.). In addition to the SCI, the institute also provides the Arts and Humanities Citation Index and the Social

highlighted by it quickly became universally accepted quantitative indicators (Heise, 2018, p. 112). The group of "core journals" according to the SCI subsequently became increasingly essential for university libraries, as they (seem to) represent the state of research in the disciplines and are in greater demand among students and academics (Hofmann & Bergemann, 2014). Consequently, demand for core journals developed largely independently of price. In economics, this phenomenon is referred to as inelastic demand (Schäfer & Ott, 2020, p. 55; Khoo, 2019).

Eventually, large publishing groups began buying up the relevant journals. However, this had far-reaching consequences. On the one hand, the market was quickly confronted with stagnation from an economic perspective. While the profit margins and capacities of commercial publishers continued to rise due to their "monopolistic pricing policy" (Brintzinger, 2010, p. 333), the budgets of university libraries either did not increase or even decreased slightly (Frosio & Derclaye, 2014, p. 117; Young & Kyrillidou, 2005, p. 10; Lorenz, 2014). In the field of human and social sciences, for example, a price increase of approximately 130% was observed between 1990 and 2000 (OECD, 2005, p. 35). From a governance perspective, on the other hand, the learned societies lost control over the dissemination of scientific knowledge when they sold their journals. The principle of the "gift exchange" was thus replaced by the power of the assigned rights of use (Hofmann & Bergemann, 2014). The crisis in the journal industry, which first emerged in the 1970s, has been gaining momentum since the mid-1990s and is spreading from academic journals to other publication media, such as monographs or anthologies (Taubert & Weingart, 2010, p. 159). In response, to reduce the risk of factual unavailability of specialized literature for many scientists, the DFG created a way to make digitally available older volumes of scientific journals, completed editions and databases permanently by financing national licenses (Rutz, 2007, p. 3). However, this funding offer is more of a compensatory nature, which means that the need for alternative publishing models remains high.

With the help of a macro-sociological approach to the crisis described above, the formal organizational structure of the two relevant and colliding fields of the universi-

Sciences Citation Index. In 1992, the ISI was acquired by the media group Thomson Corporation (since 2008 Thomson Reuters) and incorporated into the Thomson Reuters Web of Science database (ibid., p. 123).

ties and the commercially oriented publishers is to be addressed. First, it should be noted in this context that universities and their affiliated libraries operate in a similar environment—that is, within an organizational field. An organizational field is a group of organizations that are bound to a common system of meaning and can be recognized by their interrelated actions and shared regulatory mechanisms (Baier & Schmitz, 2019, p. 307). Accordingly, organizations in a field are confronted with similar institutionalized expectations, which leads to them aligning with each other in a process of isomorphism, thus ensuring their continued existence by acquiring legitimacy.

Isomorphism in the organizational field is emphasized in the macro-sociological NI works of DiMaggio and Powell (1983), who distinguish between two sources and three mechanisms of isomorphism. For the sources, the authors differentiate between competitive and institutional isomorphism (DiMaggio & Powell, 1983, pp. 149f.; Becker-Ritterspach & Becker-Ritterspach, 2006, p. 109). While competitive isomorphism prevails in fields with free competition and emphasizes market-based competition, niche changes and performance comparisons (DiMaggio & Powell, 1983), institutional isomorphism can be traced back to the reaction of institutional expectations to the environment (Süß, 2008, p. 64). Apparently, both sources are at play in the organizational field of universities. Through the research funding model via third-party funds, universities enter into global free competition. In relation to this acquisition process, a global free competition market for research funding is emerging. However, with reference to institutional isomorphism, the term "entrepreneurial university" (Keupp, 2007) should also be mentioned. The term is based on the observation that societal ideas about the legitimate design of universities today tend to be shaped by economic and business management perspectives (Baumeler, 2009, p. 69). Currently, the institutional environment of universities is characterized by economic (e.g., the approach of the knowledge-based economy; Lin, 2010, p. 5), research policy (e.g., science as a service organization; Braun, 1997, p. 175) and business perspectives (e.g., implementation of the organizational innovation of New Public Management; Gülay, 2015). The concept of the "entrepreneurial university" is based on the observation that the structures of universities are becoming more similar in terms of economic parameters. This is not due to processes of competition-related isomorphism, but to institutional isomorphism.

In examining the sources and mechanisms of isomorphism, DiMaggio and Powell (1983) differentiate between isomorphism out of coercion, isomorphism through imitation, and isomorphism through normative pressure. Each mechanism has already been applied to the organizational field of universities in the context of neo-institutionalist higher education research. The first mechanism results from the pressure exerted by powerful organizations based on dependencies (Krücken & Röbken, 2009, p. 329; Becker-Ritterspach & Becker-Ritterspach, 2006). For example, Brünner et al. (2016) were able to show in their case study that the considerable influence of the private company Daimler-Benz AG contributed essentially to the establishment of dual study programs ("Stuttgart Model") at universities throughout Germany (Brünner et al., 2016, p. 75). In the present case of the emergence of the journal crisis, the hypothesis can be formulated based on isomorphism that the large commercially oriented publishers, due to their market power, exerted dependencies on university libraries through the purchased core journals, which led to isomorphism in terms of budget management at the libraries. In contrast, isomorphism through imitation is based on organizational reactions in which, triggered by uncertainties regarding organizational goals or cause-and-effect relationships, organizations that are considered legitimate or particularly successful are imitated (Oliver, 1991, p. 152). However, this mechanism cannot be applied to the stage of the journal crisis. The third mechanism, isomorphism through normative pressure, can, however, be applied to the journal crisis. This mechanism arises from the increasing professionalization of occupational groups and leads to specific cross-case and cross-organizational problem-solving patterns (Süß, 2008; Hasse & Krücken, 2005, p. 240). In view of the developments that led to the explosion in the prices of scientific journals, the right of students and scientists to be provided with current scientific information is a central normative expectation of libraries. To maintain legitimacy, it is part of the norm of "proper work" (Ritterspach & Becker-Ritterspach, 2006) for academic libraries to maintain the currency of their holdings.

In addition to the classification of universities and colleges as an organizational field with isomorphic organizational structures, it is also interesting from a neo-institutional perspective to see how the non-monetized principle of the "gift exchange" dissolves in the science-internal system of publication-based information exchange, replaced by an opening to the market economy. The theoretical elements of de-institutionalization and decoupling from the NI can be used for this purpose. If one assumes that the institution of the free exchange of information has been eroded to some extent by the establishment of the SCI and the sudden economic attractiveness that came with it, then one can speak of a process of de-institutionalization. Such processes usually begin with an increasing discrepancy between the expectations and actions of actors (Quack, 2006, p. 176). In this specific case, one expectation of university libraries is that the availability of core journals must be guaranteed. However, the libraries' actions are still geared toward an economically insignificant market for scientific journals and, due to budgets being calculated differently, they cannot fulfill the institutional requirement.

Social support for the anti-capitalist orientation of academic publishing is dwindling in response to the unavailability of the SCI after recognized journals were taken over by commercially oriented publishers. According to Oliver (1992), who distinguishes between political, functional and social pressures as causes of de-institutionalization, the de-institutionalization of the principle of "gift exchange" represents a reaction to the increasing critical reflection on the compatibility of the named institution with economic demands and can thus be assigned to the cause of functional pressure (Quack, 2006, p. 177). The change in economic conditions—especially the commercialization of the scientific publishing industry—means that the institutionalized mechanism of the free exchange of information can no longer be maintained. Scott (2008) observes in this context that the weakening of an institutionalized practice is often accompanied by the emergence of new practices, which is also evident in the increasing acceptance of fee-based closed-access models and the parallel development of open-access initiatives. However, the broad support for the OA movement in the organizational field of universities, which will be explained later, does not indicate a complete de-institutionalization of the institutionalized idea of the free exchange of scientific information. Rather, the described change in the dissemination model of scientific journals seems explicable through the phenomenon of decoupling.

The concept of decoupling originates from the work of Meyer and Rowan (1977) and describes a way in which organizations cope with conflicting cultural and institutional environmental expectations (Meyer & Kirchner, 2016, p. 1). Meyer and Rowan (1977) note that organizations whose success depends on the adaptation of institutionalized rules are confronted with the problem that institutionalized rules come into conflict with the task-related requirements and efficiency demands that an organization must meet (Walgenbach, 2014, p. 316). In the present case, the institutionalized rule is the “gift exchange” principle and the rule of the free exchange of scientific information within the scientific community that it contains. The task-related requirement of university libraries to provide students and scientists with the most current and evident journal publications is antagonistic to the horrendous prices for core journals in the age of closed access in the 1990s. Here, the demands of the social environment (free exchange of scientific information and access to the most current and most evident scientific studies) and the productivity-oriented work within the organization (investment-intensive license procurement for core journals) conflict with each other. In this case, the concept of decoupling assumes that the organizations can be divided into the organizational structure that is visible from the outside and appears rational and the sphere of the actually problematic everyday world (Baumeler, 2009, p. 81). The two organizational elements are decoupled because NI does not assume that either the organizational structure or the self-representation of the organization determines processes in the context of everyday practices, or vice versa (Hasse, 2006, p. 153). The preliminary stage of decoupling should therefore be understood as a loose coupling, which describes a weak relationship between these two sides of an organization (ibid.).

Returning to the historical context of the journal crisis, it is notable that, as a reinforcing factor in the crisis, the strong focus on IFs in the competition between academic journals has also diffused quantitative evaluation indicators to the level of the researchers in the science system. In the context of increasing competition for research funding and the use of bibliometric parameters to evaluate the performance of young scientists, authors are forced to publish in high volumes—and preferably with positive results—to survive in the scientific community (Fanelli, 2010, p. 1; Heise, 2018, p. 42). The resulting problem of “publish or perish” has led to an enormous increase in scientific publications and the controversially discussed assumption of low quality in terms of content (Rekdal, 2014, p. 650).

Other factors contributing to the quantitative increase in scientific publications can be divided into three areas. First, in some institutions, a higher number of publications is rewarded with a greater allocation of resources (Ash et al., 2015, p. 32). This can lead to scientists splitting their work according to the principle of "Least Publishable Units"[6] (Broad, 1981, p. 1137) to achieve multiple publications. Second, digitalization via the internet has made it possible to publish lower-quality and/or less significant works (e.g., working papers or reports; Ash et al., 2015, p. 33). Third, a growth in volume may be driven by large academic publishers, as characterized by the acquisition of less prestigious journals and the submission of manuscripts that have been rejected elsewhere (ibid.).

From the NI point of view, the described publication behavior of scientists should also be viewed in the context of institutional frameworks; after all, they operate within the constraints of society (Chalmers, 2007, p. 145). In addition to students, companies and the state, colleagues represent a central environmental segment of scientists (Süß, 2006, p. 89). Scientists are increasingly competing with other actors in the aforementioned environmental segment to maintain or build their reputations. In addition, certain expectations are directed at the environmental segment with regard to scientific quantities (e.g., publications or citation frequency) and quality (e.g., innovativeness; ibid., p. 90). The assessment and attribution of legitimacy also occurs through this segment. As a result, scientists align their actions in particular with the expectations of this specific environmental segment and decouple them from other—usually contradictory—expectations (ibid.). For example, it is possible that scientists orient themselves toward trending topics in science as this increases the likelihood of reputation, or that scientists use the aforementioned publication strategies to artificially increase the number of peer-reviewed journal articles in order to boost their reputations.

The Rise of the OA Movement: Responses to Structural Crisis

The economic and systemic crises in the scientific publication and research sector provide the breeding ground for an alternative approach to publication, which, as mentioned in the first paragraph of the chapter, was first technically realized in 1991 with the help of the not yet commercially distributed World Wide Web. However, it took

[6] This phrase is a common euphemism for the smallest possible amount of information in a scientific article that is sufficient for publication in a peer-reviewed journal.

another 10 years before the demand for OA to scientific publications could manifest itself and thus coalesce into a movement. Indeed, the term only gained public attention in 2001 with the Budapest Open Access Initiative (BOAI; Lorenz, 2014, p. 35; Herb, 2012, p. 12; Herb, 2017). At a scientific conference organized by the Open Society Institute in December 2001 in Budapest, a group of participating scientists developed a declaration of principles (the BOAI) calling for OA to scientific publications for all people (Stempfhuber, 2009, p. 116; Schaffert & Schmidt, 2004, p. 7). The resulting document was an expression of three central interest groups, which have already been explained in the context of this chapter: the scientists, for whom the rapid dissemination of their work and the availability of their colleagues' publications was important (Herb, 2017, p. 2; see pp. 31f.); the libraries, interested in an alternative to the rapidly increasing acquisition costs for scientific journals (ibid.); and the scientific institutions, interested in the free and economically and bibliometrically efficient dissemination of their content (ibid.). The declaration for the first time clarified a minimum requirement for openness, from which the basic understanding of OA as the possibility of using scientific documents free of charge (Herb, 2012, p. 11) can be derived: "The literature that should be freely accessible online is that which scholars give to the world without expectation of payment" (BOAI, 2002). The close connection between OA and digitization as a condition also becomes clear here. With the demand for free (within the legal framework) use of scientific full texts (ibid.), copyright issues become virulent. Copyright, in the sense of a restriction of reproduction rights, is untenable in the context of OA and is therefore also minimized in the BOAI: "The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited" (ibid.). At this point, however, it should be noted that information, as the central content of scientific publications, in any case inherently has the property of incomplete exclusion possibilities vis-à-vis others (Heylighen, 2007, p. 170).

With the "Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities" in 2003, the Max Planck Society extended the BOAI's call for OA to scientific publications to include the underlying data: "Open access contributions include original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material" (Berlin Declaration, 2003, p. 1). In addition to granting free access to scientific publications, the Berlin Declaration introduces a further criterion for publications to be designated as OA: An OA publication must be stored in an online archive that ensures the long-term availability of the publication and secures its unrestricted distribution (ibid., p. 2). Finally, the signatories of the declaration argue that far-reaching changes to the financial and legal framework are necessary to achieve the desired "culture of open access," which would be accompanied and supported by the signatory organizations (ibid.). At present, 787 national and international organizations are among the signatories (Max Planck Society, 2025).

From a neo-institutional perspective, neither the BOAI nor the Berlin Declaration represent counter-initiatives controlled by affected individuals, nation-states or organizations. The idea (and reality) of individuals, nation-states and organizations that are capable of autonomous action is a historical construct that is closely related to the emergence of the world society (Ramirez, 2001, p. 358). The world polity approach, which is particularly suitable for analyzing global processes, can be used to integrate the elementary explanations into neo-institutionalist theory. The world polity perspective assumes that modern actors[7] are embedded in global, world-cultural forces that act like "institutions," constructing and authorizing them, but also limiting them (Adick, 2009, p. 259). According to Meyer (2005), the aforementioned world-cultural forces consist of globally effective and rationalized worldviews—cognitive models that he summarizes under the term "world culture" (Meyer, 2005, p. 133; Adick, 2009, p. 268). Since there is no world state with centralized political control, the regulation of world events is carried out virtually by the world polity (ibid.). The term "world polity" is understood to refer to a broad cultural order that has explicit origins in Western society (Hasse & Krücken, 2008, p. 176). From the perspective of the world polity, it is interesting to see how the institution of OA to scientific information has been able to spread globally in the case of the OA movement. Although the signatories of the BOAI and the Berlin Declaration are not states with formal democratic legitimation or

[7]From the perspective of world polity research, the structural forms of state, organization and individual are considered modern actors. They are generated in social rationalization processes, are becoming increasingly important, and thus weaken the formative influence of other, traditional social actors (groups, families, clans, etc.; Krücken & Meier, 2008, p. 114).

legally binding decision-making power, the two declarations nevertheless had a direct influence on the ongoing implementation of OA in scientific publishing.

Relevant to this context is the work of Boli and Thomas (1999), who examine the quantitative growth of INGOs as a fundamental mechanism of the world polity. Boli and Thomas were able to show that, although INGOs differ greatly from one another as types of organization, they are also characterized by an overarching strong orientation toward dominant principles such as universalism, individualism, self-organized agency, belief in progress and world citizenship (Hasse, 2013, p. 74). Although INGOs also have no formal power of control, they have developed into effective actors in the system of the world society over the course of the 20th century, particularly in the period after the Second World War. When it comes to the international science organizations that are among the signatories of the two essential declarations, it can also be seen that these are representatives of INGOs. Although there is currently no uniform definition of an INGO, in the context of educational science discourse works, a pragmatic definition based on Martens (2002), in which organizations that are politically independent, operate transnationally, pursue a public interest and are committed to charitable purposes (Fuchs, 2007, p. 149) can be described as INGOs. Schofer (1999, p. 252) has shown that the number of “Science INGOs” more than quadrupled between the Second World War and 1990. At the same time, according to Brunsson and Jacobsson (2002, p. 6), such INGOs have covert influence on norm-building processes in science. In summary, the signatories of the BOAI and the Berlin Declaration are “science INGOs” capable of action in the system of the world polity. As individual organizations, they are endowed with legitimacy nationally and internationally due to their organizational structural embedding in world political institutions. When they join forces, their influence—acquired through their legitimacy—is strengthened. It is only through the perspective of the world polity that it is possible to understand the enormous impact of the above-mentioned declarations in the context of the OA movement.

Regarding OA’s copyright problems, from the perspective of scientists, the establishment of the Creative Commons license in 2002 has provided the option of freely licensing works for certain uses under certain conditions or for use in the public domain without restrictions (García-Peñalvo et al., 2010, p. 3; Heise, 2018, p. 51). This license solution has become the copyright standard for OA publications (Margoni & Peters, 2016, p. 2). The financial issues of OA, on the other hand, have been and continue to be the subject of heated debate.

OA Business Models: Between Public Good and Profit Logic

From an economic-historical perspective, given the reputation of the first signatories of the Berlin Declaration (on the German side, these included the Helmholtz Association, the Fraunhofer-Gesellschaft and the Leibniz Science Association; Berlin Declaration, 2003, p. 3), the commercially oriented and established scientific publishers were forced to react, especially since OA in its then form proved to be completely unsuitable for pursuing economic interests. In a PR campaign supported by the internationally operating publishers Elsevier and Wiley, among others, this interest group relied on the claim that OA led to a decline in the quality of scientific publications (Giles, 2007, p. 347). While the peer review process[8] as a quality assurance instrument in traditional publishing can be transferred to OA publications without changes (Bodenschatz & Plöschl, 2007, p. 50), how can OA be financed without those publishers who were fundamentally involved in the journal crisis? Two approaches can be distinguished here, which are also relevant to PJs (Sub-study 3). On the one hand, there is the possibility of financing publications through institutions. For example, professional associations can levy membership fees to cover the costs of OA contributions between members. On the other hand, the "author-pays model" requires authors to pay "article processing charges" (APCs) to OA publishers as part of the professional publication of journals (Björk & Solomon, 2012, p. 2). Contrary to the anti-commercial orientation of the OA movement, the "author-pays model" has become established as a common business model in OA. Although many OA publishers and journals only use the instrument of APCs to cover their costs, this financing option offered commercial scientific publishers the opportunity to enter the OA market; the previously classic commercial providers have since opened up the "business field" of OA in such a way that Springer Nature (one of these publishers) currently publishes the most OA journals[9].

[8]Peer review is understood to mean an anonymous, non-public and independent expert examination of scientific texts. In the classic model of quality assurance, editors are involved in upstream qualitative selection. This is the most established quality assurance approach in scientific publishing (Bodenschatz & Plöschl, 2007, p. 51).

[9]https://www.scilit.com/rankings (Accessed March 03, 2025).

To understand the business models mentioned and the enforcement of the "author pays model," it is important to explain the publication channels of OA and their direct connection to the business models. The Finch Report—a report by a working group from the UK that addressed the expansion of access to publicly funded research results and was submitted to the British Minister of Universities and Science in 2012 (Hall, 2012, p. 235)—plays an important role in this line of connection. In the report, the experts explicitly advocate favoring gold OA in OA guidelines for research funders (Finch et al., 2013, p. 127). Gold OA refers to one of two main publication paths in OA. This is understood to mean the primary publication of scientific articles in OA journals, or, in short, self-publishing (Döbler, 2020, p. 400). These newly founded journals operate independently of financing models based on subscription or access fees (BOAI, 2002). Instead, the alternative financing models described above apply. For these journals, financing through APCs represents a central source of funding (Pieper, 2017, p. 1).

The recommendation in the Finch Report to finance gold OA journals via such APCs has been adopted internationally in recent years. For example, at the European level, the Horizon Europe program allows APCs in fully OA journals to be reimbursed as direct costs[10]. At the national level in Germany, the DFG also supports gold OA publications with up to €1,400 per APC by setting up university funds to finance OA publications (DFG, 2024). Due to the profitability of gold OA for commercial publishers, the second OA publication route is increasingly being neglected. This publication route is referred to as the "green road" and refers to the second publication of a publication that is accessible without financial or other barriers, the first publication of which is subject to a license or subscription (Blume, 2019, p. 106). The scientific documents (mainly articles in scientific journals, aka postprints) or their preliminary versions (preprints) are stored in repositories (Herb, 2006, p. 1). In the green road, quality assurance is carried out as part of the peer review process of the original closed-access publisher. Legally, the publication path is much more complex than the "gold road," since the documents published on the OA servers were previously published by a closed access publisher. Since the transfer of exclusive rights of use from the author to

[10]https://www.openaire.eu/how-to-comply-with-horizon-europe-mandate-for-publications (Accessed March 01, 2025).

the publisher is common practice in closed access, the author no longer has the option of publishing their texts elsewhere or translating them (Herb, 2015, p. 50). In this case, the use of repositories can only be made possible by the goodwill of the publishers after an embargo period (Herb, 2017, p. 3). In the case of such a goodwill agreement through the signing of an individual contract, the use of the Creative Commons license with releases for commercial use and editing (CC BY), which is common in OA, is rather the exception. This is due to the economic conflict of interest of publishers, who make a profit from distributing and controlling the content to which they hold the rights (ibid.).

In addition to the two publication paths described above, there is also a transitional path that is designed to help subscription journals make the transition to OA during the transformation process. The publication route of "hybrid OA" allows authors to either pay a publication fee to make their article immediately accessible in OA or to refrain from doing so and make the article accessible only to subscribers to the journal (Prosser, 2003, p. 164; Mittermaier, 2015, p. 2). From an economic perspective, this model is particularly attractive for publishers, which is why it has been criticized by libraries and research funders. Hybrid journals can generate income both through subscription fees and through the OA purchase of articles (Björk, 2017b). This effect is also known as "double dipping" and has already been demonstrated in the example of Wiley's hybrid journals (Asai, 2023a).

However, the economic attractiveness is to be relativized in terms of the demand of authors, although in humanities disciplines, 89.9% of all OA expenditures are accounted for by this publication channel (Butler et al., 2023). For example, the demand from scientists for hybrid publications in closed-access journals is extremely low (Björk, 2012, p. 1503). Even if the attractiveness of this model has possibly changed slightly since, it presumably remains a niche option. There are three reasons for this: First, the visibility of articles on publishers' websites is unsatisfactory due to inadequate labeling of OA (Mittermaier, 2015, p. 3). Second, articles that have been "purchased" by authors via the hybrid OA option are not cited more frequently as a result: A study by Mueller-Langer and Watt (2014) in the segment of hybrid OA journals in economics showed that the citation-boosting effect compared to 1,329 closed access and hybrid

OA articles was just 0.4% (Mueller-Lang & Watt, 2014, p. 21). Third, this marginal increase in citations is offset by disproportionate APCs. While publication costs for gold OA publications average around 1,000 USD (in the “Arts and Humanities” disciplines relevant to this paper, the average in 2010 was around 250 USD; Solomon, 2012, p. 1491), the price for hybrid OA articles would be around 3,000 USD (Björk, 2012, p. 1502). Recent surveys have also revealed that the charges set by hybrid journals were higher than those set by gold OA journals by 1,620 USD (Asai 2023b).

However, OA as a business model also entails risks, particularly in the form of PP. As OA opened to the market, in addition to core publishers, actors were also attracted who were not interested in global and free scientific communication but merely wanted to exploit the business models associated with the movement for economic gain. Over time, a “new industry of journals which engage in deceptive and dishonest practices, falsely claim to offer peer review and publish any article in exchange for a fee” (Bagues et al., 2019, p. 462) was established. The talk here is of the practice of PP and its organs of publication, the PJs. The two terms were coined by librarian Jeffrey Beall, who opened a private blog as early as 2010 in which he listed OA journals that he had identified as suspicious according to his own criteria, thus warning the scientific community against submitting articles to them (Beall, 2017, p. 274). The danger of PJs is twofold: On the one hand, by feigning respectability and legitimacy, they ensure that inexperienced scientists submit articles to them and thus unintentionally become part of the fraudulent practice, as a result of which they face a loss of reputation. On the other hand, there is the danger of scientists who knowingly exploit PJs to increase the quantity of their publication lists without having to fear failure in strict peer review procedures (Stollorz, 2018, p. 3). The lack of a controlling body for peer review can also lead to research results of inferior methodological quality entering into public discourse.

3.2 Present-day OA

After analyzing historical milestones of the OA movement and explaining its central characteristics (motives, business models and publication paths), the current situation of OA needs to be examined more closely. Depending on the perspective, different conclusions can be drawn. While some developments in the field of OA are seen as progress toward freer scientific communication, including the increasing OA rate, political initiatives such as Plan S, and the expansion of technical infrastructures through preprint servers and institutional repositories, Richard Poynder emphasizes in a recent interview[11] that central goals such as affordability and equity have not been achieved. In particular, commercialization by publishers and the increasing dominance of the gold OA model with high APCs are creating new access barriers that specifically disadvantage unfunded researchers and scholars from the Global South. For the natural sciences, Beck-Sickinger et al. (2019) even state that the traditional structure of scientific publication has gotten out of hand:

> Market power is largely concentrated in the hands of a few publishers offering hundreds of journals. Subscription prices for libraries have risen sharply and continuously, to the extent that it is no longer possible to guarantee comprehensive access to scientific knowledge.
> [Translated by the author] (p. 245)

Compared to the original goals of the OA movement as set out in the Budapest and Berlin declarations, the situation 22 years later looks rather sobering. The demand for a reduction in publication costs through OA has not been met. As already mentioned, the large commercial academic publishers such as Elsevier and Springer have managed to maintain their market power by taking the gold road to OA via the fundamental business model of APCs. According to a study by Larivière et al. (2015), there has in fact been a market concentration of large academic publishers since the journal crisis. The authors analyzed 45 million articles published in the online literature database WoS between 1973 and 2013 and found that the market shares of large scientific publishers—especially Reed-Elsevier, Wiley-Blackwell, Springer and Taylor & Francis—have increased significantly in both the natural and life sciences and in the social sciences and humanities since the digital revolution of the mid-1990s. They concluded that in 2013, the five largest publishers accounted for more than half of all scientific publications, with a particularly high concentration of 70% in the social sci-

[11] https://scholarlykitchen.sspnet.org/2023/12/07/where-did-the-open-access-movement-go-wrong-an-interview-with-richard-poynder/ (Accessed February 01, 2025).

ences and a comparatively independent humanities sector with a share of 20% (ibid., 2015, p. 1). One reason for the relative independence of the humanities from the big publishers may lie in the study's focus on papers as a form of publication; in the social sciences and humanities, monographs and collected works are the central forms of publication (Schindler & Rummler, 2018, p. 10).

The cross-disciplinary market power of large publishers in gold OA also extends to the university landscape (at least in Germany). Since scientists depend on high citation numbers for their careers, the opportunity to publish in expensive core journals is becoming a luxury good and a mark of excellence that makes financially strong university locations attractive for scientists (Herb, 2017, p. 6). Universities can enable researchers to publish in the leading gold OA journals with high APCs through local funds or deals, making gold OA publications in high-ranking journals an exclusive commodity (ibid.). As early as 2015, universities and financially strong private research institutions in Germany paid for a large proportion of APCs (Jahn & Tullney, 2016, p. 11). The cost problem caused by closed-access publishers in the mid-1990s has not been solved by OA in the present day. Whereas libraries used to have to plan large budgets for expensive subscriptions, today's expenditure is shifting to the financing of APCs and package deals with commercial OA publishers. Only the original problem of the supply of information in the scientific system seems to have been solved since the Berlin Declaration 16 years ago.

As already described, the CC BY license is establishing itself as the standard in connection with gold road OA and allows readers free use of the published contributions and data. According to EU figures, OA has become an integral part of the scientific publication landscape. In 2017, 35.7% of all articles published were freely accessible in the Scopus and Unpaywall databases (Open Science Monitor, 2022). The distribution of publication routes also reflects the exclusivity of gold road OA, which, according to the Finch Report, should actually become the standard: By comparison, 24% of OA publications appear via green road OA and 13.9% via gold road OA, with a slight decline in green road OA publications since 2016, while the gold road OA share is constantly increasing slightly (ibid.). Nevertheless, for the reasons explained, there can be no talk of a satisfactory development of the movement in view of its original motivations. For this reason, in 2018, 13[12] national research funding organizations from Europe (Schiltz, 2018) joined together to form cOAlatio S. With the support of the European Commission and the European Research Council, they committed to the goal of making full and immediate OA to research publications mandatory from January 1, 2021, for all scientific publications funded by public funds. To achieve this goal, the alliance developed Plan S, a 10-point strategic plan that, in addition to well-known elements such as making publications available under the Creative Commons license CC BY, also includes truly explosive elements, such as the funding of OA publication fees being standardized and capped throughout Europe. Furthermore, the fee-based OA provision of individual articles in a closed-access journal (hybrid OA) is not compatible with Plan S. Instead, publications must be published either in pure OA journals or in open repositories[13].

After negotiations with scientists, librarians and publishers, however, the content of the plan was changed before Plan S came into force. For example, the radical demand for a cap on publication fees was completely rejected (Rabesandratana, 2019). Regarding the influence of Plan S on OA channels, the strategic plan has not significantly accelerated the growth of gold OA, while hybrid OA has increased at an above-average rate, which can be attributed to the widespread use of transformative agreements[14]. Green OA has remained stable, with the Rights Retention Strategy[15] not yet showing any measurable effects, presumably due to the short implementation time (de Castro et al., 2024). Overall, Plan S has been instrumental in strengthening the OA movement by promoting transformative agreements and establishing the rights preservation strategy, but challenges remain, including a lack of awareness among researchers, limited global reach, particularly in Asia and Latin America, and the difficulty of achieving long-term

[12] Currently, there are over 20 national research funders as well as research organisations (https://www.coalition-s.org/join-the-coalition/) (Accessed March 04, 2025).

[13] The US has based its open access strategy to a large extent on Plan S. Since August 25, 2022, the directive of the White House Office of Science and Technology Policy (OSTP) requires that all publicly funded research be made freely available without delay, making it almost a copy of Plan S in key respects. However, the US strategy remains more favorable to large commercial publishers overall due to the more flexible transition periods of the transformative agreements (Smith, 2023).

[14] This term refers to agreements between scholarly institutions and publishers that enable the gradual transition from subscription-based journals to full open access by allowing researchers to publish open access while institutions continue to pay for reading access (read-and-publish models).

[15] Since January 01, 2022, the Rights Retention Strategy enables authors to deposit a copy of their author accepted manuscript in a repository upon publication, ensuring immediate open access, regardless of publisher-imposed embargoes, and reinforcing researchers' control over their intellectual property rights.

structural change in scholarly publishing (ibid).

Similar to the international level, it also looks as if the market power of large scientific publishers is being accepted by German scientific organizations. The DEAL project, initiated by the Alliance of German Science Organizations, currently aims to conclude nationwide licensing agreements with the global players Elsevier, Wiley and Springer Nature to make all publications with significant participation by German authors from these publishers accessible in OA[16]. That said, the new DEAL negotiations for the second contract phase since 2024 have been criticized since their focus on large publishers further consolidates their market power, potentially increases the costs for scientific institutions and establishes hybrid financing models that could delay a complete OA transformation (Reitz, 2023; Haucap et al., 2023). There are also complaints that non-DEAL-bound journals are disadvantaged, that researchers were hardly involved in the negotiations, and that the contracts offer publishers more far-reaching opportunities to collect data and monitor scientific communication without sufficient regulation (Meijer, 2023; Gehring, 2023).

From the NI perspective, the organizations in the field of commercially oriented academic publishers must be considered in relation to the current situation in academic publishing. Due to the anti-capitalist demands of the BOAI and the Berlin Declaration, commercial academic publishers are forced to act to maintain their legitimacy and their associated economic existence. Academic INGOs, university libraries and academics are part of the organizational environment of these publishers. Since OA is ascribed rationality in these environmental segments, according to Meyer and Rowan (1977), academic publishers are under pressure to adapt the procedures and practices associated with OA (Hartz, 2009, p. 135). Staying with the work of Meyer and Rowan, the concept of decoupling is applicable in the case of the adoption of certain characteristics of the concept of OA by commercial academic publishers, similar to the case of university libraries (see Sec. 3.1). The main pillar of the rationality myth[17] of OA is

[16] https://deal-konsortium.de/ (Accessed February 01, 2025).

[17] Rationality myths are rules and sets of assumptions that are rational in the sense that they define social goals and determine in a regular way which means are appropriate for the rational pursuit of these goals. They are myths in the sense that their reality or effectiveness depends on a shared belief in them and they are not or cannot be subjected to objective scrutiny (Walgenbach & Meyer, 2007, p. 26). OA can be described as rational in the sense of this definition due to the social goal of the free availability of scientific information and the defined means (publication channels, business

the belief in the free availability of tax-funded scientific information; this is in fundamental contrast to the profit orientation as a structural feature of commercial scientific publishers. For this reason, publishers integrate OA only superficially into their formal structure and decouple it from their activity structure (Meyer & Rowan, 1977, p. 357). The decoupling takes place with the help of various measures, including the vague and ambiguous formulation of goals (Walgenbach, 2014, p. 317). This measure seems to be exemplified by the commercially oriented scientific publishing group Springer Nature in its recommendations on the first draft of Plan S by the cOAlatio S group (see p. 47). In its recommendations to the group, Springer Nature emphasizes that it agrees with the fundamental goals of Plan S, but that it believes that the requirement for publishers to convert their hybrid journals to OA at the end of transitional agreements should be abandoned, as hybrid journals deliver high OA figures (Springer Nature, 2024a). This is a concealment of the publisher's functional objectives, as hybrid journals make up the majority of Springer's OA publications (Springer Nature, 2019b) and are particularly attractive financially due to the "double dipping" effect (see Sec. 3.1). The focus, then, is on the hybrid OA route, regardless of its unpopularity among scientists for the three reasons explained above (see p. 43). In conjunction with the further call for cOAlation S by the Springer Nature publishing group to fundamentally rethink its negative attitude toward hybrid journals (Springer Nature, 2024a), the impression of a concealment of the financial efficiency requirement is reinforced. By decoupling the formal structure from the activity structure regarding OA, commercially oriented publishers have succeeded in continuing to secure the procurement of monetary resources under the guise of the OA label.

3.3 OA from the Global South perspective

OA was originally touted as a mechanism for democratizing scientific publishing. It was supposed to free the global scientific community from commercial publishers and their high fees and enable a fairer distribution of knowledge. In practice, however, the OA sector remains dominated not only by commercial publishers and their pricing

models, licensing systems). OA can be described as a myth in the sense of the definition, as it cannot be proven to what extent OA can actually solve the problems of the scientific publication system.

power, but also by perspectives from the Global North. Thus, OA continues to perpetuate the exclusion of Global South authors, resulting in "epistemological injustice" (Knöchelmann, 2021).

The most central problem of publishing participation in a market characterized by OA is based on the dominance of commercially oriented large publishers and their preferred "pay-to-publish" funding model. While authors from well-funded Northern institutions, which in turn still have members, can often finance these fees from third-party funds, many scientists from low-income countries have to bear the costs themselves (Björk & Solomon, 2014, p. 95). Although some publishers offer APC waivers, these do not work globally, as they are often non-transparent or only include scientists in countries that are on the United Nations (UN) list of least developed countries (LDCs; Peterson, 2017). In this context, the weak representation of national research funders from countries of the Global South in cOAlation S should also be taken into account. This scenario is also an expression of structural deficits in research infrastructures and unequal global research funding, which make access to OA more difficult (de Castro et al., 2024, p. 64).

At the same time, long-standing OA initiatives exist in the Global South, such as the bibliometric databases SciELO and Redalyc and the collaborative open science initiative AmeliCA, which rely on community-based publication models to promote fairer OA models (ibid., 63). In addition to their Latin American origins, these three projects share a focus on building a collaborative, publicly funded OA system characterized by "academy ownership"[18] (Becerril-García, 2019), as well as "diamond" or "platinum" OA (García et al., 2023, p. 194). The term "diamond open access" (DOA) describes publication models in which neither authors nor readers have to pay fees. Such publications are often financed by scientific institutions that provide the necessary infrastructure, or by scientists who publish the journals as part of their work. They are more than a subtype of gold OA journals that temporarily suspend APCs, as community-driven, non-commercial structures replace the for-profit approach of commercially oriented gold OA journals (Simard et al., 2024). Latin America is considered a model region in which DOA enables sustainable and inclusive scholarly communication (García, 2024,

[18]The term describes a scientific publication model in which academies, universities or scientific institutions retain control over the publication process instead of outsourcing it to commercial publishers.

p. 445).

The three initiatives mentioned above explicitly regard scientific publications as global common goods and refer to a Latin American tradition of scientific production and communication. An important origin of this open science tradition is the long history of bibliographic cataloguing and the development of scientific information systems with the support of intergovernmental organizations (Heredia, 2022, p. 449). Institutional and state support for OA in Latin America is the norm: Countries such as Peru, Argentina, Mexico, Colombia, Brazil and Chile have adopted laws and national strategies to support OA repositories and open science initiatives (ibid., p. 448). SciELO, Redalyc and AmeliCA are expanding their collaborative sphere of influence beyond Latin America and are successively creating "South–South Collaborations" to promote non-commercial OA in other countries of the Global South. A good example of such collaboration is the project between Oscar Ribas University (Angola) and the Autonomous University of the State of Mexico, alongside Redalyc and AmeliCA, aimed to advance non-commercial OA in Angola. Supported by UNESCO and the Angolan Ministry of Higher Education, Science, Technology, and Innovation, the project included drafting a national recommendation for OA and Open Data, establishing a national repository, and enhancing institutional capacities in Angolan universities (Artigas et al., 2022, p. 3981). Overall, this Latin American-influenced alternative counter-hegemonic vision of OA can be summarized under the concept of bibliodiversity. Bibliodiversity is a decolonial concept that aims to break the epistemic hegemony of the Global North in scholarly communication by promoting non-commercial, community-based OA models, regional publication infrastructures and linguistic diversity, thereby empowering the Global South in knowledge production (Berger, 2021, p. 385; Walsh et al., 2024, p. 297).

Even beyond the cooperation efforts initiated by Latin America, a growing infrastructure for DOA is developing in Africa, although it is still in its infancy. A comprehensive study on DOA in Africa (Kuchma & Ševkušić, 2024) shows that 199 journals from 27 African countries operate according to the diamond OA model. Nevertheless, 74.9% of these journals struggle with considerable financial challenges, as they have hardly any long-term funding structures (ibid., p. 18); 71.4% have no fixed annual budget, and almost 60% are completely or partially dependent on voluntary work (ibid., p. 15). These structural deficits mean that many journals are not visible in global scientific databases: While 53.3% of journals are listed in African Journals Online (AJOL), only 32.7% make it into the Directory of Open Access Journals (DOAJ), and only 13.1% are indexed in Scopus—a dramatic underrepresentation of African research in international academic discourse.

The unequal global representation of science is not only evident in Africa, but also in other regions of the Global South, hence why international organizations are increasingly pushing for structural reforms in the OA sector. UNESCO is pursuing an explicitly inclusive perspective that is compatible with Latin America's basic attitude in the context of OA by embedding OA in a broader open science framework and developing policy guidelines to strengthen non-commercial infrastructures. In 2021, UNESCO published a Recommendation on Open Science, a non-legally binding global instrument adopted by 194 countries (UNESCO, 2021). With this recommendation paper, UNESCO is seeking to make scientific knowledge accessible as a global public good by recommending a political framework for OA, supporting open publication models and strengthening international cooperation to create non-commercial OA infrastructures. DOA also plays a decisive role for UNESCO in the context of inclusive open science. However, considering the influence of Plan S on the expansion of commercial scientific publishing, it should be recognized that cOAlation S seems to be becoming aware of the negative effects of OA. For example, Science Europe, as a co-founder of cOAlation S, is organizing the Global Diamond Summit (Beigel, 2024) and has commissioned the “OA Diamond Journals Study” (Becerril et al., 2021), which ultimately resulted in the “Action Plan for Diamond Open Access” (Ancion, 2022).

The new business models of commercial academic publishers can be seen as a reaction to the headwinds that are now also slowly emerging from the Global South. Commercial science publishers have increasingly evolved from pure publication providers to data brokers that not only publish scientific papers, but also collect and commercially exploit research data, scientist profiles and academic networks (Reitz, 2023). Companies such as Elsevier and Clarivate have acquired data analysis companies specifically to secure their market position and establish themselves as central players in scientific information management (ibid.). By combining OA and data-driven business models, they benefit not only from APCs, but also from the comprehensive exploitation of academic metrics and usage behavior (Grossmann & Brembs, 2021). These developments lead to an increasing dependency of researchers and institutions, which must orient themselves toward the data profiles created by publishers in scientific rankings, research funding and career opportunities if they are to survive in the metricized reputation competition, for example (Reitz, 2023, p. 13). This threatens to restrict academic freedom, as academic competition is increasingly controlled by commercial algorithms and monopolized data structures (ibid.). On the one hand, commercial academic publishers now control access to publications; on the other hand, they now dominate citation and impact metrics (e.g., Journal Citation Reports from Clarivate or the SCImago Journal & Country Rank) and even seemingly neutral services such as the DOI for digital resources (Beigel, 2024, p. 12). The threat of vendor lock-in[19] in science is also becoming an increasingly urgent problem in science globally due to this new business model and is leading to an increasing consolidation of "platform capitalism" characterized by large publishers (Chan, 2019). In this way, the strong focus and scientific mainstreaming of the OA infrastructure created and expanded by commercial scientific publishers is not only economically detrimental to scientists in countries of the Global South, but also harbors epistemic risks of distortion. The barriers to entry for the Global South into the Northern-dominated OA infrastructure means that Western knowledge dominance is reproduced, and the metrics focus means that publishers are less inclined to take risks and publish "cold" topics or innovative methods, as these articles may not receive the desired attention and citations (Ma et al., 2023, p. 3). In its Northern commercial manifestation, then, OA contributes to—rather than reduces—epistemic inequality (Mboa Nkoudou, 2020, p. 26; Ma, 2022; Meagher, 2021, p. 346).

Another reason for this epistemic pressure lies in the global orientation of universities toward university rankings, which in their basic structure act as an instrument of epistemic coloniality. Over the last two decades, university rankings have developed into a central mechanism of university governance by hierarchizing and homogeniz-

[19] Vendor lock-in in the academic system describes the technical and financial dependence of researchers and institutions on proprietary platforms and infrastructures, which makes it considerably more difficult if not impossible to switch to alternative providers due to a lack of open standards, high switching costs and institutional integration, leading to monopolization effects, price increases and a restriction of academic autonomy in the long term (Brembs et al., 2023).

ing institutions worldwide (Leiber, 2017). Today's global university rankings, dominated by Times Higher Education (THE) and Quacquarelli Symonds (QS), are based on bibliometric databases such as Scopus (Elsevier) and WoS (Clarivate Analytics), with commercial actors not only controlling the underlying metrics but also offering universities paid consultancy services to improve their ranking positions, reinforcing market-driven university governance (Bell & Mills, 2020; Robertson & Olds, 2017). A central problem with these rankings is their alignment of global higher education strategies with a Western, market-oriented model (Mills, 2022, p. 480). Universities around the world are increasingly aligning themselves with the assessment criteria of these rankings to remain internationally competitive (Robertson & Olds, 2017). As a result, universities from the Global South have to align their curricula, research priorities and publication strategies with the norms of Western academia if they are to move up the rankings (Mbembe, 2016, p. 38). This systematically excludes local knowledge systems, indigenous perspectives and alternative academic traditions (de Sousa Santos, 2018).

From the perspective of the macro-sociological variant of NI, world polity, problems arise when describing and interpreting the OA publication structures of the present from the perspective of the actors of the Global South. While the degree of penetration of the norm of free access to scientific publications becomes clear in the course of the analysis of historical milestones of the OA movement (Sec. 3.1) with the help of the approach, the counter-hegemonic movement, which is particularly well established in Latin America, can only be interpreted via decoupling processes. However, this seems to be too short-sighted here; instead, the Eurocentric basic perspective of world polity studies comes to the fore. Meyer (1980) claims that certain values, primarily those of economic progress and rationality, are institutionalized as normative rules in the world polity. For Meyer, these values are always Western or Eurocentric. Processes of harmonization through isomorphism, for example in education systems (Meyer & Ramirez, 2005) or in the context of higher education (Brandley, 2000), are based on norms that world polity studies assume to exist in Europe and seem to spread diffusively to all other regions of the world, while discrepancies between global norms and national implementation are often explained by an undifferentiated decoupling (Meyer et al., 2005, p. 99).

From the perspective of world polity, the opening of OA-based academic publishing to private, commercially oriented publishing groups can be seen as an expression of normative connectivity to neoliberal rationality myths. No other integration of commercially oriented organizations from the private sector in the dissemination of specific norms and institutions in the "virtual" world polity is envisaged. The groups of actors are limited to international (non-) governmental organizations (e.g., the UN, UNESCO, World Bank), scientific communities and transnational networks that produce normative models and values. The concept of OA as a vehicle for the norm of free access to publicly funded science and research is, as has been made clear, permanently influenced by actors from the private sector and has massive power to influence the design of the institutionalized norm in question. The publishers' authority to set prices emphasizes material inequality phenomena between regions of the world that are not taken into account as influencing factors in world polity. From the perspective of Schlicht, "As states become more closely bound to the world polity and economy, the definitions and prescriptions of the world polity become more imperative for their behavior" (Boli, 1987, p. 79). In this sense, the degree to which Latin America is bound to the world polity and economy seems to be a decisive reason for the divergence of perspectives on OA. Furthermore, the finding of the counter-hegemonic OA initiative from Latin America and the low participation of representatives from the Global South in cOAlation S ties in with Beckfield's (2003) world pollity perspective, which is enriched by civilization theory. In his longitudinal data analysis, he found that the isomorphism thesis of world polity is not supported: "Latin American, African, Islamic, Sinic, Hindu, and Buddhist societies had significantly fewer INGO ties than did Western societies, and five of these six differences have grown since 1960" (Beckfield, 2003, p. 417). If it can be assumed that no formal exclusion appears in the example of cOAlation S, there must be other reasons—for example, cultural distance or conscious rejection of Western-style organizations. Following Beckfield, it can therefore be assumed that "[n]on-Western states and societies may have fewer world-polity ties out of resistance rather than exclusion" (ibid., p. 404).

The world polity approach fails to recognize that global norms and systems are influenced by power and conflicts of interest. From the perspective of world-systems analysis, the unequal global distribution of publishing opportunities in the OA system can be interpreted as an expression of the structural division of labor within the capitalist world economy (Wallerstein, 1976a, 1976b). The dominance of large commercial publishers based in the Global North reflects the concentration of capital- and technology-intensive activities in the core regions (Wallerstein, 2004, p. 57), while researchers in peripheral regions have to fall back on resource-poor, often precarious publication infrastructures. The unequal access to visibility, funding and epistemic recognition thus reproduces the principle of "unequal exchange," in which scientific added value is systematically transferred from the periphery to the center (Wallerstein, 1976b, p. 351). At the same time, common good-oriented, non-commercial OA initiatives can be read as semi-peripheral counter-movements that formulate alternative knowledge orders and create partial autonomy within the world-system through transnational South–South cooperation (Chase-Dunn & Gills, 2003). OA thus appears not as an egalitarian model of global science communication, but as a contested space within a hierarchically structured world-system.

3.4 Interim conclusion

In Sections 3.1 to 3.3, a critical recapitulation of the historical milestones of the OA movement was used to present the central characteristics of OA and interpret them as a macro-sociological variant of NI with the aid of meso-sociological theories of NI and the world polity approach. The OA movement developed out of the journal crisis of the 1990s, during which the prices for scientific core journals rose unchecked, libraries were put in financial distress and the supply of scientific information suffered. Before the market economy opened up the academic publishing system, the anti-capitalist principle of "gift exchanges" based on the free exchange of information within disciplines dominated. While, from an economist's perspective, the introduction of the SCI and the resulting core journals in individual disciplines led to the economic attractiveness and thus to the takeover of frequently cited journals by commercially oriented academic publishers, it is only through NI that it becomes clear why the market power of these publishers was able to expand over more than two decades until the peak of the journal crisis in the mid-1990s. In NI terms, the hypothesis can be put forward here that the establishment of commercially oriented academic publishers as an environmental segment of university libraries led to a process of isomorphism in the latter, which was expressed in the collective restructuring of budgets for the acquisition of cost-intensive licenses for high-ranking academic journals. Following DiMaggio and Powell (1983), this process was brought about by coercion from license-holding publishers and normative pressure from the environmental segments of students and scientists who expect a supply of up-to-date and high-quality scientific information. As a result, the institutionalized rule of the “gift exchange” principle collided with the task-related requirement of providing scientific information. With the establishment of commercial scientific publishers in the organizational environment of libraries, it is no longer possible to meet this requirement without violating the institutionalized rule. To ensure the necessary legitimacy from the organizational environment by observing central institutions, the university libraries decouple the organizational structure from everyday practices.

The BOAI (2001) and the Berlin Declaration (2003) have played a central role in the process of re-institutionalizing the idea of free access to scientific literature and other materials on the Internet. In the course of the declarations of intent drawn up and signed by nationally and internationally renowned research organizations, an increasing number of OA journals were founded at the beginning of the 21st century. From the perspective of the neo-institutionalist theory of world polity, the steering capacity of these organizations, which are not endowed with formal nation-state steering power, becomes clear in this context. All of the undersigned research organizations can be classified as scientific INGOs due to their non-profit research commitment, their political independence and their transnational scientific work with other research organizations. In the concept of world polity, INGOs gain legitimacy and influence through the embedding of global political institutions. The impact of the declaration becomes clear from the perspective of world polity.

Focusing on the characteristics of the OA journals establishing themselves in the course of the two important declarations, it is worth pointing to the licensing basis, financing and publication channels in OA. In terms of licensing law, the emerging publication culture has been based since its beginnings on the CC BY license, which enables the free licensing of works for certain uses under the condition that the author is named.

With regard to the financing of OA, the "author-pays" model has established itself, whereby authors or their funding organizations pay APCs to the OA publishers, which are used to cover the peer review process for quality assurance and other publication costs. Funding via APCs must be distinguished from the gold road OA publication route, which refers to the primary publication of scientific articles in OA journals: The Creative Commons license goes hand in hand with gold OA, and the publications are immediately freely available (Schmitz, 2017). The green road is another publication route in OA. This is a secondary publication of a publication originally published in closed access. The publications are archived on a scientific repository for the long term. The quality assurance for such articles has already taken place in the peer review process as part of the initial publication. Hybrid financing models are an intermediate option for closed access journals that aim for OA. In this model, authors can purchase online availability for their articles for a fee. However, the journal continues to be distributed for a fee (Bargheer, 2006, p. 183); as such, hybrid OA draws criticisms due to the possibility of double resource revenue—via both APCs and subscription costs.

Considering the current situation surrounding OA, it is notable that the commercially oriented scientific publishers that dominate closed access publish most of the core journals in the SCI. These publishers have succeeded in securing their economic existence through APCs. The example of the Springer Nature publishing group also shows that, regardless of the interests of the scientists involved, the focus is on the particularly lucrative hybrid publication route. While from a neo-institutionalist perspective, a decoupling process on the part of university libraries hypothetically guaranteed institutional legitimacy in the age of closed access, the decoupling approach currently appears to be applicable to commercial scientific publishers. The anti-capitalist institution of OA is only superficially integrated into the formal organization of publishers. Nonetheless, the analysis of OA from the perspective of the Global South opens up new perspectives on the mode of action of global norm diffusion processes. In the logic of world polity theory, internationally anchored normative models, such as the principle of free access to scientific information, are seen as an expression of Western-influenced rationality myths that diffuse globally via IGOs, INGOs and transnational networks. From this perspective, OA also appears as part of a rationalized world culture that is disseminated worldwide via supranational institutions such as UNESCO. What is striking in the case examined here, however, is that this normative dynamic by no means takes place exclusively in a top-down movement from the Global North to the Global South, as suggested by the convergence logic of world polity theory.

In particular, the Latin American OA initiatives (such as Redalyc, AmeliCA or SciELO) are paradigmatic of a counter-hegemonic norm-setting approach emanating from the South that consciously positions itself beyond commercial exploitation logics. It is remarkable that these models do not remain marginalized, but are actively taken up by UNESCO and recognized as normatively connectable. The direction of cultural transfer often assumed by world polity theory—in the sense of a "westernization" of global institutions—is reversed here: A practice from the periphery oriented toward the common good is given normative authority and has repercussions on global regulatory bodies and potentially even on private sector actors in the North. Following Hironaka (2014, p. 7), this effect can be interpreted as the result of a "multiplicative swarm of bees" of indirect normative influences, through which non-Western models can also generate isomorphic pressure to adapt. One potential effect can already be seen in the changing business models of many commercial science publishers.

Nevertheless, this example also shows a central deficit of the world polity approach: Its analytical strength lies in the description of normative convergence, but not in the explanation of persistent structural inequalities. The empirically verifiable exclusions of marginalized actors in the OA system—for example, through APCs, infrastructural barriers or unequal visibility—cannot be satisfactorily explained by concepts such as decoupling or lack of implementation. As Meyer (2009) himself admits, the thesis of global convergence is hardly empirically tenable on closer inspection. Rather, a differentiated view of selective appropriation, recontextualization and deliberate non-adaptation of global models is required, as formulated by Steiner-Khamsi (2003, p. 143) with her call for the illumination of "intermediate spaces." In addition, the world polity theory largely ignores a key type of actor: private sector organizations. While INGOs, IGOs and transnational networks come into view as carriers of global norms, the structural and strategic influence of economically powerful actors such as Elsevier or Springer Nature on the form and scope of global norm diffusion is ignored. However, the case of OA in particular shows how strongly the shaping of normative concepts such as “open science” is shaped by commercial interests—for example, via APC-based business models, metrics management or the control of publication infrastructures.

This is where the world-system approach offers a productive addition. While world polity theory emphasizes global processes of normative alignment, the world-system approach analyses the capitalist-structured reproduction of epistemic and economic inequality. The hierarchical world economy structures not only material production relations, but also academic visibility, funding and recognition along a global division of labor. Large commercial publishers in the core regions control resources, platforms and metrics, while researchers from the periphery remain structurally excluded. From this perspective, common good-oriented OA models appear as semi-peripheral counter-movements that formulate alternative knowledge orders and create partial spaces of autonomy through South–South cooperation. Only by combining both theories does it become clear how OA can be understood not only as a globally diffusing norm, but also as an epistemically and economically contested field. While the world-polity perspective captures the normative dynamics of institutional diffusion, it remains blind to the structural conditions of unequal participation. The world-system approach closes this gap by revealing the materialist basis of epistemic inequality, and thus explains why and under what conditions alternatives such as diamond OA could emerge in Latin America at all.

4 Methodological framework

Following the hypothesis from Chapter 1 that journal-based publishing in adult education research is gaining in importance to the detriment of monographs and edited volumes, bibliometrics is becoming more interesting as a family of methods for the publishing exploration of a field or a specific group of authors in a field, since current bibliometric methods are almost exclusively oriented toward journal literature and largely ignore other forms of publication (Kempka, 2018). Essentially, bibliometrics can be understood as the application of mathematical and statistical methods to explain the processes of written communication, as well as the nature and course of development of a scientific field, by counting and analyzing the various aspects of written communication (Ball & Gorski, 2009 after Gorraiz, 2009). Bibliometrics is a sub-discipline of scientometrics that addresses the analysis of quantitative aspects of the production, dissemination and use of scientific information with the aim of contributing to a better understanding of the mechanisms of scientific research as a social activity (Braun et al., 1985, p. 5).

The advantages of bibliometric methods in the context of the questions relevant here are, on the one hand, that they "reveal regularities and patterns in scientific communication which are not consciously available to the actors involved-and therefore should not be asked of them-yet structure their behavior" (Leydesdorff, 2001, p. 20). On the other hand, the theoretical framing of this work by the world polity approach proves to be compatible with bibliometric methods, since both work with aggregated numerical data: While bibliometrics provides quantitative data on participation in journal exchange processes, world polity research uses such data to measure educational participation, for example (Adick, 2009, p. 266). Bibliometric analysis methods can be divided into evaluative and descriptive or exploratory bibliometrics (Gauch, 2023)[20]. Evaluative bibliometrics develops and uses indicators to assess the scientific performance of researchers, institutions or nations, while exploratory bibliometrics uses bibliometric methods to map social and knowledge-related structures of scientific spe-

[20]In the English-language literature, the term descriptive bibliometrics is dominant in comparison to exploratory bibliometrics. In German-speaking countries, Gauch (2023, p. 259) defines exploratory bibliometrics as "the exploration, structuring and mapping of science." In terms of terminology, exploration fits in with the fundamental research interest of this study and is therefore preferred hereafter to descriptive bibliometrics.

cialties (van Leeuwen, 2004; Morris & van der Veer Martens, 2008, p. 215).

Bibliometric indicators on publications and citations are used as part of a metric approach in award procedures for research funding, among other things, to generate statements on research quality at team, institution and country level (Leišyt & Peksen, 2020, p. 16). However, bibliometric indicators for evaluating individual performance should be viewed critically due to their decontextualization (Dobrovolny & Fuentes, 2008, p. 12). Especially when the number of publications in journals with a high impact factor is used as an indicator of individual research performance, this poses a problem in the context of adult education research. On the one hand, the significance of the IF is susceptible to invalidity regardless of the discipline, as the mean value is used to calculate the indicator, and references are usually unevenly distributed across individual articles (Baum, 2011, p. 5). On the other hand, genuinely adult education journals are very rare (Roor in press a, p. 75). Instead, the Hirsch index (h-index) has become established as a metric for evaluating individual journal publications in educational science disciplines. The h-index refers to authors and not to journals. The h-index of an author is the highest number h, for which the following applies: h of their N publications were cited at least h times, while the remaining (N-h) were cited less frequently (Herb, 2008, p. 3). Significantly, the index is criticized for its discrimination against younger researchers, researchers in countries with few resources, its simplistic methodological character and its limited usefulness for research evaluations (Thelwall & Kousha, 2021). Overall, it should be noted that citations also only reflect a limited spectrum of scientific performance, as they measure scientific recognition but not directly quality, reflect past rather than future performance, and are strongly influenced by social network effects (e.g., invisible colleges, Matthew effect; Luukkonen, 1999; Larsson, 2010).

Bibliometric methods are far more widespread in the context of adult education research at the macro level than at the micro level, with the aim of surveying the research landscape of the discipline. In adult education research, such approaches can be described as meta-research analysis (Long & Agyekum, 1973). For the extraction of bibliometric data with the purpose of surveying the field, the investigation of the publishing outlets of the discipline is recognized as a viable approach (Fejes & Nylander, 2015, p. 104). A historical overview of bibliometric work in the discipline can be found in the introduction to sub-study 1 of this dissertation. Exploratory bibliometrics, which is thus recognized in the field, collects and accumulates information about documents such as bodies responsible for the production and transmission of the information, form of transmission (e.g., journal, monograph), medium of communication (e.g., article, letter), nature of information conveyed, subject and language characteristics, timing and frequency with which information is conveyed, amount of information conveyed, or geographical origin (Diodato & Gellatly, 1994, p. 15).

Although bibliometric indicators such as formal quality, download numbers and citations are used in two of the three sub-studies, the present study is located in the field of exploratory bibliometrics, since the generated evaluations of the indicators are not used to evaluate efficiency in a competitive economic or managerial sense (Hammarfelt & Hallonston, 2023), but to measure the research field of adult education research with a focus on a specific, sometimes marginalized group of authors.

4.1 Bibliometric analysis model of scientific specialties

To systematize the three bibliometric approaches of the papers on which this work is based, a model of bibliometric (explorative) field surveys is used, which represents broad and fundamental elements for systematization. Morris and van der Veer Martens (2008) present a model for determining "special fields," which consists of three parts "1) a network of researchers, 2) a system of base knowledge, and 3) a formal literature. These three parts model the social, cognitive, communicative, and bibliographic processes in the specialty" (p. 240). This study has not examined the forms of collaboration between adult education researchers in countries of the Global South, which means that the first part of the model is no longer relevant. For Morris and van der Veer Martens (2008, p. 241), the "base knowledge" on which researchers draw for their work comprises the shared and frequently used knowledge (theories, data, techniques, evaluation standards, controversies) in a special field. The formal literature of a specialty includes all types of documents in which the results of research are published (journal articles, books, conference papers, etc.; Morris & van der Veer Martens, 2008, p. 241; Dees, 2018, p. 51). The literature in turn comprises seven different entity types, which the authors summarize in an entity-relationship model and show their connecting lines. The basic entity type of the model is Paper (1):

> Each paper is linked to the index terms (2) that are associated with it, the authors that authored the paper (paper authors; 3), the journal in which it appeared (paper journal; 6), and the references that it cited (4). Each reference is linked to the authors that are associated with it (reference authors; 5), and the journal that is associated with it (reference journals; 7). (Morris & van der Veer Martens, 2008, p. 253)

Alongside the entities paper year and reference year, these are the easiest entities to extract via databases. The ongoing technical development of the most comprehensive academic databases, such as WoS or Scopus, has made it possible to filter other entities in a user-friendly way, so that "special entity extraction routines" (Thompson, 2005) are no longer necessary to retrieve, operationalize and interpret this information. Author affiliations or author institutions, title terms and abstract terms can be easily extracted. Quantitative text mining methods and corresponding packages can even be used to extract author gender imputation (Altman & Cohen, 2021).

All named indicators can be analyzed using one- and two-dimensional techniques, whereby a mapping of a special field in the sense of the model only comes about through the identification of co-occurrences between the indicators. One-dimensional refers to the simple counting of bibliometric elements (Dees, 2015, p. 50). The entities represent certain elements and objects of a special field, which are determined in the context of a bibliometric analysis with the aim of grouping them to analyze relationships (ibid., p. 52; Morris, 2005). Therefore, the basic idea of the bibliometric analysis model according to Morris and van der Veer Martens is that

> [t]he structure within the knowledge domain is manifested in the collection of papers as groups of related entities, such as [...] groups of references that represent base knowledge, [...] groups of reference authors that represent experts, [...] and groups of terms that represent specialized vocabularies within the knowledge domain. Exploration and visualization of these

> groups and the complex relations among them provides information that can be used to gain a broad and detailed understanding of the underlying knowledge domain." (Morris & Yen, 2004, p. 5291 after Dees, 2015, pp. 54f.)

In summary, this study concentrates on the formal literature of the specialized field of adult education research with a focus on the increasingly important document form of journal articles. The entity of author affiliations has a systematizing effect in the analysis to be able to explicitly consider academics from countries of the Global South as a *unit of analysis* (Smith, 1981, p. 86). The following bibliometric entities are extracted: paper authors, paper journal, paper year, author affiliations as well as title terms, abstract terms and index terms. The last three identities mentioned are to be described as terms in the sense of bibliometrics. Terms are meaningful terms that are used in scientific texts—especially in titles, abstracts and keywords—to mark research content and thematic focuses. They differ from citations in that they do not primarily refer to the knowledge flows and reference systems of a discipline, but rather reflect current research questions, discourses and scientific identities. As "interest markers" (Zitt et al., 2011, p. 21), they function as signals for emerging or established topics and can be used in bibliometric analysis to make research fields and their development visible.

The analysis is carried out in the three sub-studies using both one- and two-dimensional bibliometric techniques. The analysis model of Morris and van der Veer Martens focuses on network techniques in the context of two-dimensional analysis, which concentrate on the relationship between citing and cited entities. In the context of the present study, however, the one-dimensional analysis of bibliometric entities is sufficient for exploring the representation of adult education researchers from countries of the Global South; the authors' (citation) network does not play a role here. Rather, the topics of the research work that the authors bring into the discourse space are of interest. Here, however, the model only offers the analysis of index terms as tokens for the representation of topics. The authors themselves observe that "[a]uthor-supplied index terms may contain considerable ambiguity and overlap in meaning because authors typically do not use standardized index terms" (Morris & van der Veer Martens, 2008,

p. 260). While the bibliometric entity analysis can be systematized via the model, there is a lack of instruments for determining the topics of the papers, although title, abstract and keyword tokens in combination provide sufficient data for the evaluation of topics. Therefore, the challenges of topic analysis and interpretation must be addressed in greater depth.

4.2 Content analytical approaches and bibliometrics

Although bibliometric data provide sufficient information to also analyze topics and content, as described above, bibliometrics does not provide sufficient tools for content analysis, which is why existing studies that also want to evaluate the content of papers as part of bibliometric analyses typically make additional use of the repertoire of (qualitative) content analysis (e.g., Fejes & Nylander, 2015; Aktoprak & Hursen, 2022; Leong et al., 2021). When bibliometric studies remain within the methodological repertoire of bibliometrics and evaluate content or topics, they tend to use the most commonly used technique of co-word analysis as a means of content profiling (van Eck & Waltman, 2014, p. 285).

First introduced in the 1980s by Callon et al. (1983), co-word analysis takes the terms explained in Chapter 4.1 into consideration with the aim of analyzing the knowledge structure in different areas that investigate the relationship between the words used in different parts of documents (title, abstract, keywords). The method is based on two assumptions: First, it assumes that the words used in an article are carefully selected by the author and accurately reflect the meaning of the article; second, that the co-occurrence of two words in different articles indicates a correlation (Feng et al., 2017, pp. 1523f.). In practice, however, the technique is usually limited to keywords as the data basis (e.g., He, 1999; Leung et al., 2017). The strength of keyword co-occurrence is measured on the left, and the interaction between keywords is thus revealed and visualized (Leung et al., 2017, p. 36). However, one criticism of measuring co-occurrence in the context of co-word analysis is that it does not reflect their inner relation to the field (Alhwiti & Megahed, 2022, p. 6). Thus, especially in research fields that interact with theories, objects and methods from a variety of scientific disciplines, as is the case in educational science, for example, words and terms can have different meanings in various educational science subdisciplines (ibid., p. 7). Keywords can therefore correlate in certain disciplines without presenting causal relationships, since no statement on semantic proximity is possible with co-word analysis alone, it is often combined with co-citation analysis (e.g., Braam et al., 1991; Tan Luc et al., 2022; Bernatović et al., 2022) and thus indicates that two terms are actually related in terms of content when they appear in jointly cited articles (Alhwiti & Megahed, 2022, p. 7). As a result, co-word analyses are displayed in co-occurrence network maps and systematized according to (mostly keyword) clusters. The resulting clusters provide a macroscopic overview of dominant subject areas or research clusters and their interconnectedness within the research field.

An alternative to quantitative bibliometric co-occurrence analysis is offered by qualitative content analysis of bibliometric terms. While co-word analysis offers a field overview similar to a word cloud, qualitative content analyses provide deeper insights into theoretical orientations in specialist disciplines and facilitate the identification of desiderata. The latter gain in knowledge seems particularly successful when qualitative content analysis is used alongside co-word analysis to gain deeper insights into identified topic clusters (Pescador & Arzadun, 2025). That said, one disadvantage of qualitative content analysis in the context of evaluative bibliographic field survey projects is the limited amount of data that can be analyzed using complex interpretative analysis methods. When it comes to surveying a very broad area of an entire research discipline, as is the case with this dissertation, topics must be retrieved using quantitative content analysis. If one wishes to avoid the disadvantages of co-word analysis, the topic modeling method is a good choice. Topic modeling is a method for analyzing latent thematic structures in large text collections. It is a probabilistic method that is able to automatically identify thematic patterns from unstructured documents[21]. The use of topic modeling has proven to be effective in various scientific disciplines—for example, in linguistics (Bauer et al., 2012) and political science (Greene & Cross, 2017), but also increasingly in education (Ozyurt & Ayaz, 2022) and adult education research (Nylander et al., 2022). Numerous implementation variants based on different programming environments are now available. The model is based on the assumption that topics arise from similar patterns of word usage across documents and

[21]The method is described in detail in sub-study 2.

that each document is a mixture of several topics. It is a "soft clustering" method that does not assign documents thematically unambiguously, but proportionally to several topics (Lamba & Madhusudhan, 2021, p. 106). The method helps to organize, search, structure and annotate large collections of texts by identifying central topics and their distribution in the documents. Although it is based on certain theoretical assumptions, topic modeling does not itself provide empirical evidence for these theories and requires manual interpretation of the topics identified (ibid.).

Topic modeling offers a manageable method for mining topics in large data sets, given the content analysis gap in the model for determining "special areas." The basis here are the entities title, abstract and keywords, which are analyzed across a large data set of empirical texts by adult education researchers in countries of the Global South. In contrast to one-dimensional scientometric indicators, which count individual events such as citations or publications, topic modeling is based on the cooccurrence of terms within many documents and thus allows the identification of latent thematic patterns. As such, it is a two-dimensional bibliometric technique that serves less to evaluate performance than to describe content structures (Hornbostel, 1997, p. 308). Topic modeling thus offers an effective instrument for the structural reconstruction of scientific discourse, especially in constellations in which classical citometric methods reach their limits due to visibility asymmetries (e.g., in non-indexed journals). This latter aspect is particularly relevant in relation to the subject of adult education research in countries of the Global South. Ultimately, bibliometric analyses must be reflected upon with decolonial sensitivity in the light of academic dependency and other postcolonial marginalization factors—and also implemented methodologically.

4.3 Decolonially sensitive bibliometrics

As becomes clear from Chapter 4, particularly in the context of evaluative bibliometrics, scientometrics or bibliometrics is strongly influenced by Western definitions of performance. It is postcolonially influenced when it uncritically reproduces existing colonial power and knowledge relations in the global science system, especially through its methodological foundations, inclusion criteria and technical infrastructures. Bibliometric work in adult education research has so far almost exclusively considered selective samples of data sources identified as relevant to the respective research question, and it usually selects those that are indexed in the leading commercial databases (e.g., Fejes & Nylander, 2018; Larsson, 2010; Käpplinger, 2019; Nylander et al., 2020). In the case of (systematic) literature reviews, which are more common in the discipline and represent the methodological attempt to achieve the highest possible degree of systematization of academic knowledge on a specific topic, large commercial databases such as Scopus, WoS and ScienceDirect, or discipline-specific core databases such as Education Research Complete, ERIC and PsycINFO dominate (e.g., Papadopoulos, 2023, p. 4; Laupichler et al., 2022, p. 3; Choudhary & Bansal, 2022, p. 112). In the case of the former, it has become particularly clear in the context of Chapter 3 that they often exclude research from poorly funded research environments, from formerly colonized countries, from the "peripheries" (Schmidt, 2020, p. 47), whether intentionally or unintentionally.

However, the second group of discipline-specific databases also exhibits a North-South bias. For example, in Education Research Complete, only 2.76% of all resources are published in countries that the OECD classifies as belonging to the Global South[22]. Large citation databases and established research information systems create a seemingly objective picture of global research, but they are based on a highly selective database. What is lost from the epistemic core of a discipline as a result is shown by Ramos Zincke (2014) using the example of sociology. His study is based on the manual collection of over 21,000 literature references from 3,522 social science publications by Chilean researchers (2000–2006) that were published locally and not indexed in international mainstream databases. It shows that despite international reference patterns, national and local theorists in particular play a central role in citation networks, thus maintaining cognitive autonomy vis-à-vis global knowledge centers. The study is considered methodologically groundbreaking for a decolonial bibliometrics, as it makes local scientific practices empirically visible that remain invisible through conventional scientometric methods (Ramos Zincke, 2014). Schmidt (2020) takes up this approach in her dissertation on the unequal visibility of global research in scientific library and indexing systems and emphasizes that decolonially sensitive bibliometrics or

[22]This value was determined using the Database Coverage List of Education Research Complete, available at https://www.ebsco.com/m/ee/Marketing/titleLists/ehh-coverage.htm (Accessed April 03, 2025).

scientometrics requires painstaking manual research. For her bibliometric study in the context of Southeast Africa, she selects the data sources database indexing, curricula vitae and institutional records (ibid., p. 176).

Based on the assumption that manual data collection is the key to redressing postcolonial distortions in the bibliometric measurement of specialized fields, the journal-based publication field of adult education research that is not indexed by commercial service providers is first systematized in greater depth and then operationalized on the basis of this system. For this purpose, we draw on Beigel's (2014) concept of "segmented circuits of scientific recognition" (also presented in sub-study 2). Her model identifies four academic publication circuits: mainstream publishing circuits, semi-peripheral circuits, southern circuits, and national circuits—each of which enables specific forms of academic prestige and scientific visibility. Rather than reproducing a binary division between "mainstream" and "periphery," the circuit approach allows for a differentiated typology of scientific publication spaces, characterized by specific combinations of institutional sponsorship, technical infrastructure, language, accessibility, and reach. In this way, transnational open-access networks and regional publication platforms can be recognized as independent scientific public spheres, defined not only by their absence in commercial databases, but also by alternative logics of visibility, legitimacy and relevance.

Beigel's concept of segmented recognition circulations reveals how scientific visibility and legitimacy are unequally distributed globally and organized along infrastructural and institutional lines. Alatas' analysis of academic dependency underscores the fact that these structural inequalities also persist at the epistemic level, in that research in the Global South is often connected to theories, problem definitions, and methods of the North (Alatas, 2003, p. 602) —a scenario that further emphasizes the importance of alternative circuits beyond hegemonic specifications. Applying the circuit model to adult education research makes it possible to explicitly show the spatially and infrastructurally segmented communication channels within which research from the Global South circulates, be it in regional OA platforms such as SciELO, in institutional repositories, or in local print journals. These spaces are not simply deficient; they often follow different quality criteria, languages and addressee references that are not represented by the logic of mainstream publishing, and thus remain bibliometrically invisible.

The first sub-study of the present dissertation addresses the mainstream circuit of adult education research, as defined by Beigel, with a focus on scholars in countries of the Global South. Sub-study two uses Beigel's subdivision of the non-mainstream circuit to operationalize the same space for adult education research. For the third sub-study, which examines the illegitimate publication area of PP in adult education, the circuit approach has a sensitizing effect in that it emphasizes the legitimacy of financially weak journal outlets and warns against labeling them as illegitimate on the basis of linguistic deficiencies.

5 Sub-study 1: A bibliometric analysis of adult education research from countries of the Global South at the journalistic center of the discipline

5.1 Summary and classification in the overall framework

The first sub-study of this cumulative dissertation was published second and contends with the part of the OA-influenced journal-based publication landscape that is particularly influenced by and viewed through the lens of the Global North. More precisely, the article focuses on the mainstream circuit of the narrow discipline of adult education research, with a focus on adult education researchers in countries of the Global South. It can be assumed that adult education researchers from countries of the Global South are underrepresented in internationally renowned (hybrid) OA journals of adult education research since, among other things, high APCs represent a financial hurdle for scholars from low-income regions, and open-access publication models can thus reinforce existing inequalities in access to scholarly visibility (Smith et al., 2021).

The study is methodologically based on a bibliometric analysis that draws on nine internationally recognized and indexed journals of adult education research that can be considered mainstream in the discipline. All original contributions published in these journals between 2000 and 2020 that were either written exclusively by authors from countries of the Global South or that focus on topics from these contexts were examined. The articles were analyzed with regard to their author structure (institutional location, qualification), visibility (download and citation numbers compared to the annual average of the respective journal) and thematic orientation. For the content analysis, an inductively developed category system was adopted that had already been used in bibliometric studies in adult education research (Fejes & Nylander, 2019) and supplemented by further relevant categories for the Global South.

The results of the study reveal a striking underrepresentation of authors from countries of the Global South in the international journals of adult education research considered. Even when articles by such authors appear in the journals analyzed, in over 80% of cases they receive fewer downloads, and in around 60% of cases they receive fewer citations than the respective annual average of the journal. Moreover, a combined analysis of visibility and thematic focus shows that articles that receive little visibility are those that address highly context-specific issues or topics that are particularly relevant to the realities of life in the Global South, such as literacy, poverty or rural educational settings.

These results provide clear indications of a postcolonial bias in the international publication system: Access to visibility and reception seems to be linked to proximity to the dominant epistemic interests and publication standards of the Global North. Traces of an epistemic homogenization can be identified, in which theoretical, methodological and thematic convergence with hegemonic discourses is rewarded, while deviant or locally anchored perspectives are systematically marginalized or sanctioned, for example, through low levels of reception or visibility. This points not only to economic and infrastructural barriers, but also to epistemic barriers that impede equal access to international knowledge communication.

5.2 Who Publishes What? – A Bibliometric Study of Papers from the Global South in International Journals of Adult Education Research[23]

Abstract

On the one hand, the paper follows the approach of mapping the rapidly changing field of adult education research through the quantitative approach of bibliometrics and on the other hand, it takes up the hypothesis of the underrepresentation of adult education researchers from the Global South in the research field. It focuses on the question of how often adult education researchers from the Global South are able to

[23]This is a reproduction of the article with unchanged content. For the sake of readability and consistent presentation, the bibliography has been integrated into the overall bibliography of the present study, and a German-language version of the abstract has been omitted. In addition, the figures for tables and figures have been adjusted in favor of consecutive numbering. The original version of the article can be found in: Vetter, T. (2022). Who publishes what? – A bibliometric study of papers from the Global South in international journals of adult education research. *Internationales Jahrbuch der Erwachsenenbildung*, 45, 107–128. https://doi.org/10.3278/I72685W007.

place their work in indexed international journals of adult education research, what visibility their articles gain, and what topics they address. Methodologically oriented on already conducted bibliometric studies in adult education research, all contributions of authors from the Global South of the years 2000–2020 in nine indexed journals of adult education research were examined for this purpose. The results show, among other things, that perspectives of scholars from the Global South are strongly under-represented in the renowned journals considered, that the published articles receive less attention than is usual for the journals and that this could also be related to the topics covered.

1 Framing in the Context of Bibliometric Studies in Adult Education Research

This paper is located in the sub-research area of mapping the field of adult education research. In order to illustrate that in this subfield no attention has yet been paid to the group of authors brought into focus in the present paper, bibliometric studies in adult education research will first be examined.

The emerging cartographies are attempts to map out particular conditions, developments or trends in the rapidly changing research field (Fejes & Wildemeersch, 2015, p. 97). Bibliometric analyses mainly use the medium of scientific journals for quantitative access to such overview efforts and are defined by the OECD Glossary of Statistical Terms as "(...) statistical analysis of books, articles, or other publications to measure the output of individuals/research teams, institutions, and countries, to identify national and international networks, and to map the development of multidisciplinary fields of science and technology" (OECD, 2008, p. 49). Bibliometric data were first taken up as an object of analysis in adult education research by using the bibliometric indicator of citation analysis by Boshier and Pickard (1979). Without explicitly placing their quantitative study in the context of bibliometrics, the authors evaluated the citations of all original articles in the journal Adult Education Quarterly over a 10-year period, determined the influence of individual scholars, and listed the most cited scholars. Field et al (1991) and Gillen (1993) adopt Boshier and Pickard's methodology for their citation analyses in other journals of adult education research. The main focus of both papers was to explore the opportunities and limitations of citation analysis for measuring quality in adult education research. Both studies come to the conclusion that the evaluation of citation numbers only allows a very limited view of quality. While the authors are concerned with assessing the evolution of adult education research into a distinct research field, the citation analyses of Gillens (1994) and Robinson (1996) take a geographically narrowed approach with a focus on Canada. In addition, the authors also choose divergent data sources with conference papers and master theses.

In addition to citation analysis, productivity analysis plays a major role in the context of bibliometrics. The number of publications by scholars, institutions or research groups is often evaluated as a productivity indicator in this context. In adult education research, this analysis was first conducted by Rachel and Sargent (1995) focusing on North American adult education research institutions with a focus on five journals also located in North America. The first author repeated this evaluation for other time periods and different subsegments of adult education research (Rachal et al., 1996; Rachal & William, 2005; Rachal et al., 2008) although the North American focus remains.

It is only with Larsson's (2010) citation analysis that bibliometric work emerges in the field, both explicitly as such, and adding analytical complexity by broadening perspectives. For example, Larsson (2010) takes a geographical perspective on the citations of three indexed international adult education research journals and intertwines this with an analysis of actor networks. The study can thus not only prove the dominance of anglophone authors, but also a dominant (citation) network of the same. Confirming findings are those by Fejes and Nylander (2014), who focus particularly on the top cited authors in three adult education journals between 2005–2012, and Larsson et al. (2019). Adult education research is thus largely anchored in national or language-bound discourse spaces (Schüßler & Egetenmeyer, 2018, p. 1074). More recent studies use sources obtained through bibliometric data collection processes to link qualitative (Fejes & Nylander, 2015; Käpplinger, 2015) and quantitative content analyses (Nylander et al., 2022). The work with a linked qualitative content analysis is methodologically oriented (content algorithms) to the field-forming work of Taylor

(2001) and Long (1983).

All of the bibliometric studies in the field of adult education research have a number of defining parameters in common with regard to the data basis and the findings generated. Thus, all studies focus on publication organs (journals and conferences) whose place of origin and publishing can be assigned to the Global North. The focus (with the exception of Nylander et al. 2022) is particularly on those contributions that are especially successful from a bibliometric point of view. The results show, among other things, that especially authors whose institutional locations can be assigned to Anglophone countries of the Global North dominate the journals and conferences. Fejes and Nylander (2014; 2017) speak of an anglophone bias here: "Knowledge produced in other locations than the Anglophone regions is to a high extent invisible in the wider scientific conversations, either by not being published in these journals in the first place or by not rendering much scholarly attention" (Fejes & Nylander, 2017, p. 6). This invisibility is reinforced by the benchmark character that seems to be inherent in bibliometric analyses. In order to be able to generate a more accurate picture of explanatory contexts of the underrepresentation of authors from countries of the Global South, a bibliometric study of this group of authors is needed, with the addition of a content-analytical evaluation of the published contributions of this group. In the neighboring discipline of sociology, such a discourse is already more advanced with the help of a perspective critical of colonialism (e. g. Alatas, 2003). More specifically, in the context of academic publishing, the phenomenon of academic colonialism takes hold. The term represents "(…) how states that occupy the center where knowledge is produced, transmitted, and ordered have successfully forced scholars in peripheral states to accept their dominant relations in thought and ideas by standardizing, institutionalizing, and socializing academic disciplines in an inequitable academic division of labor on a global scale" (Shih, 2010, p. 44). Papers produced at the center receive more attention and recognition than papers produced elsewhere (Lengyel, 1986, p. 474). Thus, to strengthen the perspective of academic neocolonialism or imperialism in adult education research, this paper can provide helpful supporting indications.

The need for the exploration of the described desideratum is also underpinned by the explorative examination of adult education research articles in potential predatory journals by Vetter and Schemmann (2021). The paper highlights that, in addition to authors from North America, scholars from the Global South, in particular, publish in potential predatory journals, often focusing on issues that are characteristic of countries in this category, such as poverty (especially in rural areas), a high rate of analphabetism, a high infant mortality rate, a low level of democratization, great political instability combined with crime, and a great importance of agriculture (Jaselskis & Talukhaba, 1998; Neubacher & Grote, 2016; International Fund for Agricultural Development, 2021). Thus, if it is true, as indicated by the findings of Vetter and Schemmann (2021) and other research (Kurt, 2018; Cobey et al., 2019; Demir, 2018), that predatory journals are not only a business model but also a means for scholars, one of which is to meet increasing publication pressures, there is reason to fear that perspectives on adult education research are underrepresented in legitimate OA journals of adult education research. This hypothesis connects to the desideratum of bibliometric surveying of adult education research and thus additionally supports the endeavor of this paper to examine publications by authors from the Global South in internationally focused adult education research journals via a bibliometric and a content analysis approach. The focus is on the question of how and which authors from the Global South are present in indexed international journals of adult education research and with which articles. The question of how, the question of who, and the question of what will be answered as follows. The representation of research on adult education in countries of the Global South in the nine "most important" international journals on adult education research was determined by a manual analysis of the volumes 2000–2020 of all papers, as well as by an analysis of the retrieval and citation numbers. Following Vetter and Schemmann (2021, pp. 89f.), more detailed data on the authors (who) were extracted through the generated bibliometric data to get an impression of the academic experience of the authors by evaluating the academic grades at the time of the publications. The question of the topics covered (what) in the identified papers is determined via a qualitative approach, methodically taking into account the aforementioned preliminary work.

Thus, this paper is further divided into a section on the methodological operationalization of the described basic questions in the same order, a descriptive explanation of the findings, and a subsequent discussion of the same.

2 General Data Basis and Data Collection

The Journal Citation Report (JCR) and the SCImago Journal & Country Rank (SJR) were used to select the most relevant journals in adult education research. Both products aim to map the quality of scholarly journals from different disciplines through different calculation methods. The JCR is a citation-based ranking and uses the Journal Impact Factor (JIF) (Woll, 2011, p. 73). This value indicates how often other journals cite an article from the journal under investigation in relation to the total number of articles published there (Kretschmann, Linten & Heller 2013). Due to the implementation of the JCR in the multidisciplinary database Web of Science, which ranks next to Scopus as the largest and most relevant scientific database, the JCR is highly relevant for the assessment of international journals of different disciplines, including educational sciences. The SJR uses the Article Influence Score as a central assessment parameter. It evaluates the influence of a journal on the basis of a network analysis, which assigns a higher weight to citations from highly cited journals than to citations from less cited ones. Thus, this weighting places more emphasis on the prestige of a journal (Kim & Chung, 2018, p. 19). The SJR is again implemented in Scopus.

Through the two aforementioned sources, nine journals were extracted in June 2021 that could be classified as adult education or continuing education research through their titles. Not included were journals that deal with other topics or target groups in addition to the relevant topic and target group and make this clear via the title, as well as journals that explicitly focus on continuing education in other disciplines. The journals Adult Education Quarterly (AEQ), International Journal of Lifelong Education (IJLE), Studies in the Education of Adults (SEA), Studies in Continuing Education (SCE), Australian Journal of Adult Learning (AJAL), International Journal of Adult, Community and Professional Learning (IJACPL), Journal of Further and Higher Education (JFHE), European Journal for Research on the Education and Learning of Adults (EJRELE), and the Journal of Adult and Continuing Education (JACE) were thus included in the final analysis since they meet the criteria described and as such represent highly reputable international adult education research journals.

In all journals, volumes from 2000 to 2020[24] were manually screened for articles authored or co-authored by authors from the Global South, and articles that placed countries of the Global South at the thematic center were identified. Only original articles and systematic literature reviews were considered. Editorials, Comments, or Book Reviews were not integrated.

To identify countries of the Global South, the list for developing countries and territories was used. The OECD list of developing countries and territories for the reporting year 2021 was used to determine the countries of the Global South. The classification is based on the countries' per capita income (OECD, 2021). Although the OECD uses the evaluative term "developing countries", it offers clear guidelines for classifying individual countries in this group in contrast to the Global South. Analytically, the list therefore offers greater advantages and, with few exceptions, is also congruent with country overviews that work with the term Global South.

Finally, only those articles exclusively written by authors from countries of the Global South and not submitted in co-authorship with scholars from developed countries have been included in the final analysis.

As the objective of this study is not to make statements about individual journals and their geo- and science-political conditions, but to generate findings about a specific group of authors within the entire discipline of adult education research, the identified papers are not classified according to journals or analyzed taking into account the publication organ. Rather, the papers are considered as a common data set that allows drawing conclusions about the representation of a group of authors in relation to the entire field of international adult education research.

2.1 Identification and Evaluation of Bibliometric Data on Papers and Authors (How and Who)

For all identified papers, data were obtained related to the authors and the contributions themselves. On the author side, the author names, their formal qualifications,

[24]The journals IJACPL, EJRELE, and JACE have only existed since 2013, 2010, and 2001. Therefore, they were included from the respective first issues up to incl. 2020.

and the locations of the research institution where the authors were working at the time of publication were recorded. On the contributions side, the titles and keywords were identified. In order to enable the later evaluation of the content, all relevant contributions had to be obtained in full text form.

In order to get an impression of the visibility and relevance of the examined contributions by authors from countries of the Global South, the respective data on downloads and citations on the homepages of the nine journals are included. The collection of these indicators took place between 09/26/2021 and 10/01/2021. For the journals AJAL, IJACPL, and EJRELE, the information on downloads and citations are not provided or incomplete and are therefore not included in the analysis. Downloads and citations are set in relation to the average of all articles published in the same year of the same journal. To avoid too much bias due to extreme values, the average is replaced by the 10% trimmed mean. To calculate the 10% trimmed mean, the top and bottom ten percent of cases are removed. Finally, it can be determined for each article whether it was over- under- or averagely retrieved and cited compared to the whole year.

When evaluating the bibliometric data of the authors, no weighting was made with regard to first and second authorship. For example, if a paper was authored by two or more authors from different countries in the Global South, the locations were included in the evaluation in equal proportions. The formal qualification of the authors was recorded individually for each author and co-author in order to ensure comparability with the corresponding study for potential predatory journals by Vetter & Schemmann (2021).

2.2 Content Evaluation of the Contributions from Authors from Countries of the Global South (What)

For evaluating the content-related data of the articles identified as relevant, the inductively developed categories of the bibliometric study of frequently cited articles in adult education research conducted by Fejes and Nylander (2019, p. 123) were used. This adoption is necessary in the context of the present study as multi-perspective category formation to increase reliability was not possible due to limited resources. Accordingly, the present evaluation captures the respective method underlying the relevant work as well as the study contexts and objects. The broad subcategories in the superordinate segments “method”, “context” and “object” from the named study by Fejes and Nylander (2019) also proved to be largely congruent for the extracted corpus of the present paper. Concerning the method, on the one hand, qualitative approaches were not differentiated and subcategories were still replaced by “historical”, “theoretical formulation”, “descriptive”, “experimental or quasi-experimental”, and “teaching of practice” from Long’s (1983, p. 83) bibliometric study of adult education research conference proceedings, which Käpplinger (2019, p. 162) also draws on in his analysis of conference papers from adult education research. Regarding the evaluation of the objects of study, the analyzed papers in the context of the present study resulted in the need for the addition of the categories “Women” and “Indigenous and rural population”.

In order to do justice to the specificity of the selected sample with regard to particular content in addition to the subcategories added and to reduce the risk of a Eurocentric or neocolonial academic bias, the papers were further evaluated according to topics that are characteristic of countries in the Global South. Since there is no generally shared overview of such characteristics, the individual categories of this evaluation part are to be judged as fragmented and thus unsystematic and not included in tables 2 and 3. The first category refers to the most common reading of the Global South according to Schneider (2017, p. 21), which emphasizes structural underdevelopment and poverty compared to the Global North. Thus, the first thematic category is “Poverty”. The economic disadvantage of countries in the Global South often also depends on colonization by, or ongoing dependence on, a country that is now classified as part of the Global North (Henningsen, 2021, p. 3), so another thematic category is “(De)Colonization”. Since severe population poverty is usually accompanied by a poorly developed health care system (de Carvalho et al., 2020, p. 280), the category “Diseases” is included. From a geographical perspective, it seems characteristic of the Global South, in contrast to the Global North, that a significant proportion of the population lives in rural regions rather than metropolitan areas, and that the proportion of the rural population continues to increase despite the trend toward urbanization (United Nations, 2019, p.13). Therefore, another thematic category is “Rural Population”. “Literacy” was also added as an important category of adult education research.

3 Number of Identified Articles and their Visibility (How)

Out of the 3,747 papers in the nine journals studied, 318 papers were identified that were authored (with participation) by authors from countries of the Global South, or that placed countries of the Global South in the thematic focus. 64.78% (n = 206)[25] of these papers were written exclusively by authors from the Global South and are therefore also relevant for the in-depth analysis. 21.38% (n = 68) focus on countries in the Global South but are written by authors from countries in the Global North. The remaining 13.84% (n = 44) were submitted by teams of authors based in countries of the Global North and South at the time of publication.

The analysis of the download numbers shows that across journals, of the 168 evaluable articles originating from authors in countries of the Global South, 80.36% (n = 135) had lower download numbers than the calculated trimmed mean of all original articles of the same year in the respective journal. In contrast, only 19.64% (n = 33) received above-average attention.

Looking at the citations, this significant discrepancy is more moderate, since a binary distribution is broken by 14.88% (n = 25) of the contributions that reach the calculated trimmed citation average of the corresponding year, rounded down or up. Nevertheless, 58.33% (n = 98) of the evaluable contributions are below this average. 26.79% (n = 45) are cited more frequently than average.

3.1 Characteristics of Authors from the Global South (Who)

The countries of the Global South do not form a homogeneous group (Dawar, 2001, p. 138). This refers not only to cultural or historical parameters, but also to the strongly economically narrowed definition of the OECD, which underlies the present work due to clear inclusion and exclusion criteria compared to social science or humanities defi-

[25] IJLE=75 relevant articles (9.14%), JFHE=29 (3.18%), JACE=25 (9.19%), AJAL=22 (4.37%), AEQ=15 (4.24%), SEA=14 (5.32%), IJACPL=13 (14.29%), SCE=9 (2.34%), EJRELE=4 (2.72%)

LDC	LIC	LMIC	UMIC
Eritrea (L) (2) Ethiopia (L) (1) Lesotho (LM) (5) Nepal (LM) (1) Uganda (2)	Zimbabwe (2)	Egypt (2) Eswatini (1) Ghana (10,33) India (7) Indonesia (UM) (4) Jordan (UM) (2) Morocco (3) Nigeria (27.5) Philippines (3) Papua New Guinea (0.5) Ukraine (1) Vietnam (2) Kenya (1)	Argentina (2) Belarus (1) Botswana (19.5) Brazil (7) Ecuador (1) Guyana (1) Iran (3) Iraq (1) Jamaica (2) Colombia (1) Lebanon (2) Malaysia (11) Mexico (3) Namibia (3) Serbia (1) South Africa (60.16) Thailand (2) Turkey (8)
11 (5,34%)	2 (0.97%)	64.33 (31.23%)	128.66 (62.46%)

Table 1: Mapping of the identified authors along the OECD-systematics for developing countries

nitions of the Global South. It distinguishes between Upper Middle Income Countries and Territories (UMIC), Lower Middle Income Countries and Territories (LMIC), Low Income Countries (LIC) and Least Developed Countries (LDC), thus still using the evaluative term “developing countries”. As can be seen in Table 1, most of the contributions have originated in research institutes from UMICs. In the OECD list, UMICs account for 39.44% (n = 56) of all developing countries. Thus, in the case of the present survey, there is a slight overrepresentation of this highest-income group of countries in the Global South. A total of 259 authors are attributable to the 206 articles. 22 authors appear more than once as authors in the nine journals studied between 2000 and 2020. At the time of publication, 92.58% (n = 237) authors were employed at universities. For 11 authors, no organizational assignment at the time of publication could be determined. Considering the formal qualifications of the authors at the time of publication, the high proportion of highly and maximally qualified persons is striking. The distribution shown in Figure 3 makes a rough structural distinction between the rank of professor, the academic title of doctor, and master’s and bachelor’s degrees.

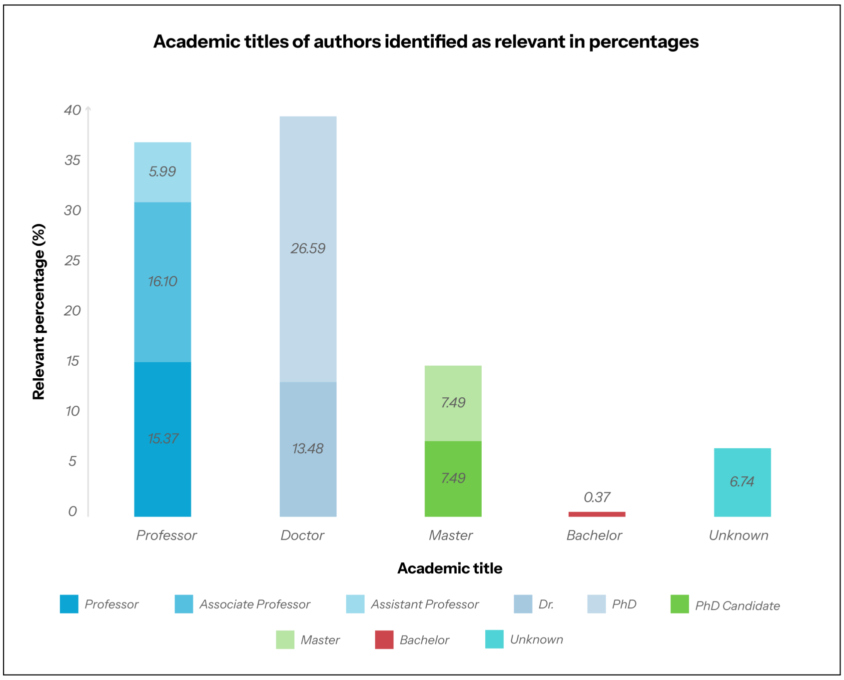

Figure 3: Academic titles of authors identified as relevant in percentages

3.2 Contents of the Contributions by Authors from Countries of the Global South (What)

The overview of the contents along the supercategories Method, Context, and Object in Tables 2 and 3, oriented to Fejes and Nylander (2019, p. 123) and Long (1983), shows that the identified papers predominantly focus on learners in certifying public-formal learning settings by means of qualitative methods. The dominance of classical teaching-learning situations is strengthened by the likewise dominant role of teachers as objects of scientific work.

Focusing on the methods, it is noticeable that qualitative methods clearly dominate the work of adult education researchers from the Global South. Since the Literature Reviews are all not systematic but rather narrative in nature and the category Technique or Practice also includes qualitative contributions, 44.17% (n = 91) can be described as methodologically qualitative. If, as in Fejes and Nylander (2019, p. 123), the conceptually and theoretically oriented articles are also included in this category, this would affect the subcategories Theoretical formulation, Descriptive and Historical in the present study. Thus, the proportion of qualitative papers increased to 72.82% (n = 150) compared to 27.18% (n = 56) that used quantitative methods or mixed methods to generate results. Most quantitative or mixed methods papers were published in the JFHE. Assigning the nine methodological categories to either empirical or descriptive approaches, 54.37% (n = 112) chose an empirical approach and 45.63% (n = 94) chose a descriptive approach. Descriptive contributions are often “country portraits” (Field et al. 2019, p. 188) in which authors provide an overview of the goals and dynamics of national adult education developments. Exemplary contributions include those by Oduaran (2001), Preece & Ntseane (2004), or Hoppers (2013).

Focusing on the contexts of inquiry, Schools & University mainly focuses on formal learning settings in public settings, followed by nonformal learning contexts. Contexts often targeted from the perspective of the Global North, such as the workplace or digital space, on the other hand, are poorly represented at 9.95% (n = 20.5). The impression of the relevance of formal learning settings is supported by the connective view of the objects of study. The majority of the contributions located in the school or university context focus on learners (students) and teachers.

The separate evaluation of the contributions along typical topics for countries of the Global South shows moreover that 20.39% (n = 42) focus on such topics. Dominant topics are Literacy 35.31% (n = 14.83), Rural Population 18.64% (n = 7.83) and Poverty 11.50% (n = 4.83).

The following chapter discusses the findings of the three results sections with reference to the discourse around (academic) neocolonialism as well as existing bibliometric studies in adult education research. In addition, the content analysis is linked to the visibility analysis to extract more detailed statements about possible success factors of successful contributions of authors from countries of the Global South in renowned international journals of adult education research.

4 Discussion of Findings

The share of 8.49% representing the Global South in terms of topics or (co-) authorship of all published articles in the nine most influential international journals in adult education research over a period of 20 years has to be considered as very low considering that 80% of the world’s population live in countries of the Global South and that the

Journals	JFHE (n)	SEA (n)	JACE (n)	AEQ (n)	IJLE (n)	SCE (n)	AJAL (n)	IJACPL (n)	EJRELA (n)	Total
Method (how?)										
Qualitative Study	5	7	6	8	24	5	11	9	2	37.38% (n = 77)
Quantitative questionnaires	12	0	6	3	4	1	6	3	0	16.99% (n = 35)
Descriptive	3	1	6	1	15	1	1	0	0	13.59% (n = 28)
Mixed Method	7	3	2	1	4	1	1	0	0	9.22% (n = 19)
Theoretical formulation	1	2	2	2	7	0	1	0	2	8.25% (n = 17)
Historical	0	0	0	0	14	0	0	0	0	6.80% (n = 14)
Review of Literature	1	0	1	0	4	1	1	0	0	3.88% (n = 8)
Technique of Practice	0	1	1	0	3	0	0	1	0	2.91% (n = 6)
Experimental or quasi- experimental	0	0	1	0	0	0	1	0	0	0.97% (n = 2)
Total	29	14	25	15	75	9	22	13	4	100% (n = 206)
Context (where?)										
School & University	27	5	11	4	22.5	4	7	9	0	44.90% (n = 92.5)
Nonformal education (NGO's, home, etc)	0	6	2	6	10.5	3	10	2	2	20.15% (n = 41.5)
Policy	0	1	2	0	17.5	0	3	0	1	11.89% (n = 24.5)
Overviews	1	1	1	4	9	0	0	0	1	8,25% (n = 17)
Workplace & Workplace transitions	0	0	3	1	4	2	2	2	0	6.80% (n = 14)
Educational systems	0	1	3	0	8	0	0	0	0	5.83% (n = 12)
E-learning, ICT & IT	1	0	3	0	0.5	0	0	0	0	2.18% (n = 4.5)
Total	29	14	25	15	75	9	22	13	4	100% (n = 206)

Table 2: Contents of articles by authors from countries in the Global South in nine indexed international journals of adult education research, 2000–2020, Part 1

Journals	JFHE (n)	SEA (n)	JACE (n)	AEQ (n)	IJLE (n)	SCE (n)	AJAL (n)	IJACPL (n)	EJRELA (n)	Total
Object (who?)										
Student & Practitioners	17.5	2.5	6	4.5	13.5	2	4.5	4	0	26.46% (n = 54.5)
Teachers & educators	7.5	2	4	1.5	11.5	2	4	4	0	17.72%(n = 36.5)
Workers & professionals	1	4	6	1	8	2	7	4.5	0	16.26% (n = 33.5)
Nation	0	0	3	0	19	1	1	0	0	11.65% (n = 24)
Research	3	2	2	3	8	0	1	0	2	10.19% (n = 21)
Indigenous and rural population	0	1.5	3	2	10	1	0.5	0.5	1.5	9.71% (n = 20)
Women	0	2	1	3	5	1	4	0	0.5	8.01% (n = 16.5)
Total	29	14	25	15	75	9	22	13	4	100% (n = 206)

Table 3: Contents of articles by authors from countries in the Global South in nine indexed international journals of adult education research, 2000–2020, Part 2

share will increase in many scenarios until 2100 (Solarz & Wojtaszczyk, 2015). Taking into account only those contributions that were exclusively written by authors from the Global South, this share even decreases to 5.5%. This is also related to the fact that all nine indexed journals examined were founded in the Global North and publish exclusively in English. Even though English serves as the lingua franca in the countries of the Global South, which are most frequently represented in the present survey, and is in this way familiar to the authors in question, the forcible colonial imposition and the associated "dependency culture" that gains significance via the imposition of English as the language of scholarly communication should not be disregarded. For many scientists from the Global South, language is one among other publication obstacles caused by colonial history (Ferguson, 2007).

Another reason for the low share of publication volume could be related to the publication funding of OA articles via Author Processing Charges. For example, an analysis of more than 37,000 articles shows that authors from low-income countries prefer to publish in paid journals rather than OA journals because processing charges are often higher in OA journals (Smith et al. 2021). This finding, too, cannot be viewed purely in economic terms, separate from a neocolonial interpretation. Funding opportunities and institutional support for publication in indexed OA journals are significantly better in the academic center (the Global North) than in the periphery (the Global South). APCs provide free access to academic knowledge only for those who can benefit from these funding opportunities, in this way, from the perspective of the Global South, such funding structures tend to revive the vicious cycle of academic colonialism (Sengupta, 2021, p. 204). The relevance of the barrier created by APCs is particularly evident in the example of South Africa. With 60.16 contributions, it is the most frequently represented in the present sample. In addition to its colonial history in the British Empire, the financial support provided by the South African government through the Department of Education can also be seen as a reason for this dominance. The department pays its universities a substantial subsidy for each journal article published in journals indexed in the SSCI or SCI (Collyer, 2018, p.11). However, such funding systems simultaneously reinforce the dominance of orientation towards neocolonial quality standards in scholarly publishing.

When articles on adult education research from the Global South still manage to be published in the international journals studied, the examination of visibility and citation shows that they receive significantly less visibility and are also cited less frequently by colleagues on average. The weak international actor networks identified by Larsson (2010, p. 108) in the context of citation networks in international journals of adult education research should actually give reason to assume that the identified dis crepancy between authors from the Global South and North should be smaller in terms of retrieval and download numbers. One explanation for this could also be found in academic neocolonialism. Sengupta (2021, p. 203) points out that countries of the Global South have come to be considered mostly an area to be studied and not a place from which to speak.

With the help of the differentiation of OECD (see Table 1), the findings on the authors identified in relation to the geographical locations show that the representation of authors from the Global South is unevenly distributed from an economic point of view. For example, the research organizations of 93.69% (n = 193) of the authors identified are located in UMIC and LMIC and thus in the most economically prosperous countries of the Global South group. Of the 11 papers from LDCs, only one achieved more views than the trimmed average of other papers in the same year of the journal.

With South Africa, Nigeria, Botswana, Malaysia, Ghana, the top four countries in the sample are all members of the Commonwealth of Nations where English is the official language. However, from a colonial-critical perspective, this "advantage" of the former British colonies must be seen as the result of the forcible replacement of educational institutions on the part of the colonial masters, which prevented local knowledge production and reception systems from thriving in the Global South. Colonization displaced these local systems in favor of the then emerging science system of the Global North, which has since been institutionalized in practically all countries of the Global South and especially in the former British colonies. This structural overlay, which has hardly been questioned in the Global North, is an example of coloniality (Schmidt, 2021, p. 4).

Comparing the findings with the sample of Vetter and Schemmann (2021) (n = 100), which is limited to countries of the Global South, it is noticeable that the percentage distribution along the OECD categorization of developing countries is different. Here, 74% (n = 74) of the contributions come from authors whose research institution can be categorized as LMIC at the time of publication, while only 24% (n = 24) belong to UMIC. When authors from developing countries publish in top international adult education research journals, their workplaces are, on average, in more economically prosperous countries in this category compared to adult education researchers from the Global South who publish in potential predatory journals. The organizational location of the authors is comparable in both surveys.

The survey by Vetter and Schemmann (2021, p. 89) indicates that the proportion of highly qualified authors is quite high. If one reduces the data set to the contributions that were exclusively written by authors from developing countries, there is a clear difference to the distribution in the present study. If here 77.53% (n = 208)[26] of the authors have at least the academic degree of a doctor (or comparable), it is 53.80% (n = 92) of the authors from the Global South in potential predatory journals of which also only 30.43% (n = 28) have a professor title. The high proportion of unidentifiable academic qualifications of 26.90% (n = 46) also leaves room for interpretation in this group. After reviewing name overlaps, it is noted that four authors published in both legitimate and probably illegitimate adult education research journals during the time period studied.

The results of the content aspects “method”, “context” and “object” shown in Tables 2 and 3 roughly reflect findings of the entire research field. The strong focus on qualitative research approaches is also confirmed in the interpretive literature review on the Scientific Field of Adult Education by Rubenson and Elfert (2019, p.23) in reference back to other bibliometric studies in the field. However, with regard to the high proportion of articles that follow a quantitative or mixed method approach, a difference to current bibliometric analyses can be diagnosed. Here, there is an overall lack of mixed-method and an almost complete absence of purely quantitative studies (Rubenson & Elfert 2019, p. 23). The high proportion of descriptive papers also seems anachronistic in light of past bibliometric studies. In this context, however, the present paper uses a

[26] The total number of authors identified differs from the number of academic titles evaluated because eight authors who published multiple times in the nine journals examined at different times reported different academic qualifications over time. Thus, these eight statements are additionally included.

different definition of descriptive papers than was used in the journal analysis by Long & Agyekum (1974, p. 116), who identified a high proportion of such papers. While the authors here included articles that illuminate relevant fields of adult education from an exploratory descriptive perspective using qualitative and/or quantitative methods, this paper understands descriptive articles to be those in which the authors describe important facts or a fact whose relevance to the scholarly community is argumentative (Orlikowski & Baroudi, 1991, p. 6).

In summarizing the contexts and objects of inquiry, the strong focus on formal learning settings is striking. A large proportion of the articles, which are in school or university contexts, focus on learners (students) and teachers in them. When comparing the results of both categories with the research of Fejes and Nylander (2019, p. 123), who looked at the top-cited articles in three journals, which are also implicated in the present research, enormous differences emerge in terms of frequency distribution. In terms of contexts, the articles in the sample of Fejes and Nylander (2019) much more frequently take Workplace & Workplace transitions and E-learning, ICT & IT into account. Adding the evaluation of content considered typical for the Global South, it becomes clear that 20.39% of all contributions deal with topics such as Literacy, Rural Population, Poverty or even HIV. The visibility of these contributions is comparable to that of the entire sample (81.82% have lower download numbers and 78.79% are cited less frequently).

Moreover, when the content evaluation and the access and citation figures are considered together, it is possible to draw conclusions about indicators of success by looking exclusively at the articles that are accessed and cited more frequently than average. Among the total of 19 articles that were both cited and viewed more frequently than average, there are only three articles whose results show a strong dependence on the survey location, which always also corresponds to the localization of the authors' university. This finding suggests that international visibility is increased by maximizing the generalizability of the findings. In contrast to the entire sample, this group of articles is dominated by mixed methods and quantitative research approaches as well as theoretical formulations. Compared to Fejes and Nylander's (2019) study, the findings suggest that authors from the Global South, in contrast to authors from the Global

North, need to adopt more quantitative approaches to gain visibility.

5 Conclusion

This paper was able to explore the “terra incognitas” of adult education research in the Global South in excerpts through the bibliometric analysis of the nine most relevant international adult education research journals. It became clear that the perspectives of this group of authors are substantially underrepresented on the international stage of adult education research discourse examined through indexed adult education research journals. The “Anglophone bias” noted by Fejes and Nylander (2017) expands into a socioeconomic bias or, more pointedly, a neocolonial bias when the present findings are taken into account, and limits the degree of openness of the international discourse of adult education research. With its highly specialized communication, the science system of adult education fulfills a certain function in the world society, namely its supply with new and reliable scientific knowledge. Following Schmid’s (2021, p. 3) assumption that researchers thereby represent the interests of the local population at the research location at least to a certain extent, and that the interests of the population in the “Global South” differ more or less from those of the population in the “Global North” because of different cultural and social conditions, it can be assumed that the international adult education research system fulfills its function of representing the majority of interests only extremely insufficiently.

The reasons for this bias need to be investigated in more detail in further surveys. A comparative bibliometric study of rejected contributions by authors from the Global South could also be helpful in this regard. Regardless of this, the dominant Anglophone scholarly community in general and the editors of international open access journals in adult education research in particular should open up further to the group of authors under investigation. This can be achieved, for example, by increasing the number of special issues with a geographical or thematic focus for authors from the Global South, by critically reflecting on the submission criteria from a neocolonial- critical perspective or by entrenchment of collaboration between researchers from the Global South and the Global North as Alordiah et al. (2021, p. 487) call for in their study related to Nigeria and Africa as a whole. Special financial support measures can also reduce the economic hurdle to publication in an open access journal. For example, Sengupta (2021, p. 205) suggests that differentiated varying rates of APC relative to the location of the author should be introduced.

6 Sub-study 2: Adult education research from countries of the Global South in the broad-based publishing space of the non-mainstream

6.1 Summary and classification in the overall framework

As Connell (2007, p. 8) summarizes in his essay on counter-hegemonic projects at universities: “to publish in metropolitan journals, one must write in metropolitan genres, cite metropolitan literature, become part of a metropolitan discourse.” The thesis inherent here is that academic writing and publishing is shaped postcolonially, not only by language, but also by the way in which knowledge is structured, legitimized and disseminated. Accordingly, researchers outside the Anglophone center are forced to adapt to the standards of metropolitan journals, which means not only writing in English but also incorporating Western theories, literature, and research paradigms. This imbalance leads to the marginalization of local journals and knowledge production and makes it more difficult for non-Anglophone researchers and practitioners in non-Western contexts to access scientific results.

The present article is situated in this diagnosis of academic knowledge communication and focuses on legitimate OA journals in which scholars in countries of the Global South publish on topics related to adult education research. While the first sub-study considers the metropolitan, center-based or mainstream journal-based publication space of “narrow” adult education research, examining topics solely through an inductive category system from secondary sources, sub-study 2 addresses the question of topics in a much more comprehensive way, comparing them along the lines of publication location and not from a narrow understanding of adult education research. The paper is preceded by a thesis that follows on from Connell, as cited above. When the attention of the (Western) scientific community of adult education research focuses exclusively on the journal-based scientific publication and communication space, which is shaped by the Global North and largely commercially oriented, this has the effect that central adult educational knowledge and perspectives of marginalized groups do not appear in the discipline’s corpus of knowledge, which is considered universal. It is only by focusing adult education research in the scholarly publishing periphery, away from the infrastructure created by commercial publishers, characterized by metrics, business models and regimes, that it becomes possible to see which topics are thus excluded from the "center" of adult education research. By comparing the research topics of adult education by authors in countries of the Global South who publish in the center and those who publish their research in peripheral outlets, the central research question is answered: namely, how the thematic priorities of adult education research from the Global South are related to the positioning and visibility of this research in the global publication system.

The world polity and the world-system approach, two macro-sociological variants of neo-institutionalism, are used to locate the peripheral scientific publication space, which is examined for the first time in adult education research. These approaches are used to explain the peripheral space in the publication system from a power and resource perspective, and its stability and structure can be made clear in a norm-reflective way. The concept of academic publication circuits (Beigel, 2014; Sec. 4.3), which can be connected to decolonial theory, offers a conceptual framework that classifies the peripheral publication space as "non-mainstream" and further differentiates it.

The analysis of a total of 830 empirical studies, based on a quantitative text-analytical topic model, shows that central topics such as sustainable development, social justice and community-based educational approaches—although highly relevant to adult education—appear primarily in peripheral publication contexts and remain largely invisible in the scientific center. Conversely, mainstream journals tend to focus on topics related to functional literacy, labor-market-oriented educational programs, and conceptual debates on professionalization. The study thus provides empirical evidence of how epistemic power relations materialize thematically in the global publication system of adult education research, while its findings open up follow-up questions about strategies for promoting biblio-diverse knowledge communication and a more inclusive international scientific culture.

6.2 Adult Education Research Between the Center and Periphery — Publication Practices and Topics of Adult Education Researchers in Countries of the So-Called Global South[27]

Abstract

This article aims to analyze the thematic focus and publication practices of adult education research in countries of the so-called Global South. A structural topic model that analyzed 830 empirical texts from mainstream and non-mainstream journals was used to identify topics in the texts, which included functional literacy, vocational education, sustainable development, and social justice. The results revealed that key themes that are frequently published in non-mainstream journals, such as sustainable development and social justice, remain invisible in the global publication space of adult education research. These perspectives could be better integrated into the international discourse and suggest directions for future research.

1 Introduction

Publication in internationally oriented (peer-reviewed) journals is becoming increasingly important in educational science and adult education research, even though the publication culture of this sub-discipline has traditionally been characterized by highly diverse publication media (Heck et al., 2024, p. 368). Even in the discipline's more nationally oriented communities, such as Germany, the publication culture has shifted, and scholarly work is no longer aimed only at national publication and reception, but also international (Schmidt-Hertha et al., 2024; Stollfuß et al., 2021, p. 1).

[27] This is a reproduction of the article with unchanged content. For the sake of readability and consistent presentation, the bibliography has been integrated into the overall bibliography of the present study, and a German-language version of the abstract has been omitted. In addition, the figures for tables and figures have been adjusted in favor of consecutive numbering. The original version of the article has been accepted for publication and will appear in: Roor, T. (in press). Adult Education Research Between the Center and Periphery—Publication Practices and Topics of Adult Education Researchers in Countries of the So-Called Global South. *Internationales Jahrbuch der Erwachsenenbildung*, 48.

The increasingly powerful publication gatekeepers—the international and prestigious journals of adult education research—also perceive this change, justifying it as the integration of the discipline into an overarching scientific culture that relies on performative evaluation criteria, such as impact factors and rankings. Thus, in addition to the tendencies toward mainstreaming and commercialization, this culture is increasingly oriented toward quantitative, globally applicable evaluation standards (Roor, in press a). These standards increase the pressure to publish, as academic careers and research funding are increasingly linked to the frequency and visibility of publications, which is further promoted by the prioritization of shorter formats by commercial publishers (Milana et al., 2016; Hodge et al., 2023).

An accurate insight into scientific publishing in high-ranking journals of adult education research is provided The bibliometric field surveys compiled in the edited volume Mapping Out the Research Field of Adult Education and Learning (Fejes & Nylander 2019) provided an accurate insight into scientific publishing in high-ranking journals of adult education research: This publication culture is highly concentrated in English-speaking countries, such as the USA, the UK, Canada, and Australia, which dominate the majority of publications and citations in leading journals (Larsson et al., 2019, p. 74; Nylander et al., 2018; Fejes & Nylander, 2019, pp. 110–112). Thus, researchers from non-Anglophone countries face significant structural hurdles, as their work in their native language is rarely published in English-language journals (Nylander et al., 2018, p. 90). As a result, non-Anglophone researchers receive less visibility and recognition in the international scientific community than their Anglophone peers. This structural disadvantage is further reinforced by the Anglophone composition of editorial boards and the almost exclusive focus of international adult education journals on English-language publications, which further complicates access to central discourses and networks (Fejes & Nylander, 2019, p. 106). Furthermore, the lack of international networking is problematic, emphasizing national publication patterns and limiting the global dissemination and recognition of research results. Overall, these factors result in a distorted map of adult education research (Nylander & Fejes, 2019, pp. 232f).

The Anglophone bias in adult education publishing identified by Fejes & Nylander (2017) is accompanies by socio-economic bias or, more specifically, a neo-colonial bias

(Vetter, 2022, p. 123). For example, the proportion of articles in leading international adult education journals by scholars from countries in the so-called Global South (GS)[28] is minimal (Vetter, 2022). Additionally, a study examining the phenomenon of predatory publishing in adult education research showed that, quantitatively, illegitimate open access (OA) journals do not pose a major problem in this field compared to other disciplines. However, when these journals are consulted, it tends to be by authors from countries in the so-called GS (Vetter & Schemmann, 2021).

Overall, from the perspective of the so-called Global North, the mapping of international adult education research seems to be sufficiently developed. According to the bibliometric data, little adult education research has occurred in the countries of the so-called GS. However, the bibliometric field studies conducted thus far have only examined journals indexed as adult education research journals, ignoring the journalistic periphery and the strong overlaps between adult education research and its neighboring disciplines (Elfert & Rubenson, 2015). This overlap suggests that adult education publications appear in journals that are not explicitly adult education journals.

This study aims to explore the adult education research contributions from countries in the so-called GS by examining peripheral or non-mainstream journals. While existing bibliometric studies have primarily focused on indexed mainstream journals, they often neglect research published in local or regional outlets, which may better reflect context-specific priorities and challenges. Building on the assumption that topics emerging from a GS perspective—which are underrepresented in the discursive center of adult education research—differ from those found in mainstream publication venues, the study briefly considers the notion of intraversion as a background dynamic. Intraversion refers to a tendency among academic communities to concentrate on nationally or regionally produced knowledge, often displaying limited engagement with external scholarly work (Collyer, 2016, p. 64), and may inform how thematic isolation or lack of global integration manifests in publishing practices.

[28] In this study, "countries of the so-called Global South" is a relational category that describes economically disadvantaged regions of the world and, in combination with its counterpart, "countries of the so-called Global North," emphasizes (economic) power asymmetries. The adjective "so-called" is always used to make it clear that "south" is not to be understood as a geographical classification. In the following, whenever the focus is economic asymmetry, this linguistic category will be used. When the focus is epistemic inequality between world regions, such as in the theoretical-conceptual framework of this article (Chapter 2), the terms center and (semi-)periphery are used.

The central research question is: To what extent are the thematic priorities of researchers from the so-called Global South related to their positioning and visibility within the global scientific publishing system?

To answer this question, the study applies a structural topic model to compare adult education publications authored by scholars from the GS in both mainstream and non-mainstream journals.

This paper's structure is as follows: First, as the central subject of this paper, the publication sphere of non-mainstream journals, which has been marginalized within the publication culture, is defined from a macrosociological perspective (Chapter 2). This section is followed by an explanation of the methodological approach, ranging from data generation (3.1) to the application of structural topic modeling (STM) to identify latent topics in both corpora (3.2). The subsequent presentation of the identified latent topics is structured according to whether the topics appear to a similar extent in both publication groups (4.1) or are predominantly present in either the mainstream (4.2) or non-mainstream corpus (4.3). The concluding discussion of these topics (5), framed within a macrosociological perspective, focuses on the findings of Chapters 4.2 and 4.3 and derives assumptions that extend beyond the methodological framework of this study.

2 Theoretical-conceptual framework: Non-mainstream publishing in the context of the world system and polity

Academic recognition processes are characterized by a structural decoupling between local relevance and international visibility, which reinforces asymmetries in the valuation of scholarly work across the global academic landscape (Beigel, 2018). These asymmetries have led to the emergence of two distinct journalistic communication spheres across disciplines: the mainstream and non-mainstream circuits. Understanding the formation of these spheres and their role within the academic system requires an analytical approach that considers power and resource dynamics as well as the processes of globalization and standardization in academia. Accordingly, this study employed world-polity and world-system perspectives to analyze non-mainstream journals both as products of global institutional norms and as manifestations of hierarchical positions within the economic and scientific world system.

Although scientometrics—the study of scientific networks through quantitative analyses of bibliometric data—is not known for its high level of theorization, Wallerstein's world-systems approach is frequently referenced via the center–periphery framework (e.g., Demeter & Toth, 2020; Hladchenko & Moed, 2021; Schubert & Sooryamoorthy, 2010). In this approach, Wallerstein described a global system of centers and peripheries interconnected by economic exchange processes. Building on the dependency theory, he introduced the concept of the semi-periphery, which is both peripheral to the center and central to the periphery. This structure blurs the boundaries between different levels of the world system, stabilizing its socio-economic order (Schubert & Sooryamoorthy, 2010, p. 182).

Applying this economic world-systems approach to academia, core nations with strong economies are positioned by their ability to process data sourced from the (semi)periphery, develop theories and methods, and export these back to the periphery in the form of literature, research conventions, and publication standards (Larson, 2017, p. 523). As Von Gizycki (1973, p. 474) noted, the center is a place where "works produced receive more attention and recognition than works produced elsewhere. A center is a place from which influence emanates." Centre, semi-periphery, and periphery can thus be understood as epistemic categories.

From a world-systems perspective, scientific journals function as communication arenas within distinct power spheres. Journals controlled by the center align with Wallerstein's center, operating as 'centres of excellence' and setting the norms for scientific quality, citation practices, and publication standards. This center–periphery distribution of the scientific publishing system aligns with the economic North–South asymmetry. Furthermore, the hegemony of the so-called core journals is reinforced by the hypercentrality of English and the standardization of impact criteria established through indexing systems such as the Science Citation Index, which was introduced in the 1960s (Beigel, 2014, p. 745). These systems have played a significant role in elevating the global prestige of certain research centers, while publications outside these frameworks have been dismissed as 'local science' (Beigel, 2021, p. 3). In the domain of scientific journals, the hegemonic position of the academic center is further perpetuated by self-referential citation networks within core journals (Larson, 2017, p. 525) and strengthened by the influential mechanism of the impact factor.

From a macrosociological perspective, the world-systems approach highlights the inequalities that define the scientific publishing landscape and underpin the dichotomy between core and peripheral journals. However, the reasons for the relevance and normative penetration of international scientific publishing across core and peripheral journal boundaries remain unclear, as these cannot solely be explained by power and resource dynamics given the decentralized nature of the scientific publishing system.

Unlike Wallerstein's world-systems perspective, Meyer's (2005) world polity approach conceptualizes world society as a network of social actors—nation-states, organizations, and individuals—'embedded in and shaped by a global cultural, social, and political environment, resulting in a high degree of decoupled isomorphism among them' (Cole, 2017, p. 86). In the context of scholarly publishing, this implies that institutions and journals worldwide conform to global norms to attain legitimacy, which leads to institutional isomorphism, in which national or regional publishing practices increasingly mirror global models. For example, English publishing standards have been adopted in non-Anglophone countries. The world polity approach also addresses decoupling: institutions formally adopt global standards and practices but often fail to implement them fully. For instance, peripheral actors may establish journals that mimic global standards without being genuinely integrated into the global network (Silva & Avrichir, 2024).

These two perspectives, the world-systems approach and world polity theory, highlight the structural heterogeneity and hierarchies within the global academic system. They demonstrate how scholarly publications are segmented not only by power and resource dynamics but also by global norms and standards. To better understand the role and significance of non-mainstream journals in this context, Beigel's (2014) model of four academic publication circuits is a useful framework. Beigel outlined four distinct yet interconnected and segmented circuits of the global academic landscape, each reflecting different forms of academic prestige and scholarly visibility.

First, mainstream publishing circuits (a) are dominated by large commercial publishers, such as Elsevier and Thomson Reuters (Beigel, 2014, p. 745), and occupy central positions within the world system. These circuits set global standards and exert hegemonic influence. Semi-peripheral circuits (b), by contrast, operate as OA transnational networks and repositories, offering an alternative to commercial publishing systems. Supported by non-profit institutions, they provide full-text access to scientific articles and promote global accessibility to scientific knowledge (Beigel, 2014, p. 749). From a world-systems perspective, actors within semi-peripheral circuits consciously oppose the hegemonic power structures of the publishing industry and seek to establish systemic access for researchers outside economic centers. Within the framework of the (scientific) world polity, their efforts align with the institutional expectation of knowledge as a global public good, thereby gaining legitimacy. Simultaneously, actors in these semi-peripheral circuits, such as the DOAJ, are increasingly integrated into the global logic of science. The need to expand reach and enhance scientific recognition leads OA platforms to adopt structures and technologies similar to those of mainstream circuits.

Beigel (2014, p. 345) further distinguishes the field of peripheral or non-mainstream journals into regional Southern circuits (c). The scholarly publishing systems of the so-called GS are organized through OA platforms, such as SciELO, RedALyC, and AJOL. These platforms disseminate regional and local research, enable publication in non-English languages, and are primarily publicly funded. They not only provide an alternative to mainstream journals, which often charge fees but have greater international visibility and prestige (Beigel & Salatino, 2015, p. 16; Russo et al., 2024, p. 83), but also pursue counter-hegemonic objectives.

Finally, national circuits (d) represent local publishing systems characterized by non-indexed journals with limited distribution. These journals are predominantly print-based; are not listed in international or regional databases, such as SciELO or RedALyC; and target a local audience. With minimal international visibility, they occupy a marginalized position in the global scholarly system (Beigel & Salatino, 2015, p. 16). However, they may achieve some visibility through mega-indexes, such as Google Scholar, Dimensions, or Lens (Beigel et al., 2024, p. 5). Journals in this circuit reflect the material and institutional fragmentation of the periphery, as they are often published by underfunded universities or research institutions.

The distinctions within non-mainstream journals—such as those between regional, transnational, and national circuits—are often overlooked by the mainstream circuit. Instead, all publications outside the hegemonic networks are dismissed as peripheral and local. This disregard occurs either because these journals fail to meet the global standards established by mainstream indices and publishers (hegemonic quality justification) or because the topics addressed by the adult education periphery prohibit integration into the central publication space (topic-centered justification). This article explores the latter assumption: The generalized classification by the center ignores specific regional or transnational relevance, thereby contributing to the epistemic marginalization and invisibility of alternative scholarly networks.

In summary, non-mainstream journals mirror the hierarchical structures of the scientific world system, with national circuits remaining highly localized and marginalized, while regional southern circuits (e.g., SciELO) hold a semi-peripheral position. Transnational OA networks (Circuit b) bridge the periphery and the center by promoting global knowledge access but simultaneously adhere to mainstream logics. From a world polity perspective, non-mainstream journals increasingly adopt global standards, such as peer review and citation metrics, yet remain decoupled from hegemonic networks. The mainstream circuit's hegemonic dominance is evident in its blanket classification of other venues as "local" or "peripheral"—a classification that disregards their transnational relevance. This leads to epistemic marginalization, despite these journals' offering vital alternatives to existing power asymmetries in the global scholarly system.

3 Methodical Design

This paper examines topics in adult education research from countries of the so-called GS, focusing on academic publications in both mainstream and non-mainstream journals. It aims to identify topics by authors from the so-called GS that remain overlooked in international adult education discourse by highlighting non-mainstream journals in this context for the first time. The following sections outline the data sampling for both corpora (3.1) and describe STM as the analytical method (3.2).

3.1 Sampling

As defined in Chapter 2, the distinction between mainstream and non-mainstream journals forms the basis for operationalizing the two corpora in this study. Mainstream journals are globally oriented, predominantly English-language publications (Guzmán-Valenzuela & Gómez, 2019, p. 118; Chavarro et al., 2017, p. 1668) that employ rigorous peer review, achieve high citation and retrieval rates, have an impact factor, and are indexed in leading services, such as Web of Science (WoS), Scopus, or PubMed (Vessuri et al., 2014, p. 650).

For the operationalization of mainstream journals, indices that include impact-factor journals are relevant. In education disciplines, the most pertinent indices are the Emerging Sources Citation Index (ESCI) and the Social Sciences Citation Index (SSCI). These indices are integrated into larger databases: the Journal Citation Report (JCR) within WoS and the Scimago Journal Rank (SJR) within Scopus. Both provide key metrics to assess journal visibility and impact.

To identify adult education studies by authors from the so-called GS, WoS and Scopus databases were utilized. Following database-supported systematic review procedures, the search strategy used predefined inclusion and exclusion criteria encompassing both formal (f) and content-related (i) criteria (Theurer, 2024, p. 99), which are summarized in Table 4. The intracoder reliability of these criteria yielded highly satisfactory values for formal criteria ($\alpha f = .951$) and adequate values for the content criterion ($\alpha i = .781$) as calculated using Krippendorff's alpha (De Swert, 2012, p. 5). To investigate the visibility gap between the center and periphery, this study adopted the database indexing approach as the most effective search strategy following Di Césare & Robinson-Garcia (2024). This approach assumes that non-mainstream journals are

[29]The present study uses the list from the reporting years 2024/2025. This can be found here: https://www.oecd.org/en/topics/oda-eligibility-and-conditions/dac-list-of-oda-recipients.html (accessed on November 20, 2024).

[30]China was not considered in the study due to its economic strength and role as a donor, which contradicts the ODA criteria (Kitano & Miyabayashi, 2023).

Criteria No.:	Exclusion if:
f1	Not published between 01/01/2000 and 30/09/2024
f2	Type of journal publication: - Letter to the Editor - Editorial - Comment - Review - Conference report/summary
f3	The institution of at least one author of a contribution is not based in a country that is listed by the OECD's Development Assistance Committee (DAC) as a recipient of official development assistance (ODA)[29][30]
f4	Title, abstract and keywords not available in English
i1	There is no indication that the article can be categorised as adult education research in the narrow sense, as distinct from the discipline of higher education (Hill et al. 2023).

Table 4: Inclusion and exclusion criteria

located outside the mainstream databases Scopus and WoS (López Piñeiro & Hicks, 2015; Moed et al., 2021; Tijssen et al., 2006). Non-mainstream journals in adult education were defined as those not indexed in Scopus or WoS and not published by major commercial publishers, but rather through self-administration or similar means.

The classification framework proposed by Beigel (2014, p. 745) and Beigel and Salantino (2015, p. 16) (Chap. 2) served to systematize the diverse field of publication channels. Alongside (a) mainstream publication channels, the non-mainstream journals were categorized into three publication circuits, operationalized in this research as follows. First, the Directory of Open Access Journals (DOAJ) is the largest repository of its kind, indexing 21,143 journals from 136 countries in 2024, with minimal overlap with channel (a) (Cho, 2023). This research utilized the DOAJ database to represent transnational open access networks and repositories. Second, journals from channel (c) were indexed via OA platforms, such as SciELO, RedALyC, and AJOL. Given their distinct geographical focus, SciELO (South America) (Guzmán-Valenzuela & Gómez, 2019, p. 119) and AJOL (Africa) were used to identify adult education studies from countries in the so-called GS published in non-mainstream journals. Finally, the identification of journals from circuit (d) was relevant to this research only if these journals planned to transition from print to digital formats. Many of these journals use the open-source software Open Journal Systems (OJS), which manages the publication process and facilitates this transition. By supporting OA and standardizing metadata, OJS enhances journal visibility. Due to its free and user-friendly design, OJS is widely adopted, especially in the so-called GS (Yance-Yupari 2018, p. 356; Vessuri et al. 2014, p. 655); it is used to manage over 44,000 journals in 148 countries.

Publishing Circuit	Database	Search Strategy
(b)	DOAJ	Article-Search / Subject “Education”: ABSTRACT (“adult”) Year of Publication: 2000-2024 n=3459
(c)	SciELO	Advanced Search: ABSTRACT (“adult”) SciELO Thematic Areas: Human Sciences; Applied Social Sciences Type of Literature: Article; Review Article; Case Report Publication Year: 2000-2024 n=2225
(c)	AJOL	Google Assisted Search on AJOL-Homepage: All fields (“adult education”) n= 1231
(d)	OJS	In beacon.tab of Khanna et al. (2024): All fields (“educa*” OR “Pendidikan” OR “التعليم” OR “образование” OR “Éducat*” OR “Eğitim*” OR “शिक्षा” OR “Освіта” OR “onderwys” OR “Bildung”)[31] n=8260

Table 5: Search strategies for each database

For this study, the full January 2024 OJS dataset[32] was used to represent the national circuits. This dataset, published by the Public Knowledge Project (PKP), contains CSV-formatted information about known public installations of OJS. It includes metadata relevant to the operation, location, and subject coverage of these platforms. Table 5 outlines the search strategy for each source. Unlike the mainstream corpus, varying

[31] In the OJS dataset, only a basic 'Ctrl-F' search is possible, covering the following languages: English, Portuguese, Spanish, Indonesian, Arabic, Russian, French, Hindi, Ukrainian, Afrikaans, and German. Journals meeting the inclusion and exclusion criteria are then manually searched for relevant papers.

[32] https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/OCZNVY (accessed on November 24, 2024)

technical requirements prevented a uniform search strategy for these circuits. Additionally, the non-mainstream databases lacked the detailed filters of Scopus and WoS, necessitating manual research.

In addition to the inclusion and exclusion criteria presented in Table 4, the non-mainstream corpus was checked to ensure that the journal of a relevant article was not listed in the SSCI or ESCI by entering the ISSN into Scopus and Web of Science. Moreover, given the proximity of some non-mainstream journals to potential predatory journals (Mills & Inouye, 2021), each journal was evaluated using the checklist by Vetter and Schemmann (2021, p. 82) and excluded if necessary. The intracoder reliability for identifying journals in the publishing circle (d) was satisfactory ($\alpha = .804$). The relevant articles identified during sampling were prepared for topic modeling by extracting titles, abstracts, and keywords into unformatted text files. Metadata, including authors' names, institutional affiliations (country), and publication years, were also recorded. The content of the texts in the mainstream and non-mainstream corpus was then analyzed using a probabilistic topic model.

3.2 Structural topic modeling: preprocessing and model selection

To address the research question, STM, a semi-automated quantitative text analysis method, was applied to compare two text corpora in a cumulative topic model using the R package stm (Roberts et al., 2019). Topic modeling is an unsupervised machine-learning technique that identifies latent topics in text corpora based on the bag-of-words hypothesis, which assumes word order can be ignored to analyze co-occurrence patterns (Blei et al., 2003; Sievert & Shirley, 2014). Topics, defined as probability distributions over words, emerge from probabilistic modeling and represent clusters of words likely to occur together (Goldenstein & Poschmann, 2019). Among topic modeling approaches, Latent Dirichlet allocation (LDA) and STM are prominent, with STM offering the advantage of incorporating metadata including geographic origin and publication year (Roberts et al., 2019).

A key aspect of topic modeling is the calculation of statistical indicators, such as beta and gamma values. Beta values measure the relevance of a term to a specific topic, while gamma values indicate the relative frequency of terms associated with a latent topic. These metrics enable comparisons between empirical texts and ideal–typical topics, revealing their thematic imprint (Kuckartz, 2019).

The topic modeling process involved data preparation, during which texts were tokenized, stop words were removed, and word forms were standardized to reduce bias (Muller et al., 2016). Probabilistic modeling was then applied to compute a latent thematic structure, facilitating objective and reproducible analysis of large text corpora (DiMaggio et al., 2013). The results were interpreted using visualization tools, such as LDAvis, which illustrate relationships between topics and terms (Sievert & Shirley, 2014).

Topic modeling offers a robust foundation for examining how the thematic priorities of researchers from the so-called GS relate to those researchers' visibility and positioning within the global publication system. STM, in particular, enables the analysis of contextual factors and epistemic inequalities, as the method visualizes differences between mainstream and non-mainstream journals and supports the exploration of marginalized topics and disciplinary diversity in the global science system (Nylander et al., 2022).

For this study, models with varying topic numbers (K = 3 to K = 20) were computed to test various `min_docfreq` values and the use of word stemming. Models with a low `min_docfreq` of 0.005 and without word stemming produced the most selective and interpretable results. The optimal number of topics was determined using criteria including semantic coherence and exclusivity. As shown in Figure 7[33], a model with K = 7 topics was selected for analysis.

The modeling results were visualized by extracting the most salient terms for each topic and generating an intertopic distance map with the LDAvis package (Sievert & Shirley, 2014), providing a two-dimensional representation of the seven topics and their lexical proximity or distance (Fig. 4). Gamma values (γ) were used to analyze the typical assignment of texts to topics. These values represent the estimated proportion of a document containing a particular topic, where the sum of all γ-values is 1 (Silge & Robinson, 2017). A text is considered typical for a topic if its γ-value is at least 0.5.

[33]Figure 7 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.VIII).

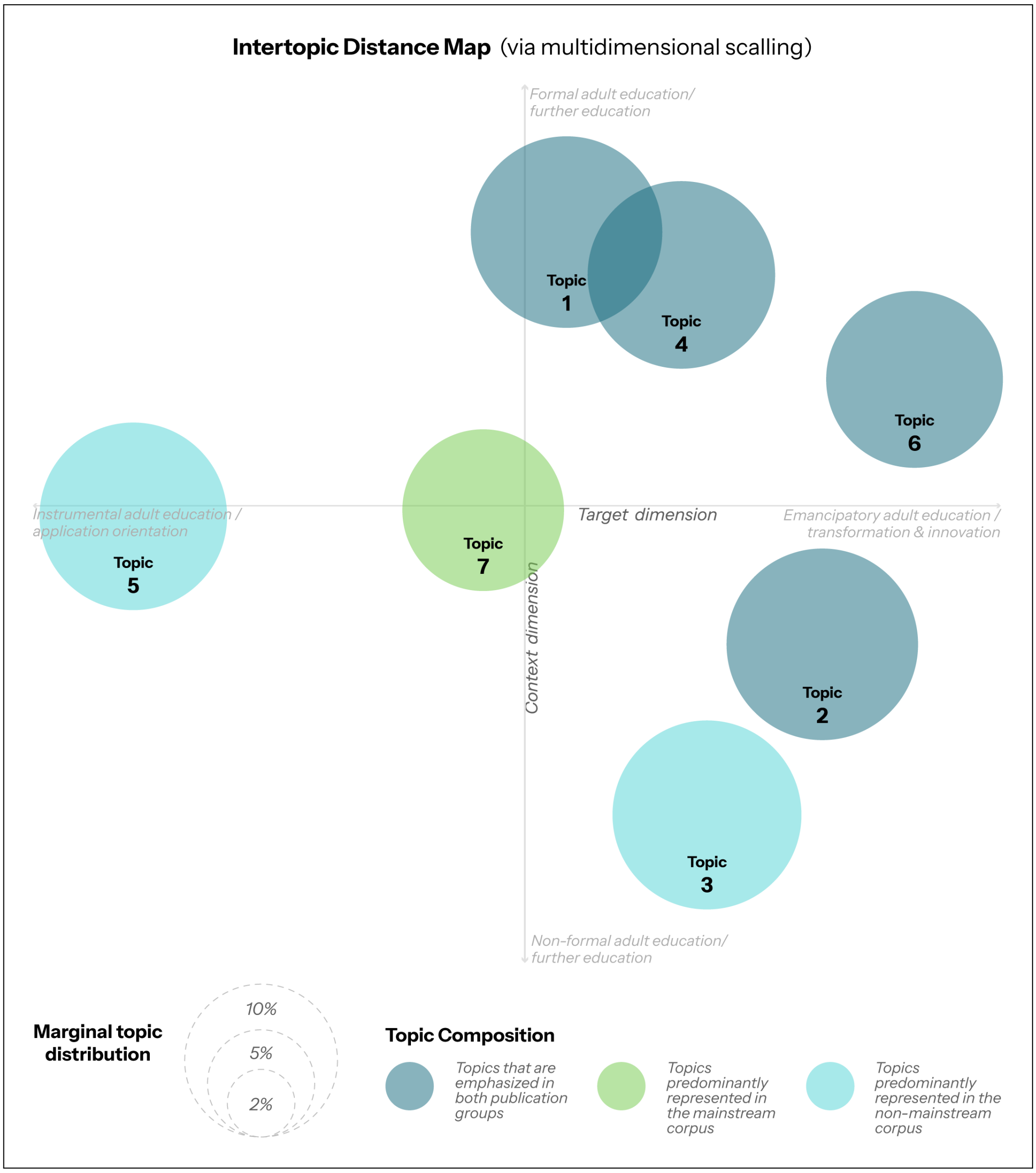

Figure 4: Intertopic distance map

Therefore, texts with γ-values of 0.9 or higher were deemed highly representative and formed the basis for further interpretations of the topic's content characteristics. The proportion of topics published in mainstream and non-mainstream journals was also calculated to determine which topics were more strongly influenced by each publication group and highlight differences in thematic priorities between the two.

4 Results

The search process identified 415 articles published before September 30, 2024. Since an exhaustive search in non-mainstream journals was unfeasible due to frequent non-indexing, the search continued until the non-mainstream corpus also included 415 studies.

Analysis of the bibliometric metadata by authors' countries of institutional affiliation revealed that the non-mainstream corpus was dominated by lower middle income countries (LMICs; 49.88%, n = 207), followed by upper middle income countries (UMICs; 36.02%, n = 149.5) and least developed countries (LDCs; 14.10%, n = 58.5). In this corpus, the most frequently represented countries included Nigeria (145 articles), South Africa (37.5[34]), and Indonesia (37.32). In contrast, the mainstream corpus was led by UMICs (64.33%), with smaller shares for LMICs (24.04%) and LDCs (11.58%). The most frequently represented countries in the mainstream corpus were South Africa (n = 106.82), Brazil (n = 43.33), and Turkey (n = 33). These findings highlight the differences in the geographical distribution of contributions, particularly regarding the prominence of LMICs and LDCs.

Figure 8[35] illustrates the publication years of articles from both corpora. While publications by adult education researchers from countries of the so-called GS were published at a low to moderate level in mainstream journals in the 2000s, non-mainstream journals only featured such publications from 2012 onward, with a sharp increase beginning in 2018.

[34]The article counts reflect fractional authorship attribution. In cases of co-authorship across countries, the contribution was equally divided among the countries involved (e.g., a paper co-authored by researchers from South Africa and Ghana was attributed as 0.5 to each).

[35]Figure 8 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.IX).

The mainstream corpus, comprising 138 journals, was dominated by the International Review of Education (59 relevant articles) and the International Journal of Lifelong Education (53), both central to global adult education research. In contrast, articles in the non-mainstream corpus were distributed more widely among the 202 journals, with the Journal of Vocational, Adult, and Continuing Education and Training (23 articles) and the Journal of Continuing and Development Education (18) leading. Geographically, most mainstream journals were published in the United Kingdom (162.5 relevant articles across 35 journals), Germany (63/5), and Brazil (38/19), while the non-mainstream corpus was dominated by Nigeria (93/39), Indonesia (55/34), and South Africa (28/5). A full list of journals is available in the supplementary material[36].

The computed model's topics were described and interpreted individually. Here, topics appearing in similar proportions in both the mainstream and non-mainstream journals are addressed first, followed by those that were predominant in the mainstream corpus and then those significant in the non-mainstream corpus.

The 30 most relevant terms for each topic are presented, reflecting various relevant concepts, from absolute frequency to exclusivity. Irrespective of occurrence frequency. LDAvis controlled this weighting using the parameter λ ($0 \leq \lambda \leq 1$), where lower values emphasize terms that are highly specific to a single topic, while higher values highlight more frequent terms across topics. A value of $\lambda = 0.5$ represents a compromise between these two notions of relevance, balancing exclusivity and general frequency to provide a more nuanced view of each topic's most informative terms (Sievert & Shirley, 2014). For consistency, all reported terms are based on $\lambda = 0.5$. To complement the topic descriptions, texts with gamma values of $\lambda \geq 0.9$, considered highly representative, were included.

[36] A tabular overview of the journals included in both the mainstream and non-mainstream corpora, the reference list of all 830 included studies as a machine-readable RDF file, and the analyzed titles, abstracts, and keywords as plain text files are available in the appendix at https://doi.org/10.57743/smmcwc3f18yw8t0s, in the "Dataset" folder.

4.1 Topics emphasized in both publication groups

Topic 1 (Fig. 9)[37] centered on the methodological development, implementation, and evaluation of adult education programs, emphasizing practice-oriented approaches and the application of andragogical principles. Terms such as andragogy, methods, training, implementation, and evaluation highlight the topic's focus on designing learning processes tailored to learners' needs and experiences. Key principles from Knowles, such as self-directed learning, relevance to learners' lives, and autonomy, played a pivotal role in this topic.

The non-mainstream texts emphasized the practical application of these principles, such as tutorial support in evening classes (A330[38]) or work-based training (A314), often adapted to local contexts. In contrast, mainstream texts, such as B501 and B549, expanded these approaches by developing theoretical models for generalizable applications, including collaborative learning and active-learning methods. The corpora also differed in their objectives: non-mainstream texts prioritized contextual applicability, while mainstream texts focused on systematically developing transferable concepts and empirically validating them. Methodologically, the non-mainstream studies favored qualitative approaches to capture contextual factors, whereas mainstream studies employed quantitative and mixed methods to evaluate outcomes. Further, many studies explored how learning processes can foster intrinsic motivation, reflecting a central emphasis on motivation. Thus, this topic is best described as *learner-centered implementation of andragogical concepts in practice-oriented continuing education programs.*

Topic 4 (Fig. 10)[39] focused on transformative learning, particularly in the context of distance education and the reflection of social and cultural identities. Terms such as reflection, identity, and community highlight the focus on individual transformation and collective change in educational processes. The emphasis on distance underscored the role of distance education in fostering subject- and community-oriented transformation.

[37] Figure 9 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.IX).

[38] This is the randomized code of a text from the data set. "A" stands for the corpus of "non-mainstream" and "B" for the corpus of "mainstream." The complete dataset is available for download here: https://doi.org/10.57743/smmcwc3f18yw8t0s

[39] Figure 10 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.X).

Another notable term, indigenous, highlighted the importance of distance education for Indigenous communities, as this type of education helps overcome geographical and social barriers while offering flexible learning opportunities, especially for those with community or family responsibilities.

The non-mainstream texts explored practical applications of transformative principles, including Mezirow's theory of shifting frames of reference (A265) and the integration of cultural values, like Ubuntu (A340). Mainstream texts, such as B418 and B786, expanded on this perspective by incorporating cultural sensitivity and motivational techniques into distance education programs.

Topics 1 and 4 shared an application of andragogical principles and motivational teaching approaches, both aiming to empower learners and enhance educational effectiveness. However, Topic 1 prioritized measurable competence development and adopted a naturalistic perspective, while Topic 4 emphasized learning processes and their social impact, reflecting a social constructivist andragogical lens. Thus, Topic 4 can be aptly described as *transformative learning in distance education contexts*.

Exploring vocational education and training (VET), lifelong learning, and the role of educational programs in fostering employability and social justice, Topic 2 (Fig. 11)[40] emphasized vocational education and economic integration policies, particularly in regions like South Africa. Key terms included *TVET, training, policy, vocational, and market*. Non-mainstream texts, such as A75 and A125, highlighted practice-oriented approaches, such as work-integrated learning, while A406 addressed challenges in lifelong learning for older adults. In contrast, mainstream texts, such as B658 and B752, analyzed policy frameworks and their impact on program effectiveness, particularly for industrial workers and global labor markets. A recurring theme was the fight against social inequalities, as discussed in B645 and B658, which demonstrated how education can promote economic and social integration for disadvantaged groups. However, B457 criticized insufficient political commitments to lifelong learning. As seen in these articles, Topic 2 is best described as *VET and lifelong learning for employability and social justice*. It was distinct from other topics due to its focus on labor market integration

[40]Figure 11 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.X).

and structural reforms.

Topic 6 (Fig. 12)[41] explored the role of education in historical, social, and political developments in South America, focusing on emancipatory approaches inspired by Paulo Freire's pedagogy and its connections to social movements. Within this topic, education was framed as a tool for promoting social justice, political participation, and the decolonization of knowledge (A325). Key terms including *history*, *movement*, and *political*, alongside references like *Brazil* and *Brazilian*, emphasized the topic's historical and geographical roots. Freire's concepts, particularly the *pedagogy of the oppressed and conscientization*, formed the theoretical foundation of many studies (A217; A347). These perspectives link education with political struggles and social change, as exemplified by movements like the *Movimento dos Trabalhadores Rurais Sem Terra* (MST) (B686; B576).

Since history serves as both a subject of analysis and a methodological approach, studies in this topic analyzed historical developments and actors to reflect on structural challenges and the transformative potential of adult education. Here, education is viewed as a continuation of historical struggles aimed at individual liberation and collective transformation (B688; B613). Methodologically, studies on this topic relied on qualitative approaches, including historical analysis, document studies, and critical theory, facilitating in-depth reflections on education systems and their role in addressing social inequalities (B540; B585). Topic 6 is labeled *"historical-political education perspectives in South America: Emancipation through social movements."*

4.2 Topics predominantly represented in the mainstream corpus

Topic 7 (Fig. 13)[42] addressed functional literacy and women's education as central approaches to promoting autonomy and social participation. Educational programs combine basic skills, such as reading, writing, and arithmetic, with application-oriented skills to enable participants to actively shape their lives. A particular focus was placed on addressing intersectional disadvantages that arise from the intersection of gender,

[41] Figure 12 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.XI).
[42] Figure 13 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.XI).

socioeconomic status, and geographic isolation (B622). The key terms of the topic—*literacy*, *functional*, *women*, *rural*, *skills*, and *participation*—underscored the programs' focus on strengthening individual skills and collective participation. The studies showed that women in rural areas benefit particularly from functional literacy, as it allows them to acquire practical skills, such as accounting and problem solving, which enhance their economic independence and social participation (A225). At the same time, the studies identified challenges, such as inadequate funding and a lack of infrastructure, that hinder the implementation of effective educational programs (A79).

Methodologically, the studies employed qualitative needs assessments to determine the specific needs of participants (B472) and used quantitative measurements to evaluate functional literacy levels and their impact on daily and working life (B471). The results demonstrated that functional literacy in rural areas not only contributes to individual empowerment but also facilitates collective development by breaking down social barriers and promoting economic participation (B702). A suitable label for the topic could therefore be *"functional literacy and women's education: promoting autonomy and social participation in rural areas."*

4.3 Topics predominantly represented in the non-mainstream corpus

Topic 3 (Fig. 14)[43] investigated the role of non-formal education as a pivotal instrument for advancing sustainable development, alleviating poverty, and addressing climate protection, with a particular emphasis on the Nigerian context. Central terms, such as *non-formal*, *community*, *poverty*, *environment*, *challenges*, and *development*, underscored the deliberate and strategic utilization of education to reduce social inequities and enhance environmental awareness. The non-mainstream texts, including A202 and A253, provided empirical insights into how non-formal education facilitates the realization of the Millennium Development Goals, and A302 and A243 emphasized the critical role of environmental adult education in addressing climate change. Furthermore, texts such as A407 and A393 highlighted structural challenges, such as inadequate funding and the importance of public–private partnerships (PPP) in sus-

[43]Figure 14 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.XII).

taining adult education programs. The mainstream text B820.4 extended this discourse by analyzing the relationship between education and Nigeria's political reform agenda.

The thematic connection between Topics 3 and 2 arises from their shared objective of leveraging education to foster social and economic participation. However, while Topic 2 primarily focused on labor market integration, Topic 3 emphasized community empowerment and sustainable development. Accordingly, Topic 3 was characterized as *non-formal education for sustainable development, social justice, and climate protection.*

Topic 5 (Fig. 15)[44] is characterized by predominantly quantitative research and evaluation of educational programs, particularly within specific regional contexts, such as Nigerian states (state). Key terms, including *questionnaire*, *data*, *survey*, *findings*, *learners*, and *programs*, emphasize the focus on data collection and analysis to evaluate and adapt educational programs to regional conditions. Moreover, the significant presence of the term "state" underscored the regional grounding of this topic, with numerous studies addressing challenges and successes in Nigerian states. For instance, A129 and A130 investigated the effectiveness of regional entrepreneurial, agricultural, and political education initiatives for women, particularly in terms of poverty alleviation and social inclusion, utilizing validated questionnaire instruments. Similarly, the mainstream text B763 expanded this perspective by examining the role of libraries in facilitating educational resources through a descriptive questionnaire approach. Overall, the thematic focus and target groups were secondary to the methodological approach, which centered on quantitative data generation and analysis. The isolated position of this topic on the intertopic distance map reflects its distinct methodological orientation and differentiation from topics with a more subject-centered focus. Topic 5 was therefore described as *quantitative evaluation and data collection in regional education programs in Nigeria.*

Based upon the results presented, the following interpretation emerged for mapping adult education research from countries in the so-called GS: the vertical positioning of topics reflected a distinction between research on formal adult education and discussions of non-formal settings. Thus, the vertical axis was labeled as a *context di-*

[44]Figure 15 is available in the appendix of the dataset at https://doi.org/10.57743/smmcwc3f18yw8t0s, located in the "Figures" folder and in the appendix of this dissertation (p.XII).

mension. The horizontal axis, in contrast, distinguishes between studies that framed adult education interventions as application-oriented or instrumental and those that viewed these interventions as transformative and emancipatory. Thus, this axis was referred to as the *target dimension*. This distinction is exemplified horizontally by the intertopographically isolated Topic 5, which includes programs—often quantitatively researched and evaluated—that pursue functional goals such as poverty reduction or (agricultural) skills development. In contrast, the transformative-emancipatory side is characterized by an epistemological orientation that, drawing on historical paradigms and framed within lifelong learning, conceptualizes adult education as largely detached from (economic) exploitation goals.

5 Discussion, Conclusion & Outlook

To enable a concise discussion and outlook, the labeled topics are analyzed within the macrosociological framework of this article. These reflections extend beyond the methodological limitations of the current analysis and highlight potential influencing factors. Implications for publication practices and directions for future research in the field are derived from these assumptions.

The overall analysis of the seven topics revealed that the thematic priorities of adult education research from the so-called GS were strongly influenced by regional specifics. For instance, texts from Nigeria dominated Topics 3 and 5, while Topic 4 was heavily shaped by contributions from Brazil (58.15%) and other South American countries. Topic 2 comprised 58.23% of works from Ukraine and South Africa, whereas Topic 1 was largely defined (40.41%) by contributions from Indonesia. With the exception of Topic 1, country designations appeared among the most frequent terms in the "most frequent words" lists of the respective topics, emphasizing the strong localization of these discussions within national, regional, and local contexts.

In the non-mainstream corpus, papers from Nigeria had a high frequency (Topic 3: 68.35%; Topic 5: 78.08%), with Topic 5 consisting entirely of African contributions. The Nigerian research landscape reflects a complex interplay of colonial legacies, economic instability, and global dependencies. During the post-colonial era, international organizations, such as UNESCO and NGOs, have provided significant support for research and science. However, a sustained lack of state investment and political prioritization since the 1980s has led to a substantial reduction in public funding and infrastructure (Lebeau, 2003, pp. 184f.). Subsequently, international sponsors became central actors, supporting infrastructure but simultaneously fostering dependencies and aligning research priorities with global rather than national needs (Lebeau, 2003, pp. 193f.). Thus, Nigerian researchers face significant challenges, including fragmented networks, insufficient state funding, and inadequate technical resources, and these challenges render their working conditions particularly precarious compared to other GS countries (Lebeau, 2003, pp. 194f.).

Additionally, universities in Nigeria frequently use international publications as a promotion criterion, irrespective of the bibliometric prestige of the journals (Omobowale et al., 2014, p. 672). This practice may account for the relatively high use of potential predatory journals by Nigerian adult education researchers (Vetter & Schemmann, 2021, p. 89). However, it does not explain the extensive local Nigerian journal output identified in this study or the finding that only n = 17.5 of the texts in the mainstream corpus were authored by Nigerians. Rather, the dominance of local Nigerian journals can be attributed to institutional requirements and national research structures. These journals function less as vehicles for global visibility and more as tools to advance academic careers and secure promotions within the national context (Mills & Branford, 2022, p. 841).

The highly representative texts from Topic 5, which emphasize the evaluation and methodological research of educational programs within Nigerian local contexts, demonstrated the practical orientation of many studies that directly address the specific challenges of Nigeria's educational landscape. This research, deeply rooted in regional contexts, focuses on adapting education policies and practices to local conditions and needs, explaining the topic's strong prevalence in local journals (Mills & Branford, 2022, p. 842). Furthermore, these studies were frequently accompanied by direct appeals to educational policy institutions advocating for increased support for regional adult education projects, initiatives, and organizations.

The latter point—namely, the frequent appeals to educational policy institutions—

also applies to another topic in the non-mainstream corpus, Topic 3.: Unlike Topic 5, which was more theoretically and conceptually oriented than methodologically or empirically so, Topic 3 focused on education policy, advocating for increased financial support for adult education as a key instrument for sustainable national development. Contributions to this topic frequently discussed sustainability through the "three pillars of sustainability" framework, which considers social, economic, and environmental dimensions as equally significant and operationalized via the Sustainable Development Goals (Purvis et al., 2019). National challenges, such as discrimination against minorities, poverty, and water pollution, were framed as fields of action for adult education, aiming at national and community development. The strong emphasis on the government as a funding agency highlighted the marginalization of adult education, which stems partly from political decision-makers' limited understanding of the sector's role in promoting social inclusion, civic participation, and lifelong learning (Grotlüschen et al., 2024).

In summary, the topics primarily discussed in the non-mainstream corpus, particularly Topic 3, highlighted issues that were also highly relevant to the center, but within the non-mainstream corpus these were directed at specific audiences, such as national education policymakers or funding bodies. Thus, scientific influence on local or regional stakeholders is likely mediated through peripheral, locally oriented journals. However, the audience for these publications remains limited, as does their intended impact on decision-makers. This leads to the assumption that the struggle for recognition of adult education, particularly in Nigeria, occurs in isolation from the central discourse of adult education research, thereby diminishing its broader impact.

The only topic predominantly represented in the mainstream corpus was adult literacy, frequently analyzed in terms of risk variables, such as gender and rurality. The prominence of this topic in mainstream publications can be understood through a paradox highlighted by Hanemann and Robinson (2022, p. 242). In the so-called GN, literacy is once again receiving political attention despite ostensibly resolved challenges, whereas in the so-called GS, it has been increasingly marginalized due to national education policies that prioritize child and youth education. As a result, the so-called GS continues to face significant literacy deficits, while literacy is sidelined in national agendas.

Simultaneously, the so-called GN has reframed literacy within the context of emerging social and technological demands, thereby influencing global discourses. This observation supports the assumption that agenda-setting by the so-called GN not only shapes the central discourse in adult education research but also both enables and constrains the participation of peripheral scientific communities.

Considering the central research question of this study, the likelihood that adult education researchers from the so-called GS are represented in the center of the publication space increases in UMICs. In terms of the world-system approach, this suggests that authors from the semi-periphery oscillate more frequently between mainstream and non-mainstream publication spheres. Given the underrepresentation of adult education researchers in mainstream adult education journals (Vetter, 2022), the topic model revealed that Nigerian authors, in particular, often opt for peripheral and thus internationally less-visible publication pathways. In terms of content, these authors contribute to regional Southern circuits and national circuits by either employing quantitative methodologies to evaluate the needs and impacts of regional formal and non-formal adult education programs or emphasizing the importance of adult education initiatives in addressing social, economic, or environmental challenges through programmatic approaches. Both topics commonly focus on national education policy and advocate for increased public support. Other nations, such as Brazil (historical perspectives on liberation pedagogy), South Africa, and Ukraine (work and vocational pedagogy approaches), are visible both in mainstream publication venues and the (semi)periphery. In the South American context, this visibility reflects successful national efforts to promote locally oriented publication venues (Beigel, 2014).

While the topic model provides a broad cross-section of adult education research from previously underrepresented regions, it cannot claim full representativeness. For instance, the sampling excluded publication venues lacking an impact factor, even if they were produced by large commercial publishers. The robustness of the model could be improved by repeating the study with an expanded dataset ($n \leq 1000$). Moreover, including papers by authors from the so-called GN could help identify regional specificities in adult education research independently of publication venues and assess whether certain topics can be attributed to the so-called GS. Since questions of scientific quality were excluded from the analysis, addressing quality criteria would require reflection through a critical race theory lens. Discussions around "good" science often fail to mitigate inequalities, as they provide participants with opportunities to uncritically regard knowledge from the South as "unknown," "untested," or "of questionable relevance or validity" (Collyer, 2018, p. 70).

In the future, alongside the diversification of editorial boards to ensure greater geographical representation, a more reflective quality assessment of scientific contributions by the academic community as a whole will be needed. Alternative evaluation methods, such as Altmetrics, could complement the increasingly dominant quantitative indicators in adult education research, potentially enhancing bibliodiversity within the discipline. The findings of the topic model provide a basis for qualitative-reconstructive research on publication decisions, exploring whether publications in peripheral channels represent deliberate choices aimed, for instance, at achieving greater national political impact.

7 Sub-study 3: Adult educational publishing in the context of unintended side effects of the OA movement

7.1 Summary and classification in the overall framework

The third exploratory bibliometric study, published in 2021, is the only one of the three sub-studies that does not explicitly focus on adult education researchers from countries of the Global South. The aim here was to shed light on the difficult-to-capture area of illegitimate scientific communication via journal publications as the third and final publication space shaped by OA in adult education research, alongside the mainstream and the more differentiated non-mainstream areas. Nevertheless, scholars from countries of the Global South have been the focus of attention since the emergence of the OA business model, which is based on fraud. The term "predatory publishing" was coined by librarian Jeffrey Beall, who retired in 2018, and between 2012 and 2017 maintained a blacklist of individual (stand-alone) OA journals and publishers that he suspected of fraudulent activity (Teixeira da Silva & Kimotho, 2022, p. 1).

Much-cited studies on the OA publishing phenomenon, such as those by Shen and Björk (2015) and Xia et al. (2015), have identified a geographic concentration of female authors of "predatory" journals in the Global South, particularly in Africa and Asia, and attributed this to the inexperience of young female scientists in developing countries. The systematic review by Mills and Inouye (2021, p. 93) examines empirical studies on the motives, experiences and contextual conditions of scientific authors in connection with publications in these "predatory" journals, showing that the research analyzing these publication practices in their respective national contexts is increasingly being conducted in countries of the Global South in particular—a sign of a specific sensitivity to the phenomenon of publication at the periphery.

However, the link that is becoming so evident between countries of the so-called Global South and the OA publishing phenomenon is based on a distorted data set. For example, the studies only use the blacklist created by Beall as a source for the journals examined; Beall himself neither claimed nor provided evidence of a uniform, scientifically verifiable evaluation procedure. His selection criteria remained largely opaque and were not systematically documented, which is particularly evident from his blog practice and from analyses of his lists (Berger & Cirasella, 2015; Crawford, 2016; Teixeira da Silva et al., 2019). It is also striking that many of the listed journals come from non-Western countries, particularly from African and South Asian contexts, often due solely to formal criteria such as linguistic inadequacies, a lack of editorial internationalization, or low visibility in Western-dominated indices (Kimotho, 2019). Beall himself eventually addressed his geocultural bias, for example in an interview in which he stated: “Look, when I discover a new publisher from Nigeria, I admit I am more suspicious than I would be were the publisher from, for example, the Vatican” (Butler, 2013, p. 435). The uncritical reception of this list, including in bibliometric research, thus led to an epistemic distortion: Entire regions were associated with “dubious” publishing without a contextualized or methodically reflected examination of the actual quality or scientific practice of these journals. In doing so, Beall contributed significantly to the discursive and structural linking of predatory publishing and the Global South—and reproduced a system of evaluation that further entrenched existing inequalities in the global scientific landscape (Regier, 2018; Raju et al., 2018).

In the spirit of decolonization-sensitive (bibliometric) data collection (Sec. 4.3), the scientific exploration of the phenomenon of “predatory publishing” in adult education research, based on an integrative literature review, will determine a set of characteristics of predatory journals that can be used to create a tool for cross-checking Beall‘s blacklist and other similarly non-transparent and invalid collections of predatory journals. Since this rating system is not described in more detail in the paper for reasons of capacity, but the potential benefit for adult education researchers when checking journals could be relevant, the procedure is explained in more detail.

After a thematic review of the journals obtained from the three sources mentioned in the paper, each relevant journal was examined according to three self-developed category groups: (1) indexing features, (2) location transparency and (3) content-structural website analysis. The first category focuses on reputation and indexing characteristics and checks whether a journal is listed in one of the four recognized whitelists: Open Access Scholarly Publishers Association (OASPA), DOAJ, Scopus or WoS. These lists are considered central points of reference in the library literature for assessing scholarly integrity (Meule, 2018, p. 44; Laine & Winker, 2017, p. 288; Petersen, 2023, p. 11). Members of the OASPA, for example, must commit to adhering to ethical publication standards, particularly regarding transparent peer review processes and authors' rights (Xia et al., 2015, p. 1415). If a journal is included in at least one of these whitelists, it does not fulfill the criterion of this first category group, since it is assumed that it is a scientifically recognized and verified publication platform. It is only if a journal cannot be found in any of the whitelists mentioned that this is seen as an indication of a potential lack of legitimation in the established scientific publication system.

The second category concerns location transparency and is based on the assumption that many potential PJs try to conceal their actual origin (Bohannon, 2013, p. 60; Andoohgin Shahri et al., 2018, p. 656). To this end, a multidimensional model was used that triangulates four data sources: (1) location information on the journal website, (2) IP localization via geo-tools, (3) WHOIS domain registration data[45] and (4) ISSN-based country information. The combination of these indicators is used to check the plausibility and congruence of indications of origin, an approach that has proven effective in comparable studies (Kozak et al., 2016, p. 2010; Demir, 2018, p. 1301; Kurt, 2018, p. 143). In cases of conflicting information, it was assumed that the information was being withheld.

The third category group focuses on structural and content-related features of the journal websites. These include, for example, incorrect or misleading contact information (e.g., Gmail addresses, missing institutional attribution), unverifiable addresses (verified using Google Maps), unclear peer review processes, and conspicuous self-promotion. Particular attention was paid to the use of alternative or fictitious metrics such as non-recognized impact factors, for example based on Google Scholar or services that are on Beall's list of “Misleading Metrics” (Beall, 2016b, p. 79; Ibba et al., 2017, pp. 509f.; Dadkhah & Bianciardi, 2016, p. 2). In the literature, such indicators are considered a typical feature of predatory publishing practices (Shamseer et al., 2017, p. 8; Memon, 2018, p. 1634; Seethapathy et al., 2016, p. 1760; Petrisor, 2018, p. 199; Markowitz et al., 2014, p. 8). Journals were considered to be potentially predatory in the narrower sense (i.e., with a “high potential” for unethical publishing behavior)

[45]https://www.whois.com (Accessed April 04, 2025)

only if anomalies were found in all three category groups; these were compiled in a list and served as the basis for further analysis.

The results of the quantitative exploration show that potentially predatory open-access journals have so far only been used to a limited extent for adult education publications. Of over 54,000 articles examined from the corpus of potential PJs, only 181 contributions could be thematically assigned to adult education. A striking number of these contributions were written by scholars from the Global South, particularly from Nigeria, India and Malaysia, but US scholars were also frequently identified. The institutional affiliations and academic titles of the authors suggest that this is not a matter of randomly deceived or inexperienced researchers, but rather of a targeted publication practice in a system with limited access to renowned journals.

In addition to the noteworthy country allocation, characteristic findings also emerge with regard to the thematic orientation and formal quality of the contributions. Thematically, no spectacular deviations from the established spectrum of adult education research can be identified; rather, the contributions reflect a broad spectrum that includes topics such as political education, gender, literacy or religious education as well as labor-related issues.

What is striking, however, is that many contributions respond to challenges that are particularly virulent in countries of the Global South, such as poverty, illiteracy or the development of democracy. At the same time, the often poor linguistic quality and the lack of formal care in structure and citation point to deficient editorial processes; in many cases, peer review is doubtful at best. From a neo-institutionalist perspective, these findings can be interpreted as an expression of mimetic adaptation to institutionalized expectations of the global science system: Potential PJs reproduce markers of legitimacy such as impact factors, internationality in the title, and peer review claims, and thus also serve a need of scientists from regions with structurally limited visibility, for whom established publication channels often remain closed.

7.2 On the dark side of open access and new expectation of scientific productivity in adult education research: An analysis of publication activities in "predatory journals"[46]

Abstract

The aim of this paper is to explore international adult education research in the context of predatory publishing or predatory journals. The paper presents empirical characteristics of predatory journals, determines the quantitative occurrence of predatory journals in the field of adult education by means of a catalogue of criteria, takes a closer look at the authors of adult education contributions identified, and examines the content and quality of the contributions. The article deals with the phenomenon of predatory publishing, an unintended side effect of the Open Access movement, and thus operates in the context of Open Science.

1 Introduction

The higher education system and its organizations have been subject to profound change in recent decades. This holds true for several realms of the higher education system.

As regards teaching, the so-called Bologna process marks the beginning of the most dramatic changes in European higher education (Becker et al., 2020, p. 1). The process consisting of a series of agreements between European countries was intended to ensure comparability in the standards and quality of higher-education qualifications. However, it also evoked a development of a more competence- and student-centered approach to learning (Gover et al., 2019), which brings about questions of architecture, learning

[46]This is a reproduction of the article with unchanged content. For the sake of readability and consistent presentation, the bibliography has been integrated into the overall bibliography of the present study, and a German-language version of the abstract has been omitted. In addition, the figures for tables and figures have been adjusted in favor of consecutive numbering. The original version of the article can be found in: Vetter, T. & Schemmann, M. (2021). On the dark side of open access and new expectations of scientific productivity in adult education research. *Journal for Research on Adult Education*, 44, 75–95. https://doi.org/10.1007/s40955-021-00182-7.

space and access to learning material (e.g. Stang & Becker, 2020). This debate is not confined to the European context but is led in higher education systems around the world.

As regards research and publishing the Open Access movement can certainly be seen as one of the major changes. Originating in the United States of America with the establishment of a repository to make preprints in physics freely accessible, it covers the whole academic world by now and has profoundly changed the way research findings are being published and accessed.

Finally, regarding the governance of higher education organizations, massive changes were brought about by the introduction of new instruments subsumed under the heading New Public Management. At this point, output-orientation, quality management, management by objectives on all levels or, increase of competition might suffice as catchwords to circumscribe the changes. Within research on governance of higher education organizations the consequences were addressed in several studies (de Boer et al., 2007; Schimank, 2009; Heinze et al., 2011).

This paper focuses on unintended effects of a combination of two of the abovementioned developments. More concretely, we will look at the combination of the Open Access movement on the one hand and the changes of governance of higher education organizations on the other hand. The combination of both led to an unintended effect which we label as the "dark side", i.e. the emergence of Predatory Journals (PJs) resp. Predatory Publishing (PP). While there is no universally accepted definition of PJs (Cobey et al., 2018, p. 1), many empirical studies on the topic are based on the definition by Jeffrey Beall, who is seen as a pioneer of the academic debate on the publication phenomenon. Thus, PJs are defined as publication organs whose publishers exploit the Gold Road form of Open Access (OA) publishing and the associated form of financing via Article Processing Charges (APCs) for profit by claiming to guarantee legitimate quality control standards, such as a peer review process, but fail to keep this promise and accept all submitted manuscripts without review (e.g. Beall, 2013; Beall, 2016a; Cortegiani et al., 2019).

Although there is a tradition of analyzing scientific publishing in general and the spectrum of scientific journals in particular within adult education research (Rubenson & Elfert, 2014), PJs have not yet become the subject of analysis in the field of adult education research. Thus, it is largely unclear how to characterize these journals with adult education relevance. What is more, it is unclear who publishes in these journals on which adult education topics and in which scientific quality. This paper seeks to address this desideratum by first analyzing the above-mentioned developments as regards the Open Access movement and the governance of higher education organizations in a more detailed way. We will frame this analysis by drawing back on neo-institutionalist theory (Chap. 2).

Following, we will identify criteria for classifying potential PJs based on an integrative literature review of cross-disciplinary empirical work that treats PP as a central object of inquiry. On this basis, potential PJs relevant to adult education re- search are identified and examined (Chap. 3). Our study is methodologically oriented towards journal analyses and carries on by focusing on quantitative characteristics of the journals or their publishers (4.1), socio-demographic characteristics of the authors (4.2), the topics discussed (4.3), and the formal scientific quality of the texts (4.4). In a final chapter we draw conclusions and give an outlook on further research (Chap. 5).

2 Theoretical background and context

The starting point of this paper is the combination of the Open Access movement on the one hand and the changes of governance of higher education organizations on the other hand. Thus, we will take a closer look at both processes which, according to our analysis, brought about PJs as well as PP. We will also draw back on some notions of neo-institutionalist theory as a theoretical framework.

PP operates in the slipstream of the Open Access movement. The idea of free access to scientific literature on the Internet in turn emerged in the course of the journal crisis that developed between the 1970s and 1990s. While scientific journals were disseminated by the respective professional societies by means of the "gift exchange" principle until the 1960s (Hofmann & Bergemann, 2014), the launch of the Science Citation Index (SCI), which identifies the most relevant journals in the various disciplines by calculating the impact factor (IF), gave rise to the so-called core journals, which were increasingly in demand by students and scientists at university libraries due to their (apparent) relevance (Hofmann & Bergemann, 2014; Heise, 2018, p. 112). The resulting economic attractiveness eventually ensured that the relevant journals were bought up by large publisher groups. However, this had far-reaching consequences. On the one hand, the market quickly faced stag- nation from an economic perspective. While the profit margins and capacities of commercial publishers continued to rise due to their "monopolistic pricing policy" (Brintzinger, 2010, p. 333), the budgets of university libraries did not increase but even declined slightly (Frosio & Derclaye, 2014, p. 117; Lorenz, 2014). On the other hand, control over the dissemination of scientific knowledge was lost with the surrender of exploitation rights (Hofmann & Bergemann, 2014).

This economic and systemic crisis situations in scientific publishing and research provided the breeding ground for the OA movement, which formed at the beginning of the 1990s with the emergence of the Internet and went public in 2001 at a conference of the Open Society Institute with the demand for OA to scientific publications for all people (Stempfhuber, 2009, p. 116). Over the next three years, a broad group of supporters developed solutions for the neuralgic points of OA.

As regards financing, two options were singled out. On the one hand, there is the possibility of financing publications through institutions. On the other hand, there is the "author-pays model", in which authors pay so-called APCs to the OA publishers for the professional publication of the journals (Björk & Solomon, 2012, p. 2). Contrary to the anti-commercial orientation of the OA movement, the "author-pays model" has become a common business model in OA. Although many OA publishers and journals use the instrument of APCs merely to cover their costs, this financing channel provided the entry point for commercial academic publishers into the OA market. OA publication channels and publishers' business models are directly linked. Gold Open Access refers to one of two main publication channels in OA. This is understood as the primary publication of scientific articles in OA journals, or self- publishing for short (Döbler, 2020, p. 19). These newly founded journals are moving away from financing models .via subscription or access fees. Instead, the alternative funding models described above apply here. Financing via APCs is a central pillar of funding for these journals (Pieper, 2017, p. 1). The recommendation to finance the publication of Gold OA journals via such APCs has gained international acceptance over the past nine years. With the opening towards the market of OA, not only the core journals but also players who were not interested in global and free scholarly communication but merely wanted to exploit the business model associated with the movement for economic motives came onto the scene. Over time, a: "[...] new industry of journals which engage in deceptive and dishonest practices, falsely claim to offer peer review and publish any article in exchange for a fee." (Bagues et al., 2019, p. 462).

In the following, we want to address changes in higher education organizations. Changes in the governance of higher education organizations can be subsumed under the term new public management. However, one analytical concept to cover these changes is the so-called governance equalizer developed by Schimank (2007). Drawing on the work of Clarke (2001) Schimank (2007) developed five dimensions by which governance of higher education systems can be distinguished. State regulation can be seen as a first dimension, covering the classical notion of hierarchical authority by the state through regulations and law. Stakeholder guidance is the second dimension and draws on the delegation of power by the state to other actors such as university boards who then give advice and guidance to the organization. Academic self-governance refers to mechanisms of collegial decision-making, whereas managerial self-governance focuses the hierarchies within university leadership and addresses the power of presidents or deans. Finally, as the last dimension, competition for money as well as for prestige is singled out. Performance indicators as well as evaluations are characteristic of this dimension (Schimank, 2007; de Boer et al., 2007). Referring to this model, various studies were carried out operationalizing the model with indicators as well as comparing the governance of higher education systems with each other (e.g. Heinze et al., 2011; de Boer et al., 2007, p. 15). As one central finding, it can be pointed out, that governance of universities has undergone profound change and that "[...] changes are going in the direction of NPM" (de Boer et al., 2007). As such, amongst other trends, it can be observed that the importance of the dimension of competition for money and prestige increases. This particularly refers to third-party funding of research projects as well as to publications in high-ranked, peer-reviewed journals. What is more, the managerial self-governance also comes into play at this point, since the allocation of money is dependent on performance indicators referring to publication output. It is exactly at this point where the governance of higher education organizations and the Open Access movement are interdependent and reinforce each other.

Finally, we want to add some notions and concepts of neo-institutionalist theory as a theoretical framework. The theoretical approach seems particularly appropriate here, since it takes into account the organizations as well as their environment and environmental expectations. Key concepts of neo-institutionalist theory to be referred to in this context are institutions, legitimacy and mimetic isomorphism.

To start off, DiMaggio and Powell (1991) get to the heart of neo-institutionalism with the following quotation: “The new institutionalism in organization theory and sociology comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations and an interest in properties of supraindividual units of analysis that cannot be reduced to aggregations or direct consequences of individuals’ attributes or motives” (DiMaggio & Powell, 1991, pp. 8f.). Without any doubt, the term institution is central to the theory. Particularly, institutions which have an impact on social life are of interest. Institutions are understood as regulations, norms, values and beliefs which substantially influence processes in a binding and significant manner (Senge, 2006).

The concept of institutions is closely connected to the notion of legitimacy in neo-institutionalist theory. It is assumed that organizations acquire legitimacy by acting conform to environmental expectations. Meyer and Rowan (1977) characterize potential consequences as follows: “But conformity to institutionalized rules often conflicts sharply with efficiency and, conversely, to coordinate and control activity in order to promote efficiency undermines an organization’s ceremonial conformity and sacrifices its support and legitimacy” (Meyer & Rowan, 1977, pp. 340 f.).

By taking into account the importance of the environment of the organizations it is also possible to analyze processes of isomorphism. DiMaggio and Powell (1991) distinguish three mechanisms of isomorphism: coercive isomorphism brought about by regulations and law, mimetic isomorphism in the sense of an imitation of organizational elements which are perceived as successful, and normative isomorphism which is driven by e.g. preferences of problem solutions of professions (DiMaggio & Powell, 1991).

3 Methodological design

The present exploratory study is based on a methodical design consisting of three components.

In a first step we will carry out an integrative literature review, which focuses on cross-disciplinary empirical findings on PJs. At the heart of this review is the question, what criteria empirical research papers use to classify scientific journals as predatory and what methodological approach they use to approach the object of research.

The results obtained from the review serve as a prerequisite for quantitative data analysis since criteria can be derived from the empirical findings on PPs and PJs that can be used to derive statements on the probability of predatory intentions in selected potential PJs.

The third and final step of the research deals with the analysis of adult education papers identified as relevant in PJs as regards authorship, content and quality. The structured analysis of the content-related data on the articles studied is based on the adult education journal analyses of Rubenson and Elfert (2015), Cherrstrom et al. (2017), St. Clair (2011) and Taylor (2001).

3.1 The integrative review of empirical findings on PJs

The integrative review (IR) offers the possibility of including both experimental and non-experimental studies without having to compromise on systematicity and intersubjectivity. The IR "[...] also combines data from theoretical and empirical literature, and has a wide range of purposes, such as definition of concepts, review of theories and evidence, and analysis of methodological problems of a particular topic" (Tavares de Souza et al., 2010, p. 103). Whittemore and Knafl (2005) have designed a five-stage method sequence to ensure systematic implementation of the method. The first phase includes the development of the guiding question of the review. The second phase includes the literature search. In the third phase, the generated data are evaluated with regard to self-determined quality categories. Phase four is the data analysis, which can also vary in terms of its analysis criteria according to the research question and the corresponding needs. Finally, in phase five, the results are presented in a structured way (Whittemore & Knafl, 2005, pp. 548–552). The review prepared in the context of this work follows these steps and incorporates individual elements from the phase description of general systematic reviews by Gough et al. (2013).

In order to generate sufficient studies on the young phenomenon of PJs, the guiding questions of the IR are interdisciplinary.

Since deception is a central pillar of the business model for PJs and their publishers, they are characterized by intransparency. This makes it difficult to determine central characteristics for a discipline-independent definition of PJs. Therefore, the first guiding question of this integrative review is: "Which discipline-independent characteristics of PJs and their publishers are taken up or elaborated to define the phenomenon in the context of empirical studies?".

Following this, the second guiding question is "How or according to which criteria do the empirical studies identified as relevant determine scientific OA journals as 'predatory' or 'potentially predatory'?".

The third and final guiding question refers to the perspectives of the identified studies. The guiding question: "Which methods do the identified empirical studies use to investigate which aspect of predictive publishing or PJs?" is intended to reveal possible research desiderata. Behind the question is the assumption that PJs is a phenomenon with multiple manifestations that may not have been focused on with the same emphasis so far. The question serves as a needs analysis for the third part of this study, which refers to the results of this question in terms of content. To generate relevant studies from scientific journals, anthologies and monographs, seven literature databases were selected.

Publications with a publication date up to April 2019 were included in the search as well as national and international journal articles, dissertations, monographs, and anthologies written in German or English. On the content level, publications that deal

Search term of the IR

TITLE ABSTRACT (”Predatory Journal*” OR “Pedatory Publish*” OR “write-only publish*” OR “deceptive publish*” OR “räuberisches Veröffentlichen*” OR “Predatory open-access publish*” OR “dodgy Open Access journal*” OR “illegitimate journal*” OR “deceptive journal*” OR “journal* operating in bad faith” OR “dark journal”)

AND

TITLE ABSTRACT (”Study” OR “Studie” OR “explorative*” OR “monitoring” OR “Evaluation*” OR “Qualitativ*” OR “Quantitativ*” OR “empirisch” OR “empirical”)

Figure 5: Search Term of the IR

empirically with PJs or PPs as a whole or with selected components of these publication phenomena as the central object of investigation were included. The following Fig. 14 shows which search keywords were used in the databases.

3.2 The quantitative data analysis of potential PJs

The quantitative exploration of potential PJs, authors, and their contributions in the field of adult education research is built up under the influence of the generated findings on empirically developed characteristics of potential PJs and the identification of possible databases or other sources for access to potential PJs and their publishers. Empirical-quantitative exploration is a strategy of object exploration that lends itself to very large quantitative data sets in order to discover previously unnoticed or unrecognized patterns in them and to develop new theories on this basis (Döring & Bortz, 2016, p. 173). The aim of the exploration of the field is to generate quantitative statements on the size of the field and to collect localization data from potential PJs and the identified authors, as well as data relating to the academic profiles of the authors. The methodological procedure in this step of the analysis of the study is divided into the selection of data sources, the identification of potential PJs with possible relevance for adult education, the selection of relevant contributions in the extracted OA journals and the subsequent analysis of the potential PJs and the authors of adult education contributions.

Access to potential PJs is problematic. Although the *Beall’s List* (BL)[47] provides

[47] https://beallslist.net (accessed April 04, 2025)

a comprehensive list of potential PJs, publishers and even alternative or misleading metrics, this has no longer been maintained by the originator Beall since 2017. Since 2017, the list has been maintained by anonymous researchers, who, like Beall, have had to deal with a variety of criticisms regarding incorrect entries, the transparency of the journal selection and the associated subjectivity. At the same time, however, there is no alternative to the BL and its offshoots. The North American private sector analytics company, Cabell, does provide an extensive list of potential PJs, but this comes at a huge cost to individuals and is also open to criticism for lack of transparency. This data source is therefore out of the question due to the lack of a licence. For this reason, the BL (Journal-list and Publisher-list) represents a central data source in the present survey.

Since the latter source was updated two years ago, the *List of Predatory Journals* (LoPJ)[48] which is maintained by a group of anonymous researchers, is also used. Like the BL, this list separates publishers from OA journals. Both lists are also included here.

As a third source of supply, the paper uses suspicious-looking email invitations from OA journals that were sent to researchers from the Qualitative Sozialforschung (QSF_L) mailing list.

The identified OA journals were reviewed along different categories and subsequently included or excluded. For the two lists of potentially predatory publishers on the BL and the LoPJ, the publishers were checked along the criteria accordingly. These criteria, resulting from the integrative review, can be divided into three groups.

The first of the category groups determines whether the identified journal or publisher is listed in an integral whitelist for scientific OA journals. For this purpose, the four whitelists Open Access Scholarly Publishers Association (OASPA), Scopus, Directory of Open Access Journals (DOAJ) and Web of Science were selected. All publishers and journals were searched in the lists.

The second category group focuses on a central feature of potential PJs and publishers

[48]https://predatoryjournals.com (Unfortunately, the website is no longer online at the time of submission of this dissertation.)

that relates to their location and is disclosed in the context of the evaluation of the review conducted. Thus, this group of scientific publication bodies is characterized by a concealment of their true locations. In order to prove this concealment, a multidimensional model was created, as in the first category group. This includes the location information on the websites of the identified journals and publishers, the localization data of the Internet Protocol (IP) addresses and the International Standard Serial Number (ISSN) as well as the information on the owner of the journal domain in the WHOIS protocol.

The third group of categories takes a look at the contents of the websites of potential PJs. In this context, the contact details, the listed metrics and indices as well as suspicious components of the self-descriptions are considered to be indications of predatory behavior.

Along the three category groups presented, “whitelists”, “localization” and “homepage”, the filtered potential PJs were reviewed and sorted into one of three lists that differ in the degree of potential predatory intent. For further exploration, only those journals were considered that could be included in the list where the probability of predatory intent was upmost. The journals listed here are not in- cluded in any of the four whitelists from the first category group. The site check by four sources under the second category group yielded contradictory results for the journals assigned to this list, making an intention to conceal likely. Within the category group “homepage”, all OA journals give a misleading IF and list one of the aforementioned suspicious details in the contact information. The attached conspicuous self-descriptions of the OA journals were an optional decision aid if the assignment of individual journals was uncertain.

The potential PJ generated in this way were then searched for articles that indicated adult educational relevance based on keywords in the title.

The main focus of the field exploration is on quantifiable parameters of authors who publish articles with adult education topics in potential PJs. Accordingly, the following parameters were researched: geographical location(s) of the author(s), academic degree at the time of publication, institutional affiliation of the author(s) (including facultative background in case of university affiliation). The survey of the types of organization of authorship and the in-depth look at authors with a university location makes it possible to determine the extent to which academics use potential PJs to publish articles, or whether the phenomenon of PPs in the context of adult education also has non-university appeal.

3.3 Operationalization of the formal content and quality analysis of generated publications

Characteristics relating to the quality and content of contributions from potential PJs have so far only been collected by Oermann et al. (2018), as the evaluation of the IR has shown. In the descriptive part, the authors collect the following characteristics of the identified articles: "publisher, journal name, year, volume, issue, article title, first author's last and first name, country of first author, number of authors, length (in pages), and numbers of references, tables (including appendices), figures, illustrations, and photographs" (Oermann et al. 2018). A large part of these characteristics will be collected in the second part of the analysis of this paper in connection with the identification of authors who publish adult education articles in the potential PJs relevant to educational science. The descriptive recording of the length of the contributions and the number of sources listed in the bibliography can be seen as more content-related parameters. For the content-related analysis of adult education contributions from PJs, following the work of Oermann et al. (ibid.), the quantitative length of the individual publications measured in page numbers as well as the number of sources in the respective bibliography are therefore recorded and evaluated. The quantitative recording of figures, tables and photographs, on the other hand, is not considered necessary.

From the qualitative-interpretative categories of Oermann et al. (2018), only the first quality criterion is generally transferable, which defines the inclusion of an abstract as a quality feature of scientific articles in journals.

The logical presentation or organization of scientific articles can also be operationalized through objective criteria. For this purpose, the author's guidelines of renowned scientific journals of adult education research offer indications of minimum standards that can be verified even without interpretative work. In order to check the compliance with basic qualitative standards of the contributions to be examined, the given structure of the ZfW is assumed as a standard within the frame- work of the formal quality analysis of adult education publications. This structure is divided into five components, consisting of an introduction in which the research question is clearly defined, a theoretical framework in which the research question is embedded in the context of existing literature, a method section that presents the chosen methodology of the work in a comprehensible way, and the presentation and subsequent discussion of the results. In the case of research reports, it is therefore registered whether this structure is completely adhered to in the correct order. Articles that are not research reports but, e.g., project descriptions, commentaries or otherwise descriptive text forms are not measured against this structure. Here, it is only important that a general structuring of the text becomes clear through chapter titles.

Regarding the bibliographies of the articles examined, this paper, following the Submission Guidelines of the ZfW and the work of Oermann et al. (2018), also takes into account, in addition to the uniformity of the bibliographies, whether all sources cited are actually cited in the continuous text and whether sources are listed that are unpublished and thus not accessible. Furthermore, each bibliography is checked for punctuation and spelling errors as well as for compliance with a systematic order of the sources cited. The analysis also includes whether the bibliography has been formatted and whether Wikipedia appears as a source in the bibliography.

The text type of the articles is also determined by the information provided in the abstract and by recording the structure of the publications. Following Oermann et al. (2018), a differentiation is made between research reports, case studies, project descriptions, literature reviews and descriptive texts.

4 Findings

The following presentation of the study findings is divided into four parts. First, the results of the IR are presented with regard to characteristics of PJs. Then, the quantitative findings of the journal analysis in the field of adult education research are explained and interpreted individually. This interlocked approach is continued in the subsequent author analysis as well as in the final formative quality analysis of adult education articles in the potential PJs examined.

4.1 Characteristics of PJs and their publishers – results of the IR

A total of 353 publications were included in the integrative literature search. By using a multi-stage screening procedure, the corpus of relevant articles was reduced to 58 publications (Fig. 6). The analysis of the publication dates shows that PJs and PP

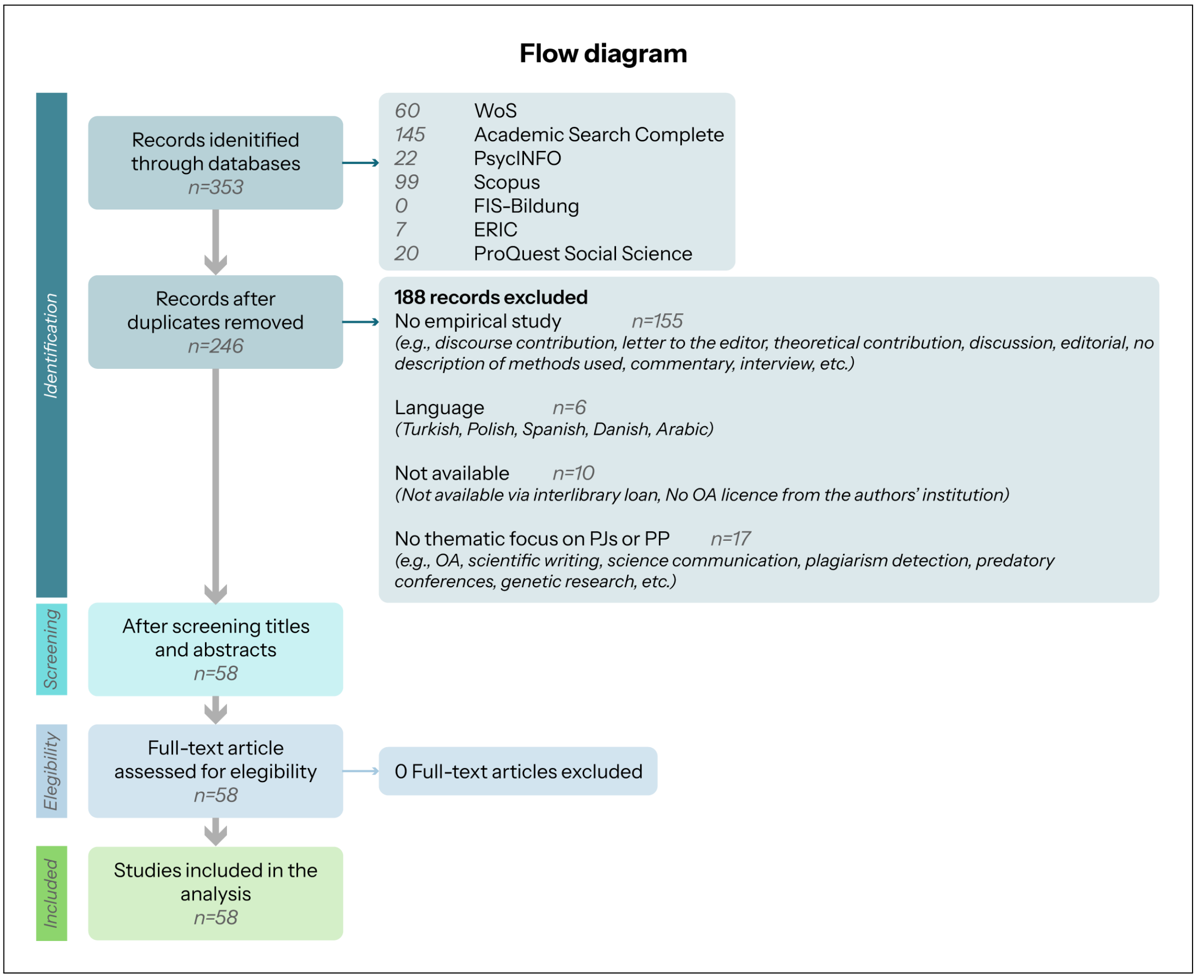

Figure 6: Flow diagram of the search process within the IR

have just recently become relevant as a central object of study. Even though the subject has indeed been addressed within the last ten years, 74.14% (n = 43) of the empirical publications identified were published between 2017 and 2019. The results show that there is a clear research focus on the North American continent (44.83%, n

= 26). In Europe, Italy stands out with a total proportion of 12.07% (n = 7). Overall, a global engagement with PJs and PP can be seen through the IR. With regard to the disciplinary positioning of the journals, it becomes clear that especially journals with a medical focus publish empirical studies on topics of PJs and PP (19 out of 49 journals). The second largest group of journals can be found in the subject area of library science, information science and science communication with 13 journals, followed by multidisciplinary scientific journals (n = 5). No journal can be assigned to the field of educational science.

As regards out central research question for the IR the following characteristics for PP and PJs can be singled out:

1. Potential PJs state that they publish in the OA model.
2. They charge APCs to fund predetermined editorial services. The amount of APCs is on average lower than the fees of legitimate academic OA journals. Some potential PJs try to conceal the costs or do not disclose them at all.
3. Potential PJs and their publishers come from similar countries across disciplines. These are mostly developing countries and the USA. However, publishers and journals also try to disguise their locations.
4. Essential editorial processes, such as the peer review process, are presented in a non-transparent manner on the websites of the publishers and the journals.
5. The duration of the peer review process is reported to be very short by potential PJs.
6. Potential PJs are not usually listed in reputable databases, but this can still happen in individual cases.
7. In order to exude relevance and seriousness, many journals use misleading alternative metrics and impact factors that can be characterized by non-reproducible methods and criteria.
8. The research institutions of authors publishing in potential PJs are often located in similar countries and have similar profiles.

9. Potential PJs use an aggressive email marketing strategy to encourage new authors to submit manuscripts.

10. Publications from potential PJs are usually characterized by low quality and low citation counts.

Regarding typical conspicuous features in the editorial board of potential PJs, the review conducted yielded contradictory results, which is why this aspect has not been included in the list.

The second guiding question of the IR relates to the way in which the empirical studies examined identify potential PJs. Overall, the results reveal a dilemma situation regarding the generation of reliable data sources for the scientific investigation of potential PJs. The BL currently represents the only freely accessible compilation of such OA journals and publishers. However, there are some problems with using this list. For one, the original website created by Beall has not been updated since 2017. Although there are offshoots of the list, they are anonymous and therefore not transparent. Secondly, the list is criticized for lacking transparency and objectivity (Teixeira da Silva, 2017; Olivarez et al., 2018; Berger & Cirasella, 2015). The points of criticism reveal that it is difficult to distinguish between fraudulent OA journals and OA journals that need to be improved in quality due to the lack of standardized criteria. For the explorative analysis of the present work, too, it is therefore important to bear in mind not to use the BL without cross-checking. There are various possibilities for this, which differ in terms of their reliability and the degree of work involved. Even if email invitations from journals or publishers are used as the primary data basis, cross-checking the results is essential to increase the degree of objectivity. Despite cross-checking, it is still necessary to speak of potential PJs, as even important verification tools, such as whitelists for OA journals, can contain erroneous entries.

4.2 Potential PJs with relevance for adult education research

By filtering the three selected sources of potential PJs for relevance to educational science, a total of 96 OA journals could be identified whose titles indicate an educational science focus[49]. The BL, which has not been updated since 2017, accounts for a total of 22.92% of the 96 total results. The LoPJ, which is maintained by anonymous researchers and regularly updated to this day, operates with Beall's extensive catalogue of criteria for assessing predatory intent. With 59.38%, the LoPJ represents the largest share of possible relevant OA journals. Its share of OA journals with a high likelihood of predatory action is also the highest in real terms for all three sources, with 38 potential PJs. The third source for potential PJs is the suspicious call for papers submitted by members of the QSF_L. Although the least results were received via this route compared to the other two sources with a total of 17 potential educational OA journals, 16 of them fulfilled the inclusion criteria of the present study. In addition, each of the potential PJs is retrievable. This underlines the relevance of the non-personalized email invitations from potential PJs as a source for this genre of OA journals.

The 96 results from the three sources include a total of 54,043 contributions from 2937 issues of these papers, 217 publications can be assigned to adult education in terms of content according to the criteria explained. The proportion of adult education publications in the potential PJs reviewed is 0.46% or 181 contributions.

By applying the evaluation procedure designed from the integrative review to assess potential predatory intentions of OA journals, the number of journals to be analysed in depth was reduced to 63. In the following, therefore, only this group of PJs with high potentiality for predatory intentions will be discussed.

Only two potential PJs from the sample directly address adult education research, both in their titles and in their formulated disciplinary orientation. These are the *Journal of Human Resources and Adult Learning* and the *International Journal of Vocational Education and Training Research*, which focuses on vocational education and training as a special sub-area of adult education.

Through the data collected in relation to the volumes of potential PJs relevant to educational science, the founding years of the journals become identifiable and thus also the temporal beginning of educational science and adult education focus of possibly predatory OA journals. The oldest journal, the Journal of Human Resources and

[49] A list of all identified potential PJs with relevance to adult education research is available upon notification to the authors' correspondence addresses provided.

Adult Learning, which explicitly refers to adult education, published its first issue in 2005. However, most journals were initially published in 2015 ($n = 13$). Considering the overall course of journal foundations, an increase in potential PJs with an educational science orientation can be observed from 2010 to 2015. Since 2016, start-ups in this segment have been declining. Only one journal meeting the criteria for potential predatory action was published for the first time in 2018. Six journals in the relevant group have not published an issue for at least a year at the end date of data collection (31.01.2019).

In general, it can be assumed that all analyzed journals use the financing model via APCs. Although 11 of the 63 analyzed journals do not provide any information on APCs on their homepages, this should rather be seen as a sign of an attempt at concealment, especially since OA journals that do not charge author fees usually communicate this clearly, such as the OA journals International Journal of Research in Education and Science, the International Journal of Technology, Education, and Resource Management, the Journal of Global Education and Research and the Advances in Social Sciences Research Journal, which were also analyzed in the context of the present study. In connection with the funding of the journals, the various APC models are also striking. For example, 14 of the 63 relevant OA journals charge an author fee specifically for Indian authors in addition to APCs for international authors. These separate fees are quoted in Indian Rupee (RS) currency and are lower compared to the APCs for international authors, which are quoted in USD. Four journals also offer reduced fees for students or registered reviewers. One journal again differentiates in terms of the text type of submission as to how high the APCs are. Five potential PJs charge either a two- or three-tier cost model, which makes the economic situation of the country of the submitting authors the yardstick for the amount of the author fee to be paid. These OA journals distinguish between fees for authors from “low-income countries” or “developing countries”, “middleincome countries” and “high-income countries”. It is therefore difficult to state an average level of APCs, especially since the values here also vary similarly to the number of published articles. The APCs given in RS converted into USD range from 9.84 USD to 15.60 USD. A German scientist would have to pay an average of 321.92 USD APCs for the selected potential PJs. An Indian author would have to pay 57.12 USD, assuming the person is limited to journals that offer a separate fee for Indian authors.

The analysis of the APCs of potential PJs with relevance to adult education confirms the findings of the integrative review on the financing model. Here, the APCs are on average even significantly lower than the prices of legitimate adult education research journals. The locations of the potential PJs or their publishers vary greatly. First of all, looking at the locations indicated by the potential PJs themselves, it is noticeable that most journals indicate India as a location (n = 19, 30%). When comparing the 14 journals identified that collect special APCs for Indian authors with the journals that list India as their own location, there is a match of 64.29% (n = 9). At least for these journals, the determination of the real location seems possible via this comparison.

The remaining journals with specifically Indian APCs do not provide their own location information. Thus, they belong to the second largest group of the analyzed OA journals (n = 17.27%). The journals' own information, together with the registration data entered in the WHOIS log, where 27% of the information was also encoded, are those of the four selected location identification sources with the most unlocatable results. Thus, the location data from the ISSN International Centre register yields only five error messages. On the one hand, these come about because potential PJs examined give an ISSN which, according to the register, belong to other journals (n = 3), or give unregistered standard numbers for serialized collected works on their homepages (n = 2). When the IP addresses were queried, there were only two error messages. However, this does not mean that the IP address query is automatically the most reliable method for determining the real locations. The IP address query only identifies the locations of the providers of the queried homepages of the potential PJs. The providers were also recorded as part of the query of the IP addresses. Assuming that the IP localization data could be equated with the location of the journal providers, nine (13%) of the relevant potential PJs would be located in Germany. This seems unlikely given the information generated by checking the ISSN, WHOIS and self-disclosure data, as Germany does not appear in the other sources. However, two firm conclusions about the real locations of relevant potential PJs can be drawn from the results. Firstly, India plays a decisive role in all three sources. In the case of self-disclosures, ISSN country information and domain registrants, India is most frequently identified as a location. India is followed by the USA in three of the four sources, whereby it should be significantly emphasized that no registrant of the journals examined is registered in the USA according to information from the WHOIS protocol. At the same time, this source of information is also characterized by many coded details (n = 16; 25%). Secondly, it is noticeable in the WHOIS and ISSN data that the proportion of identified countries defined as developing countries by the Development Committee of the Organization for Economic Co-operation and Development (OECD) is significantly high. While the proportion in the self-declarations, excluding journals that do not list a location, is only 10.87% (n = 5) and the provider locations can also be attributed to developing countries at a low rate of 16.31% (n = 10), 51.79% (n = 29) of the identified OA journals are located in developing countries as measured by the ISSN data and even 73.33% (n = 33) with regard to the WHOIS registrant information.

4.3 Analysis of authorship of adult education articles in potential PJs

In total, 328 authors from 36 nations are involved in the 181 identified articles. The highest number of articles identified in the potential PJs studied were from Nigeria (n = 39), followed by the USA (n = 27), Taiwan (n = 20), India (n = 19) and Malaysia (n = 11). The author of one article could not be assigned to a country. 20 of the 36 nations can be described as developing countries according to the OECD criteria already explained. In terms of the number of contributions, 100 of the 181 (55.25%) come from developing countries.

With 87.71%, the majority of the authors can be assigned to a university, followed by colleges (14.36%; n = 48). Focusing on the large group of authors working at universities at the time of publication, 74 (27.61%) researchers work at faculties of education. 26.49% (n = 71) are employed at faculties and departments of adult education.

Regarding the academic titles of the researchers, 59.15% (n = 194) of the authors hold a doctorate. 46.91% (n = 91) of these hold the academic rank of professor. 7.32% (n = 24) are listed as PhD students. People with a Master degree (12.19%; n = 40) or a Bachelor's degree (1.52%; n = 5) tend to play a minor role. For 26.83% (n = 88) of the authors, no academic titles are given and are also not researchable.

According to the results of the integrative review, the locations of potential PJs are congruent with the locations of the research organizations publishing authors there. Most researchers are located in the USA, India and other developing countries. This is also the case when looking at the authors of articles from adult education research in the potential PJs studied. However, most researchers in Nigeria publish articles on adult and continuing education. What is particularly noticeable about the authors from Nigeria is their distinct adult education background, which emerges from the evaluation of the facultative affiliation. According to this, the 61 academics of the total of 39 contributions from Nigeria are employed at faculties for adult and continuing education at 20 different Nigerian universities. This density of academic representation of adult education research can be explained by the fact that adult education in Nigeria includes young people from the age of 14 (Federal Republic of Nigeria 2004, p. 25). Moreover, the average age in Nigeria is 18.4 years (Statista 2021), and the literacy rate of persons aged 14 and above is just 59.6% (CIA, 2016, p. 548). Adult education in Nigeria therefore has an enormous importance for society as a whole, which cannot be compared to developed countries. The reason why Nigerian scientists publish most frequently in PJs with relevance to adult education can in turn be explained by the system of science funding in the country. Scientists in Nigeria receive additional payment for scientific publications. The quality of the journals is irrelevant (Adomi and Mordi, 2003, p. 260; Demir, 2018, p. 1298).

The high representation of authors from developing countries should not obscure the fact that researchers from countries with a highly developed research infrastructure, such as the USA or Germany, have also published contributions to adult education research in potential PJs. Nor have they by any means been exclusively inexperienced academics. The majority of those identified hold a doctorate or even a professorial title. This again does not suggest that most of the authors have allowed themselves to be deceived by the appearance of potential PJs but that they also may have opted for deliberate publication in the OA journals studied.

This finding supports the neo-institutionalist-influenced thesis that potential PJs with adult educational relevance secure their continued existence not only through the mimetic imitation and thus deception of academics, but also receive legitimacy from parts of their organizational environment. The imitation of components of reputable adult education journals in terms of using misleading metrics and indices, pretending international relevance, and possibly falsely claiming peer review also serves the scholars who consciously choose to publish in such organs. For example, the case study by Pyne (2017) showed that publications in potential PJs have a positive effect on the reputation of scientists from outside the field and on financial aspects (Pyne, 2017, p. 137). With the help of the theoretical framework, it thus becomes clear that potential PJs do not exclusively pose a threat to academic publishing, but also meet a need of the system itself.

4.4 Results of the formal content and quality analysis of identified articles in potential PJs

The analysis of the topics covered by the articles from the field of adult education research identified in the potential PJs fans out along 11 categories. While 20.44% focus on adult learning from a practical and theoretical perspective, 18.78% (n = 34) of the articles focus on teaching. The articles in these two categories largely address the micro-level of adult education (teaching-learning interaction level). The third largest group are articles that focus on corporate education in the context of Human Resource Management (17.13%, n = 31). Considering the papers by authors from developing countries identified in Chap. 4.3, it is also noticeable that 26.5% (n = 26.5) of these papers deal with topics that centrally or marginally address typical problems of developing countries, such as poverty reduction, mass unemployment or democracy development. 98.15% of the total of 27 contributions dealing with these topics were written by authors from developing countries.

The text types are largely divided between research reports (45.86%, n = 83) and descriptive texts (39.78%, n = 72), which can also be described as discourse contributions. 75.00% (n = 54) of the research reports use questionnaires to obtain data, 12.50% (n = 9) obtain their data through interviews. Three studies use different methods for data collection.

With reference to the descriptive-formal characteristics of the articles, the average page length excluding the bibliographies is 7.3 pages. The longest article is 27 pages, the shortest articles are two pages long. The articles cite an average of 24.3 sources in the bibliography. The extreme values here are 107 references and articles that cite only two sources. The two articles with only two sources were written by the same author and are not cited in the body text. The articles were published in the period 2006 to 2018. From 2011 (four contributions), the number of adult pedagogical submissions in the potential PJs studied increases steadily, apart from a small dip in 2014, until 2017 (29 articles). In 2018 (20 articles), the number of publications again decreases slightly.

In the context of the quality of the papers, the first thing to look at is the abstracts. This is present in 181 articles. One abstract stood out due to its extreme brevity of only one sentence. Furthermore, the adherence to a common structure for scientific publications in adult education research journals was examined. With the exception of the 58 publications that do not comply with the common structure only because of their text type (descriptive), since they do not cite methodological appendices, 38.21% (n = 57) of the articles show structural deficiencies. For example, 11.38% (n = 14) of the articles lack a theoretical framework, 6.5% (n = 8) have no methods section and 8.13% (n = 10) of the articles have no recognizable chapter structure. 43.90% (n = 54) have no quality deficiencies at all with regard to structure. In 17.89% (n = 22) all structural components of a scientific adult education journal article were present, but in these articles certain components were integrated into others and not clearly separated from each other in the form of chapters.

Another quality criterion is based on the clear formulation of a research question or textual intention. Here it can be seen that 64.64% (n = 117) explicitly formulate a research question/textual intention within the framework of the abstract or the methods section. Conversely, this is not the case for 35.36% (n = 64) of the 181 articles.

The final quality control is done by checking the bibliographies. 31.49% (n = 57) of the examined adult education articles have a bibliography with a consistent format. 68.51% (n = 124) do not have a consistent bibliography. It can be seen that 43.86% (n = 25) of these bibliographies do not contain any other deficiencies. The remaining lists (56.14%, n = 32) most often have punctuation errors (n = 17), list sources that are not cited in the running text (n = 11) and/or are not formatted (n = 8). Bibliographies with an inconsistent format also often have other deficiencies. Only 17.4% (n = 22) of these lists are error-free, apart from the inconsistent style. The most frequent sources of error are punctuation errors in 67 indexes, 35 articles list sources that are not cited in the running text and in 34 publications the bibliography is not formatted. According to the review of this quality indicator, 13.81% (n = 22) of the 181 articles are flawless with regard to the bibliography.

Taking into account the criteria explained in Chap. 3.3, with regard to the four quality-related indicators, 8.29% (n = 15) of the 181 adult education articles are free of deficiencies from a formal quality perspective, 24.31% (n = 44) show only slight deficiencies. Most articles, 32.04% (n = 58), do not meet two of the four relevant formal quality indicators. 35.36% (n = 64) are rated as severely and severely deficient in formal quality.

Thematically, hardly any significant noticeable features can be found in view of the categories. Rather, it becomes clear in the overview of the titles of adult education articles that it is rather the target groups and frames of the examined articles that seem to be of interest. The categories chosen in the course of the thematic evaluation do not reflect the fact that authors from developing countries often deal with typical topics of this national group. In summary, the impression is of a microcosm of adult education publishing by scholars from developing countries who cover topics that are virulent for developing countries emerges. The quality of the peer review of the journals must be viewed critically in light of the examination of the bibliographies and the adherence to a common chapter structure. In view of the many obvious punctuation and spelling errors, it is doubtful whether a review of the manuscript took place at all. The low APCs of potential PJs with relevance to adult education do not seem to ensure sufficient editorial performance.

5 Conclusion

The illumination of the selected dark side of Open Access publishing shows that predatory academic OA journals play a quantitatively marginal role in the field of international adult education research. The focused analysis of the identified contributions, the publishing potential PJs and the authors, however, reveals significant patterns that induce follow-up questions for globally networked and mutually participatory adult education research.

Through the neo-institutionalist perspective, it becomes clear that potential PJs with adult educational relevance do not exclusively deceive inexperienced scholars through the mimetic imitation of legitimate OA journals, but also seem to meet a need for low-threshold publication venues. Especially for scholars of adult and continuing education research in countries with a weakly developed system of public science funding and simultaneously high competition from other members of the scientific community on the publication market, such as in India, PJs also offer some relief. The analysis of the authors and locations of the journals makes it clear that this target group is relevant in the context of adult education research. The low average number of annual publications in the journals studied does not indicate, at least from a Eurocentric perspective, that the intention of the publishers is mainly profit oriented. The low APCs, which are even lowered again in many potential PJs with relevance to adult education for researchers from developing countries, would mean that the journals would have to increase their publication volume significantly and shorten the frequency of their issues.

Especially the contributions by authors from developing countries deal with issues that are probably underrepresented in Western-dominated journals of adult and continuing education due to the lack of practice framing. Due to the lack of indexing, the visibility of publications in potential PJs has to be rated as poor. Adult education topics that are virulent for developing countries are therefore at risk of not being considered adequately. Publishing adult education researchers from countries such as Nigeria or India need to be specifically addressed through international funding programs and encouraged to submit manuscripts to legitimate OA journals in adult and continuing education. This refers not only to changed marketing strategies, but also to investments in academic literacy. According to Nwagwu (2015), this is essential in order to develop a more critical publishing culture in developing countries (Nwagwu, 2015, p. 119). It is necessary to further investigate how topics and authors from developing countries are represented in existing indexed OA journals in adult and continuing education. It can be assumed that this will be followed by tasks of practice transfer to do justice to the claim of globally networked and mutually participatory adult education.

The question of why many academics from nations with highly developed research infrastructures are to be found among the identified authors also needs to be examined more closely. The cross-disciplinary survey by Kurt (2018), who sees the inexperience of young academics as the main reason for their publishing in potential PJs, does not seem to apply in adult education research, as the vast majority of researchers have sufficient experience in academic publishing in terms of their academic rank or title. Here, mixed-method approaches are appropriate for further inquiry.

8 Comprehensive conclusion and discussion

This dissertation examines how scholars from the Global South position themselves in the increasingly journal-centric publication system of adult education research. The three empirical sub-studies utilized in the thesis reveal that their positioning is characterized by tensions between visibility, epistemic adaptation, and contextual fidelity. In the following comprehensive conclusion and discussion, the findings of the macrosociological and bibliometric analysis of the journal-based publication landscape are first summarized and then discussed, with a particular focus on adult education researchers in countries of the Global South. The discussion explores the limitations of the work and presents some follow-up questions for the practice of adult education research, its publishing bodies, and its actors (researchers).

The overarching research question in this work entails an examination of the scientific publication landscape in which positions are established. This thesis views this landscape not as as a neutral, intra-disciplinary space for the dissemination of knowledge, but rather as a system of scientific communication shaped by economic, institutional, and epistemic power relations. In the functionalist communication system of adult education research, the processes that determine which contributions within a discipline receive attention—and which do not—are increasingly influenced by market-organized, international publication structures that are significantly shaped by actors external to academia, with digital journals, bibliometric evaluation procedures, and "open" access formats playing central roles. In its current form, the publication landscape of adult education research is, therefore, increasingly characterized by a journal-centric structure that regulates the visibility and resonance of research contributions not only on the basis of content quality but also along institutional, linguistic, and economic parameters.

In this context, internationally oriented indexed journals are gaining prominence in particular—both as venues for scientific validation and as arenas for epistemic boundary delineation. The resulting barriers to entry specifically affect researchers from countries in the Global South: they are confronted with a publication system that places high hegemonic demands on language, connectivity, and institutional embeddedness while, at the same time, offering only limited access to key resources.

By combining macrosociological perspectives of organizational and world polity NI with postcolonial theoretical approaches, the journal-centered publication system of adult education research can be not only described as a functionalist communication system but also analyzed as a power structure-shaped space of epistemic negotiation. This theoretical lens reveals that globally accepted publication standards—such as indexed, English-language journals with peer review—are not neutral; rather, they constitute an expression of institutionalized evaluation norms and colonial knowledge hierarchies that distribute visibility and recognition in an unequal manner. The selected approach, therefore, enables us to identify the structural tensions and exclusion mechanisms inherent in the space of epistemic negotiation within which scholars from the Global South must position themselves.

The structure of this space is fundamentally linked to the commercial orientation of contemporary OA and reflects the attention and prestige economy driven by external actors. It can be categorized into three knowledge circulation spaces: an internationally visible mainstream area, a non-mainstream circuit that is thematically and contextually anchored more but institutionally recognized less, and a precarious field of PP, which is used as an alternative strategy under economic pressure.

Looking at the first space, which is the mainstream circuit of adult education research, it is clear that the field of "narrow" discipline in this area is quite small. Depending on how strictly one draws the boundaries between adult education and higher education or other educational science disciplines, there are currently 9 to 13 journals indexed by the JCR and the SJR, with only AEQ listed in SSCI and all others in ESCI. The bottleneck in the field of excellence in adult education research is narrow, regardless of the global social position from which adult education research is conducted.

Against this backdrop, the analysis demonstrates that scholars from the Global South have only a limited presence in mainstream adult education research publications. Although there are some contributions—mainly from countries with more developed scientific infrastructure, such as South Africa, Brazil, and Turkey—overall representation from the Global South remains low. LDCs, in particular, are virtually invisible in the journal corpus under review. Wherever visibility is achieved, it is often subject to conditions of epistemic conformity: the contributions are oriented toward internationally dominant theories and problem areas that are primarily negotiated in the Global North. Consequently, context-specific perspectives often fade into the background or are transformed into universalizing narratives.

This finding is also reflected in terms of attention economics: contributions from the Global South that are more closely aligned with established adult education epistemologies—for example, through theoretical connections or methodological fit—receive more attention than those arguing from a locally anchored or contextually situated perspective. It is clear that this preference may not merely be due to linguistic bias but, rather, a deeper postcolonial bias that links visibility to specific epistemic expectations. What becomes visible is not what is original but that which fits the norms of the dominant publication system—a system that is both disciplinarily and structurally anchored in the Global North.

Adult education research—and it is no different in the Global North than it is in the Global South—takes place outside the narrow mainstream discipline for reasons of capacity alone, either in mainstream journals of neighboring disciplines or in non-indexed and non-mainstream journals. A look at the broad center–periphery comparison in Sub-study 2 reveals that adult education research in the Global South is, by no means, exclusively conducted in the shadow of international mainstream journals; rather, it largely takes place in local, often non-indexed journals with a strong focus on regional challenges and educational practices. This fact is particularly evident in the example of Nigeria, which is by far the most frequent country of origin for articles in the non-mainstream corpus. These articles focus, for instance, on the evaluation of regional education programs, the significance of non-formal education for sustainable development, and the education policy demands on national decision-makers.

Compared to the mainstream corpus, which is highly dominated by UMICs, almost 50% of the contributions in the non-mainstream corpus originate from LMICs, indicating a shift in epistemic centers once the selection logic of bibliometric indexing is excluded. In terms of content, these contributions more frequently reflect regional differences, locally embedded topics, and political contexts—for example, the anchoring of Freire's pedagogy in South American movements or the leveraging of adult education to combat poverty and promote climate education in the Nigerian context.

At the same time, Sub-study 2 highlights a systemic visibility limitation: the thematic and epistemic plurality that unfolds outside the indexed mainstream is hardly noticed in the global discourse on adult education, as many of these journals are not indexed, not cited, and not marked as relevant to the discipline. This limitation suggests that the field of adult education research cannot solely be defined by publication venues or impact factor; instead, it can only be captured in its global constitution if peripheral and semi-peripheral knowledge spaces are systematically taken into account as well.

Sub-study 3 examines another area of scientific positioning that has hardly been studied to date: PP. Building on the logics of visibility and structural exclusions described above, this sub-study reveals a publication space that operates beyond the establishment of indexing and quality assurance systems but is not outside the structural constraints of the global science system. Rather, it becomes clear that PJs—especially for scholars from countries with weak scientific infrastructures, such as Nigeria, India, and Malaysia—represent a functional, albeit precarious, alternative for meeting formal publication requirements. The articles in these journals indeed address key topics in adult education research—from literacy and continuing vocational education to participatory democracy education—but, in many cases, do not meet current scientific standards in terms of language, methodological transparency, or peer review.

The analysis suggests that PP is not primarily a result of individual intent to deceive but is rather a strategic response to systemic barriers to access, such as international visibility and the fulfillment of institutional career requirements. At the same time, the analysis indicates that PP does not play a dominant role in adult education research in quantitative terms—the number of contributions identified remains low in relation to the overall disciplinary publication landscape. This finding should also be understood in light of the diversity of legitimate, non-indexed publication opportunities identified in Sub-study 2, which are utilized in the Global South and help alleviate the pressure to be visible. Additionally, the findings clarify that even authors from the Global North—especially the US—publish in such formats, suggesting that this phenomenon is not exclusive to marginalized regions. These findings highlight the tension between scientific recognition, national performance logic, and global exclusion. PP, thus, appears to be a symptom of an epistemically unequal global publication order in which certain groups of actors must resort to informal or illegitimate means to remain part of the scientific discourse altogether. In the context of adult education research then, questions of epistemic justice must be negotiated not only through formal channels but also where the boundaries between legitimacy and visibility are becoming increasingly blurred.

In summary, this dissertation demonstrates that scholars from the Global South in adult education research are positioned in a field of tension between globally standardized publication requirements and local knowledge practices. The three empirical sub-studies make it clear that visibility in the journal-centered publication system is primarily mediated not by scientific quality but rather by institutionalized standards, epistemic connectivity, and infrastructural access. While the mainstream field leaves only limited space for contextual perspectives, the non-mainstream circuit encompasses a thematic and methodological diversity that, nevertheless, hardly finds its way into the disciplinary canon. At the same time, the findings on PP emphasize the ambivalence of informal strategies in the shadow of formal recognition systems. Considered together, these findings reveal a scientific publication system that not only reflects epistemic inequalities but also actively reproduces them—and in which the question of who can publish and how also determines whose knowledge is considered relevant to the discipline.

Association with the theoretical framework

In linking the results back to the theoretical framework of this dissertation, the concept of legitimacy in organizational NI proves to be particularly analytically productive. Accordingly, publication decisions made by adult education researchers from the Global South—outside the publishing center—cannot be interpreted primarily as evasive maneuvers due to actual or anticipated rejection in the center. Rather, these decisions must be considered to be indicative of a strategic orientation toward alternative forms of institutional recognition. This recognition is embedded in region-specific contexts of legitimacy, which can significantly differ from globally hegemonic evaluation criteria such as the IF, indexing status, and visibility metrics.

In particular, the difference in the topics addressed by mainstream and non-mainstream publications, as reconstructed in Sub-study 2, indicates such differing logics of legitimacy. While publications at the center are more strongly oriented toward internationally generalizable discourses, contributions from peripheral publication contexts often explicitly address national education policy actors and regional education needs. These differences can be interpreted within the framework of the awareness function of scientific communication (Roosendaal & Geurts, 1999) as an expression of the varying expectations of scientific relevance: instead of measurability through citations, the ability to connect with concrete social problems and institutional addressees becomes the central criterion for scientific legitimacy.

The poor reception of regionally focused contributions from the Global South in the mainstream (measured by downloads and citations) observed in Sub-study 1 also highlights the limited permeability between different logics of legitimacy. No reliable usage data is available for the non-mainstream sector. Hence, the assumption of an alternative form of epistemic legitimacy production cannot be conclusively tested empirically. To systematically validate the hypothesis formulated here, qualitative follow-up studies are required in order examine individual motivations, organizational contexts, and institutional recognition structures with regard to publication decisions. Although the neo-institutionalist framework provides a suitable heuristic basis here, it does not replace empirical surveys of subjective orientations toward action.

World polity theory provides an analytical framework for interpreting the publication practices reconstructed in this dissertation as an expression of globally diffused notions of scientific rationality and legitimacy. The increasing orientation toward indexed, English-language journals and standardized publication formats indicates the influence of a globally institutionalized scientific script that structures national contexts—regardless of their infrastructural conditions. At the same time, peripheral spaces are witnessing adaptation movements in which globally recognized models are translated into local contexts and linked to their own logics of legitimacy. Where this alignment fails, forms of decoupling or symbolic conformity emerge—for example, through the use of questionable publication formats to meet formal requirements. The results of the dissertation, thus, support central assumptions of world polity theory with regard to the global standardization of organizational fields under conditions of unequal participation.

Despite its analytical value, world polity theory encounters explanatory limitations in the context of this dissertation. While it can plausibly describe the global diffusion of standardized scientific norms and the resulting institutional convergence, it remains blind to the accompanying epistemic power asymmetries and unequal opportunities for participation. The exclusions that become apparent in this work, particularly in terms of the visibility, reception, and recognition of research from peripheral regions, cannot be adequately captured by the normative, convergence-oriented logic of world polity theory. Moreover, the model underestimates the context-bound capacity of scientific actors to act, who not only adopt global guidelines but also selectively adapt, undermine, or substitute them with their own forms of legitimation. Another blind spot lies in the widespread disregard of economic interests: World polity theory does not take into account the fact that cultural convergence processes in science are largely driven by private, profit-oriented organizations—such as internationally active publishers, indexing services, and metrics operators—that act as gatekeepers of epistemic visibility and play a decisive role in shaping the symbolic order of the publication system. Finally, the framework of world polity theory largely overlooks the differences within the Global South—for example, between semi-peripheral and highly marginalized regions—as well as the fact that alternative forms of epistemic legitimacy do not necessarily subordinate themselves to the global model but, in some cases, exist alongside it in a stable and effective manner.

The world system approach has proven to be a productive addition to power analysis in the context of the incremental changes taking place in the adult education research publication landscape, particularly under the influence of commercially driven OA models. The differentiation between center, semi-periphery, and periphery not only provides a heuristic framework but is also increasingly being integrated into systematic approaches to scientific communication research, as in Beigel (2014). For the empirical mapping undertaken in this dissertation, the approach, therefore, provides a viable basis for operationalizing the global publication landscape. However, a systematic analysis of the relationships between the four identified publication circulations—mainstream, non-mainstream, predatory, and nationally oriented journals—in terms of interdependent, permeable communication networks was not possible with the bibliometric methods chosen in this dissertation. Further methods such as citation network analyses—for example, in the forms of co-citation and bibliographic coupling (e.g., Hyun et al., 2015)—would be necessary to reveal interdependencies and information flows between the circulations. The postcolonial theory-based assumption of structural impermeability between the center and the periphery made in this study can, therefore, only be indirectly supported at the bibliometric level. A systematic falsification is still pending, even if—as already discussed in Chapter 4—the sampling of previous bibliometric studies on adult education suggests a systematic exclusion of peripheral publication venues, which argues against an actual penetration of the publication landscape in the sense of equivalent circulation.

Reflection on the methodological approach

Although the limitations already mentioned—in particular, with regard to the lack of consideration of publication strategy motives and the absence of an analysis of communication networks—represent relevant methodological constrains, this study contributes to the methodological discussion in adult education research. It is primarily achieved by modifying bibliometric methods in a theory-based and postcolonial-sensitive manner. In contrast to technocratic, application-oriented approaches, the bibliometrics used here are not understood as a neutral measurement practice but rather as a power-analytical instrument for making epistemic structures of inequality visible. The selection and interpretation of the indicators used was based on social and cultural theoretical frameworks—in particular, world polity theory and world system theory as well as postcolonial perspectives—and, thus, enabled an empirical exploration of the global publication system as a normatively structured, selectively accessible space. In this manner, a reflexive application of bibliometric analysis approaches was tested to systematically examine the relationship between knowledge, power, and visibility in adult education research.

While analyzing the academic journals relevant to adult education outside the mainstream control mechanisms, postcolonial-sensitive bibliometrics requires distinguishing, as clearly as possible, between legitimate and illegitimate (potentially predatory) publication formats for counteracting blanket delegitimization due to a lack of resources or limited English language skills. Furthermore, in this context, this paper makes a methodological contribution by providing an evidence-based assessment tool for evaluating the legitimacy of journals. It opens up a practice-oriented approach that enables the targeted inclusion of peripheral journals and epistemic perspectives beyond the established mainstream—for example, in systematic reviews and disciplinary maps—and, therefore, contributes to the promotion of bibliodiversity in adult education research.

A second methodological contribution lies in the systematic linking of bibliometric data with quantitative content analysis methods, as used in Sub-study 2 in particular. The topic modeling used enabled a content-based assessment of the research field, which made it possible to reconstruct not only the visibility of individual contributions but also their thematic orientation, epistemic connectivity, and contextual anchoring. The combination of these perspectives facilitates the identification of not only where research is being conducted and published but also which topics are more likely to gain visibility—and which are not. This approach expands common bibliometric logics to include a content-related dimension, thereby contributing to a methodologically sound exploration of disciplinary discourses.

In adult education research, topic modeling has thus far been primarily used in narrow thematic or institutional contexts—for example, to analyze a single journal (Nylander et al., 2022)—to map the themes of a section of the disciplinary mainstream (Nylander & Fejes, 2022) or to analyze content for expanding program analyses using the example of Swedish adult education programs (Nylander & Holmer, 2022). This paper goes further by considering a broad spectrum of publication venues from different circulation spaces and analyzing their thematic orientation in a comparative manner. The comparison of topic prevalence using gamma values represents a methodological innovation that has not yet been tested in the discipline. A further methodological development would consist of creating two independent topic models for sufficiently large corpora and systematically comparing them with each other in a subsequent step. However, such a constellation would only be feasible with a significantly larger number of cases—for example, n = 800 per corpus.

Perspectives for the practice of adult education research and its examination

The overall picture of the underrepresentation of adult education research from countries in the Global South in the center of attention can be addressed through various initiatives—journals at the center and their steering actors, on the one hand, and the marginalized group of adult education researchers themselves, on the other.

Looking at the data collected in Sub-studies 1 and 2 on the representation of adult education research from countries in the Global South, the International Review of Education, edited by the UNESCO Institute for Lifelong Learning and published by Springer, and the International Journal of Lifelong Education stand out as the mainstream journals in the narrower discipline in which most adult education researchers from countries in the Global South have published. Common to both journals is their explicitly stated aim, since their founding in 1955 and 1982, respectively, to represent international perspectives beyond the boundaries of the Global North (Bigelow et al., 1955, p. 1; Holford et al., 2022). This self-image is strikingly evident when compared to other adult education research journals with impact factors. At the same time, a critical review of the International Journal of Lifelong Education on the occasion of its 40th anniversary highlights that, even in this comparatively internationally oriented publication, contributions from the Global South—especially from Africa—are extremely few (Ilieva-Trichkova et al., 2022, p. 608). Even in the journals in which researchers from the Global South are relatively more strongly represented, their visibility is criticized as insufficient, which, in retrospect, indicates an extremely limited penetration of marginalized author groups into the mainstream publication system, thereby further confirming the findings of this dissertation.

In light of the existing economic barriers to entry, it seems surprising that both journals publish a relatively large number of articles by scholars from the Global South despite high APCs in the OA model. On the one hand, it can be explained by the fact that the countries of the Global South are economically heterogeneous and, as shown in Sub-studies 1 and 2, authors from UMICs such as South Africa and Brazil, which have better scientific infrastructure and funding than those from LDCs, are particularly active in publishing. The stronger inclusion of adult education perspectives from countries in the Global South in mainstream adult education research requires a more conscious opening on the part of journals to a global authorship, which should also be reflected in their self-descriptions. The International Journal of Lifelong Education and the International Review of Education are leading the way in this regard.

With the aim of identifying best practice concepts, it appears sensible to systematically collect the communication experiences of editorial boards with authors from the Global South and, on this basis, develop strategies to promote global inclusion. It is a question of not only ensuring justice or reducing academic dependencies but also of making adult education research more visible, which is significantly more pronounced in many countries of the Global South than in those of the Global North.

The results of the topic modeling point to a thematically broad and highly socially relevant spectrum of research concerns, which has so far only been reflected in the international mainstream to a limited extent. Particularly noteworthy are contributions on the link between adult education and democratic development, forms of functional literacy, and issues of basic education in rural areas—topics that are closely linked to social participation, poverty reduction, and political emancipation in many countries of the Global South. These emphases differ significantly from the debates in the Global North, where literacy is increasingly discussed in terms of technology—for example, with regard to digital literacy—or in the context of lifelong learning for gainful employment. It is precisely this difference that holds potential for advancing knowledge across the entire discipline: highlighting contextualized, locally rooted research from the Global South can help broaden the disciplinary discourse and address global educational challenges in a more nuanced manner. If adult education research seeks to open up to marginalized actors, adult education journals that publish in DOA must also receive more attention. This step will help remove economic barriers. Of the few journals in the narrower discipline, only the Canadian Journal for the Study of Adult Education and the European Journal for Research on the Education and Learning of Adults publish in DOA. In the first two sub-studies of this paper, only five articles that met the inclusion criteria were identified. This shortage may also be due to the regional focus of both the journals, which concentrate on Canadian and European contexts. Nevertheless, both focus on marginalized minorities within their geographical boundaries. However, the European Journal for Research on the Education and Learning of Adults, in particular, appears to have the potential for a more proactive openness to adult education perspectives from the Global South, as the journal was founded with the aim of counteracting Anglophone dominance in adult education research and enabling greater epistemic diversity (Trahar et al., 2019, p. 163). Through its OA structure and the option of submitting articles in the author‘s first language, the journal addresses structural barriers to access. Although it has mainly published authors from non-English-speaking European countries so far, the European Journal for Research on the Education and Learning of Adults has tremendous potential to act as a visibility platform for adult education research from countries in the Global South in the future.

As Section 3.3 and Sub-study 2 clarify, scholars from countries in the Global South—especially in Latin America—have long since created their own scientific infrastructures for emancipating themselves from the epistemic and economic dependencies of the Global North. Platforms such as SciELO, Redalyc, and AmeliCA are examples of South-South-oriented scientific communication that consciously distances itself from the commercial—and often exclusive—publication structures of large Western publishers. They promote DOA, which does not require readers or authors to pay fees, thus enabling barrier-free visibility of high-quality research from countries with limited access to international markets.

Support for these initiatives from actors such as UNESCO—for example, in the context of its Global Open Science Recommendations—highlights their growing global significance. For adult education research, it means that these spaces must not only be analyzed but also actively included in scientific communication. It is not merely a question of epistemic justice or decolonization but of ensuring access to empirical research that takes place in contexts where adult education is highly relevant to society—be it in questions of literacy, democratization, or sustainable development.

The establishment of cooperative indexing strategies, the systematic inclusion of these platforms in research strategies, and an awareness of alternative quality standards beyond IFs constitute possible areas of action for more responsive, globally sensitized adult education research. Consequently, it would also be worth considering whether existing journals in the discipline can actively join these South-South networks or develop hybrid cooperation models with them.

The science systems in countries of the Global South are highly heterogeneous; hence, blanket funding or cooperation strategies appear to be of little use. Rather, context-specific analyses and measures based on these analyses are required. The example of Nigeria illustrates how different scientific publication practices and logics can be.

In the second and third parts of this study, there are a striking number of Nigerian authors as well as a high number of non-mainstream journals and potentially predatory publication outlets based in Nigeria. A case study-style look at the academic incentive and publication system there demonstrates that the bibliometric results of the sub-studies must be interpreted in a context-sensitive manner: the Global South is not a homogeneous category.

Scientific publishing in Nigeria is less about scientific communication and exchange and more about career-related strategies. Omobowale et al. (2014) describe how local journals—unlike Beigel (2014)—primarily serve as a career springboard. Many of the journals founded at the faculty or department level (e.g., Journal of the Nigerian Literacy Forum and African Journal of Educational Research and Development) have primarily served to demonstrate publication achievements in the context of promotion procedures—often without a standardized peer-review process. This system has encouraged a practice known as “network publishing,” in which professors deliberately publish the work of colleagues or their own in order to meet formal criteria.

This practice is increasingly criticized by young academics, as it cements unequal opportunities for advancement. One response to this criticism was the introduction of the international publishing rule, which requires publications in foreign journals for promotion. This development must also be understood against the backdrop of a rapidly expanding higher education system: between 1980 and 2020, the number of universities in Nigeria rose from 16 to 171 (Tella & Onyancha, 2021). At the same time, the number of academic jobs remained virtually constant, intensifying the competition for positions. Many university graduates, therefore, feel compelled to pursue further studies and demonstrate their publication record in order to improve their chances of having an academic career.

Overall, the example of Nigeria highlights that publication practices cannot be analyzed in isolation from the educational and labor market policy framework. Rather, differentiated, context-oriented funding strategies, which take into consideration both structural conditions and existing scientific potential on the ground, are necessary.

Finally, from a postcolonial perspective (see Section 2.2), it is important to warn against hastily attributing the underrepresentation of adult education research from countries in the Global South to a lack of research quality. Although the underfunding of scientific infrastructure in many countries of the Global South is well documented, assessments based on common quality standards often fall short when they ignore their colonial origins and assimilative mechanisms. Even if the data collected in the present sub-studies can and should withstand critical examination in terms of quality, which criteria are applied and which forms of knowledge they may systematically exclude must be clarified first.

Instead of narrow perspectives, there is a requirement for stronger support for topic-centered research partnerships between scientists from the Global South and the those from the Global North. Literacy and education for sustainable development—topics that are being researched intensively in both the South and the North, albeit under very different conceptual and cultural conditions often—seem particularly suitable. Mutual exchange in these areas holds considerable potential for the gaining of insightful perspectives on differences.

Furthermore, researchers from the Global North are often called upon to incorporate research from the Global South more strongly into their own subject-related analyses—not as an add-on but as an integral part of disciplinary knowledge production. The postcolonial-sensitive sampling strategies of this study can provide impetus for this inclusion, especially with regard to systematic reviews, which are becoming increasingly important in the field of adult education research (Vetter et al., 2023). In this manner, epistemologies from the Global South can become not only more visible but also a more substantial part of the global knowledge canon of the discipline.

9 References

Adick, C. (2009). World Polity - ein Forschungsprogramm und Theorierahmen zur Erklärung weltweiter Bildungsentwicklungen. In S. Koch & M. Schemmann (Eds.), *Neo-Institutionalismus in der Erziehungswissenschaft* (pp. 258–291). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91496-1_13

Adomi, E. E., & Mordi, C. (2003). Publication in foreign journals and promotion of academics in nigeria. *Learned Publishing*, *16*(4), 259–263. https://doi.org/10.1087/095315103322421991

Aktoprak, A., & Hursen, C. (2022). A bibliometric and content analysis of critical thinking in primary education. *Thinking Skills and Creativity*, *44*, 1–22. https://doi.org/10.1016/j.tsc.2022.101029

Alatas, S. F. (2000). Academic dependency in the social sciences: Reflections on india and malaysia. *American Studies International*, *38*(2), 80–96. http://www.jstor.org/stable/41279771

Alatas, S. F. (2003). Academic dependency and the global division of labour in the social sciences. *Current Sociology*, *51*(6), 599–613. https://doi.org/10.1177/00113921030516003

Alatas, S. F. (2022). Political economies of knowledge production: On and around academic dependency. *Sociology Lens*, *35*(1), 14–23. https://doi.org/10.1111/johs.12362

Albert, K. M. (2006). Open access: Implications for scholarly publishing and medical libraries. *Journal of the Medical Library Association*, *94*(3), 253–262. https://pmc.ncbi.nlm.nih.gov/articles/PMC1525322/

Alhwiti, T., & Megahed, F. M. (2022). A novel bibliometrics-focused similarity measure for co-word (keywords) analysis [Preprint]. https://doi.org/10.2139/ssrn.4244376

Alordiah, C. O., Owamah, H. I., Ogbinaka, E. J., & Alordiah, M. O. (2021). Nigeria's low contribution to recognized world research literature: Causes and remedies.

Accountability in Research, *28*(8), 571–591. https://doi.org/10.1080/08989621.2020.1855984

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). Trends in global higher education: Tracking an academic revolution a report prepared for the unesco 2009 world conference on higher education [Accessed March 5, 2025]. http://www.cep.edu.rs/public/Altbach,_Reisberg,_Rumbley_Tracking_an_Academic_Revolution,_UNESCO_2009.pdf

Altman, M., & Cohen, P. N. (2021). Openness and diversity in journal editorial boards. https://doi.org/10.31235/osf.io/4nq97

Ancion, Z., Borrell-Damián, L., Mounier, P., Rooryck, J., & Saenen, B. (2022). Action plan for diamond open access. https://doi.org/10.5281/zenodo.6282403

Andoohgin Shahri, M., Jazi, M. D., Borchardt, G., & Dadkhah, M. (2018). Detecting hijacked journals by using classification algorithms. *Science and Engineering Ethics*, *24*(2), 655–668. https://doi.org/10.1007/s11948-017-9914-2

Anyanwu, C. (1986). Colonial origins of nigerian adult education. *Historical Foundations of Adult Education*, *3*(1), 11–15.

Artigas, W., Gungula, E. W., & Laakso, M. (2022). Open access in angola: A survey among higher education institutions. *Scientometrics*, *127*, 3977–3993. https://doi.org/10.1007/s11192-022-04410-w

Asai, S. (2023a). Determinants of article processing charges for hybrid and gold open access journals. *Information Discovery and Delivery*, *51*(2), 121–129. https://doi.org/10.1108/IDD-09-2021-0098

Asai, S. (2023b). Does double dipping occur? the case of wiley's hybrid journals. *Scientometrics*, *128*, 5159–5168. https://doi.org/10.1007/s11192-023-04800-8

Ash, M., Carrier, M., Dössel, O., Frevert, U., Großmann, S., Grötschel, M., Kliegl, R., Peukert, A., et al. (2015). Empfehlungen zur Zukunft des wissenschaftlichen Publikationssystems [Accessed February 25, 2025]. https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus-26414

Bagues, M., Sylos-Labini, M., & Zinovyeva, N. (2019). A walk on the wild side. 'predatory' journals and information asymmetries in scientific evaluations. *Research Policy*, *48*(2), 462–477. https://doi.org/10.1016/j.respol.2018.04.013

Baier, C., & Schmitz, A. (2019). Organizational environments and field theory: The example of the field of german universities 2002–2014. In J. Blasius, F. Lebaron, B. Le Roux, & A. Schmitz (Eds.), *Empirical investigations of social space* (pp. 305–322). Springer. https://doi.org/10.1007/978-3-030-15387-8_18

Ball, R., & Gorski, M. (2009). Bibliometrie – das Maß aller Dinge? In U. Bergner & E. Göbel (Eds.), *The ne(x)t generation. Das Angebot der Bibiotheken* (pp. 92–108). W. Neugebauer Verlag.

Barros Leal Farias, D. (2023). Unpacking the 'developing' country classification: Origins and hierarchies. *Review of International Political Economy*, *31*(2), 651–673. https://doi.org/10.1080/09692290.2023.2246975

Bauer, S., Noulas, A., Ó Séaghdha, D., Clark, S., & Mascolo, C. (2012). Talking places: Modelling and analysing linguistic content in foursquare. *International Conference on Privacy, Security, Risk and Trust and International Conference on Social Computing*. https://doi.org/10.1109/SocialCom-PASSAT.2012.107

Baum, J. A. C. (2011). Free-riding on power laws: Questioning the validity of the impact factor as a measure of research quality in organization studies. *Organization*, *18*(4), 449–466. https://doi.org/10.1177/1350508411403531

Baumeler, C. (2009). Entkopplung von Wissenschaft und Anwendung. Eine neo-instituionalistische Analyse der unternehmerischen Universität. *Zeitschrift für Soziologie*, *38*(1), 68–84. https://doi.org/10.1515/zfsoz-2009-0104

Beall, J. (2013). Dangerous predatory publishers threaten medical research. *Korean Medical Science*, *31*(10), 1511–1513. https://doi.org/10.3346/jkms.2016.31.10.1511

Beall, J. (2016a). Best practices for scholarly authors in the age of predatory journals. *Annals of the Royal College of Surgeons of England*, *98*(2), 77–79. https://doi.org/10.1308/rcsann.2016.0056

Beall, J. (2016b). The open-access movement is not really about open access. *TripleC*, *11*(2), 589–597. https://doi.org/10.31269/triplec.v11i2.525

Beall, J. (2017). What i learned from predatory publishers. *Biochemia medica*, *27*(2), 273–278. https://doi.org/10.11613/BM.2017.029

Becerril, A., Bosman, J., Bjørnshauge, L., Frantsvåg, J. E., Kramer, B., Langlais, P.-C., Mounier, P., Proudman, V., Redhead, C., & Torny, D. (2021). Oa diamond journals study. part 2: Recommendations. https://doi.org/10.5281/zenodo.4562790

Becerril-García, A. (2019). The value of the scholarly-led, non-profit business model to achieve open access and scholarly publishing beyond apc: Amelica's cooperative approach. *Septentrio Conference Series*, *1*. https://doi.org/10.7557/5.4964

Becker, A., Dutz, S., & Stang, R. (2020). Einleitung. In A. Becker & R. Stang (Eds.), *Zukunft Lernwelt Hochschule. Perspektiven und Optionen für eine Neuausrichtung* (pp. 1–11). De Gruyter Saur. https://doi.org/10.1515/9783110653663

Becker-Ritterspach, F. A. A., & Becker-Ritterspach, J. (2006). Isomorphie und Entkoppelung im Neo-Institutionalismus. In K. Senge & K.-U. Hellmann (Eds.), *Einführung in den Neo-Institutionalismus* (pp. 102–117). VS Verlag für Sozialwissenschaften.

Beckfield, J. (2003). Inequality in the world polity: The structure of international organization. *American Sociological Review*, *68*(3), 401–424. https://doi.org/10.2307/1519730

Beck-Sickinger, A., Schwappach-Pignataro, B., Herrmann, J., & Buchner, J. (2019). Open Access und die Zukunft wissenschaftlicher Veröffentlichungen. *Biospektrum*, *25*(3), 245. https://doi.org/10.1007/s12268-019-1040-z

Beigel, F. (2014). Publishing from the periphery: Structural heterogeneity and segmented circuits. the evaluation of scientific publications for tenure in argentina's conicet. *Current Sociology*, *62*(5), 743–765. https://doi.org/10.1177/0011392114533977

Beigel, F. (2018). The power relations in world science. an anti-ranking to know the science produced in the periphery [Accessed December 18, 2024]. https://blog.scielo.org/en/2018/09/05/the-power-relations-in-world-science-an-anti-ranking-to-know-the-science-produced-in-the-periphery/

Beigel, F. (2021). A multi-scale perspective for assessing publishing circuits in non-hegemonic countries. *Tapuya: Latin American Science, Technology and Society*, *4*(1). https://doi.org/10.1080/25729861.2020.1845923

Beigel, F. (2024). Cartographies for an inclusive open science. https://doi.org/10.1590/SciELOPreprints.10286

Beigel, F., Packer, A. L., & Salatino, M. (2024). Oliva: The indexed scientific output in latin america. disciplinary diversity, institutional collaboration, and multilingualism in scielo and redalyc (1995-2018). *Dados: Revista de Ciências Sociais*, *67*(1), 1–39. https://doi.org/10.1590/dados.2024.67.1.307x

Beigel, F., & Salatino, M. (2015). Circuitos segmentados de consagración académica: Las revistas de ciencias sociales y humanas en la argentina [Accessed December 17, 2024]. *Información, Cultura y Sociedad*, *32*, 11–36. http://revistascientificas.filo.uba.ar/index.php/ICS/article/view/1342

Bell, K., & Mills, D. (2020). What we know about the academic journal landscape reflects global inequalities [Accessed March 02, 2025]. https://blogs.lse.ac.uk/impactofsocialsciences/2020/10/12/what-we-know-about-the-academic-journal-landscape-reflects-global-inequalities/

Berger, M. (2021). Bibliodiversity at the centre: Decolonizing open access. *Development and Change*, *52*(2), 383–404. https://doi.org/10.1111/dech.12634

Berger, M., & Cirasella, J. (2015). Beyond beall's list. better understanding predatory publishers. *College & Research Libraries News*, *76*(3), 132–135. https://doi.org/10.5860/crln.76.3.9277

Berger, P. L., Berger, B., & Kellner, H. (1973). *The homeless mind: Modernization and consciousness*. Penguin.

Bernatović, I., Slavec Gomezel, A., & Černe, M. (2022). Mapping the knowledge-hiding field and its future prospects: A bibliometric co-citation, co-word, and coupling analysis. *Knowledge Management Research & Practice*, *20*(3), 394–409. https://doi.org/10.1080/14778238.2021.1945963

Bigelow, K. W., Gal, R., Langeveld, M. J., Merck, W., & Schneider, F. (1955). Editorial. *International Review of Education*, *1*(1), 1–4. https://doi.org/10.1007/BF01419784

Björk, B.-C. (2012). The hybrid model for open access publication of scholarly articles. a failed experiment? *Journal of the American Society for Information Science and Technology*, *63*(8), 1496–1504. https://doi.org/10.1002/asi.22709

Björk, B.-C. (2017a). Growth of hybrid open access, 2009–2016. *PeerJ*, *5*, e3878. https://doi.org/10.7717/peerj.3878

Björk, B.-C. (2017b). Scholarly journal publishing in transition-from restricted to open access. *Electronic Markets*, *27*(2), 101–109. https://doi.org/10.1007/s12525-017-0249-2

Björk, B.-C., & Solomon, D. (2012). Open access versus subscription journals. a comparison of scientific impact. *BMC Medicine*, *10*, 73. https://doi.org/10.1186/1741-7015-10-73

Björk, B.-C., & Solomon, D. (2014). How research funders can finance apcs in full oa and hybrid journals. *Learned Publishing*, *27*(2), 93–103. https://doi.org/10.1087/20140203

Black, M. (2007). *The no-nonsense guide to international development*. New Internationalist.

Blume, P. (2019). Open-Access-Monitoring: Anforderungen – Konzepte –Hindernisse. In S. Fühles-Ubach & U. Georgy (Eds.), *Bibliotheksentwicklung im Netzwerk von Menschen, Informationstechnologie und Nachhaltigkeit. Festschrift für Achim Oßwald* (pp. 103–116). Bock + Herchen Verlag. https://nbn-resolving.org/urn:nbn:de:hbz:79pbc-opus-16232

Bodenschatz, E., & Pöschl, U. (2007). Qualitätssicherung bei Open Access. In D. UNESCO-Kommission (Ed.), *Open Access - Chancen und Herausforderungen: ein Handbuch* (pp. 50–54). Deutsche UNESCO-Kommission e.V. https://nbn-resolving.org/urn:nbn:de:hbz:464-20141219-094648-1

Bohannon, J. (2013). Who's afraid of peer review? a spoof paper concocted by science reveals little or no scrutiny at many open-access journals. *Science*, *342*(6154), 60–65. https://doi.org/10.1126/science.342.6154.60

Boli, J., Gallo-Cruz, S., & Mathias, M. (2018). World society, world-polity theory, and international relations. In *Oxford research encyclopedia of international studies*. https://doi.org/10.1093/acrefore/9780190846626.013.495

Boli, J., & Thomas, G. M. (1997). World culture in the world polity: A century of international non-governmental organization. *American Sociological Review*, *62*(2), 171–190. https://doi.org/10.2307/2657298

Boli, J., & Thomas, G. M. (1999). *Constructing world culture. international nongovernmental organizations since 1875*. Stanford University Press.

Bornmann, L., & Marx, W. (2011). The anna karenina principle: A concept for the explanation of success in science. *arXiv*, 1–39. https://doi.org/10.48550/arXiv.1104.0807

Boshier, R., & Pickard, L. (1979). Citation patterns of articles published in adult education quarterly 1968–1977. *Adult Education*, *30*(1), 34–51. https://doi.org/10.1177/074171367903000103

Boshoff, N., & Akanmu, M. A. (2017). Scopus or web of science for a bibliometric profile of pharmacy research at a nigerian university? *South African Journal of Libraries and Information Science*, *83*(2), 12–22. https://doi.org/10.7553/83-2-1682

Boughton, B. (2016). Radical international adult education: A pedagogy of solidarity. In R. Mizzi, T. Rocco, & S. Shore (Eds.), *Disrupting adult and community education: Teaching, learning, and working in the periphery* (pp. 257–273). SUNY Press. https://doi.org/10.1515/9781438460932-019

Braam, R. R., Moed, H. F., & van Raan, A. F. J. (1991). Mapping of science by combined co-citation and word analysis i. structural aspects. *Journal of the American Society for Information Science*, *42*(4), 233–251. https://doi.org/10.1002/(SICI)1097-4571(199105)42:4<233::AID-ASI1>3.0.CO;2-I

Braun, D. (1997). *Die politische Steuerung der Wissenschaft: Ein Beitrag zum "kooperativen Staat"*. Campus Verlag. https://hdl.handle.net/11858/00-001M-0000-0012-598E-A

Braun, T., Glänzel, W., & Schubert, A. (1985). *Scientometric indicators. a 32-country comparative evaluation of performance and citation impact*. World Scientific.

Bremer, H. (2017). Selektive Weiterbildungsbeteiligung und (Bildungs-) Gerechtigkeit. *Hessische Blätter für Volksbildung*, *67*(1), 115–125. https://doi.org/10.3278/HBV1702W115

Brintzinger, K.-R. (2010). Piraterie oder Allmende der Wissenschaften? Zum Streit um Open Access und der Rolle von Wissenschaft, Bibliotheken und Markt bei der Verbreitung von Forschungsergebnissen. *Leviathan*, *38*(3), 331–346. https://doi.org/10.1007/s11578-010-0095-5

Broad, W. J. (1981). The publishing game: Getting more for less. *Science*, *211*(4487), 1137–1139. https://doi.org/10.1126/science.7008199

Broadus, R. N. (1987). Toward a definition of "bibliometrics". *Scientometrics*, *12*, 373–379. https://doi.org/10.1007/BF02016680

Brown, E., Vega Castillo, M. A., & Hordósy, R. (2025). How 'international' are sociology journals? analysis of stated aims and editorial board networks. *Sociological Research Online*, *0*(0). https://doi.org/10.1177/13607804241281455

Brünner, K., Chvosta, A., & Oertel, S. (2016). Die Institutionalisierung dualer Studiengänge: Hintergründe, Verlauf und Entwicklung. In U. Faßhauer & E. Severin (Eds.), *Verzahnung beruflicher und akademischer Bildung : Duale Studiengänge in Theorie und Praxis* (pp. 63–80). W. Bertelsmann Verlag.

Brunsson, N., & Jacobsson, B. (2002). The contemporary expansion of standardization. In N. Brunsson & B. Jacobsson (Eds.), *A world of standards* (pp. 1–18). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199256952.003.0001

Budapest Open Access Initiative. (2002). Budapest Open Access Initiative [Accessed March 8, 2025]. https://www.budapestopenaccessinitiative.org/read/

Butler, D. (2013). Investigating journals: The dark side of publishing. *Nature*, *495*, 433–435. https://doi.org/10.1038/495433a

Butler, L.-A., Matthias, L., Simard, M.-A., Mongeon, P., & Haustein, S. (2023). The oligopoly's shift to open access: How the big five academic publishers profit from article processing charges. *Quantitative Science Studies*, *4*(4), 778–799. https://doi.org/10.1162/qss_a_00272

Callon, M., Courtial, J.-P., Turner, W. A., & Bauin, S. (1983). From transnations to problematic networks: An introduction to co-word analysis. *Social Science Information*, *22*(2), 191–235. https://doi.org/10.1177/053901883022002003

Caruso, M. (2008). World systems, world society, world polity: Theoretical insights for a global history of education. *History of Education*, *37*(6), 825–840. https://doi.org/10.1080/00467600802158256

Chalmers, A. F. (2007). Der Ansatz von Bayes. In A. F. Chalmers (Ed.), *Wege der Wissenschaft. Einführung in die Wissenschaftstheorie* (pp. 141–154). Springer Nature. https://doi.org/10.1007/978-3-662-10879-6_13

Chan, L. (2019). Closing keynote: Platform capitalism and the governance of knowledge infrastructure [Digital Initiatives Symposium, San Diego, USA, April 29–30]. https://digital.sandiego.edu/symposium/2019/2019/9/

Chase-Dunn, C., & Gills, B. (2003). Understanding waves of globalization and resistance in the capitalist world(-)system*: Social movements and critical global(ization) studies [Accessed April 01, 2025]. https://irows.ucr.edu/papers/irows12/irows12.htm

Chavarro, D., Tang, P., & Rafols, I. (2017). Why researchers publish in non-mainstream journals: Training, knowledge bridging, and gap filling. *Research Policy*, *46*(9), 1666–1680. https://doi.org/10.1016/j.respol.2017.08.002

Cherrstrom, C. A., Robbins, S. E., & Bixby, J. (2017). 10 years of adult learning. content analysis of an academic journal. *Adult Learning*, *28*(1), 3–11. https://doi.org/10.1177/1045159516664320

Cho, J. (2023). Analysis of doaj-registered open access journals in asian countries. *International Journal of Knowledge Content Development & Technology*, *13*(3). https://journals.sfu.ca/ijkcdt/index.php/ijkcdt/article/view/829

Choudhary, H., & Bansal, N. (2022). Barriers affecting the effectiveness of digital literacy training programs (dltps) for marginalised populations: A systematic literature review. *Journal of Technical Education and Training*, *14*(1), 110–127. https://doi.org/10.30880/jtet.2022.14.01.010

CIA. (2016). *The world factbook 2016–2017: The indispensable source for basic intelligence*. US Government Printing Office.

Clarke, B. (2001). The entrepreneurial university. new foundations for collegiality, autonomy and achievement. *Journal of the Programme on Institutional Management in Higher Education*, *13*(2), 9–24.

Cobey, K. D., Grudniewicz, A., Lalu, M. M., Rice, D. B., Raffoul, H., & Moher, D. (2019). Knowledge and motivations of researchers publishing in presumed predatory journals: A survey. *BMJ Open*, *9*, 1–9. https://doi.org/10.1136/bmjopen-2018-026516

Cobey, K. D., Lalu, M., Skidmore, B., Ahmadzai, N., Grudniewicz, A., & Moher, D. (2018). What is a predatory journal? a scoping review. *F1000Research*. https://doi.org/10.12688/f1000research.15256.2

Cole, W. M. (2017). World polity or world society? delineating the statist and societal dimensions of the global institutional system. *International Sociology*, *32*(1), 86–104. https://doi.org/10.1177/0268580916675526

Collyer, F. M. (2018). Global patterns in the publishing of academic knowledge: Global north, global south. *Current Sociology*, *66*(1), 56–73. https://doi.org/10.1177/0011392116680020

Connell, R. (2017). Southern theory and world universities. *Higher Education Research & Development*, *36*(1), 4–15. https://doi.org/10.1080/07294360.2017.1252311

Cortegiani, A., Longhini, F., Sanfilippo, F., Raineri, S. M., Gregoretti, C., & Giarratano, A. (2019). Predatory open-access publishing in anesthesiology. *Anesthesia and Analgesia*, *128*(1), 182–187. https://doi.org/10.1213/ANE.0000000000003803

Crawford, W. (2016). 'Trust me' : The other problem with 87% of beall's lists [Accessed April 03, 2025]. https://walt.lishost.org/2016/01/trust-me-the-other-problem-with-87-of-bealls-lists/

Dadkhah, M., & Bianciardi, G. (2016). Ranking predatory journals: Solve the problem instead of removing it! *Advanced Pharmaceutical Bulletin*, *6*(1), 1–4. https://doi.org/10.15171/apb.2016.001

Dahlstedt, M., & Nordvall, H. (2010). (post)colonial adult education: Swedish popular education between international solidarity and national fantasies [Conference paper presented September 23–26]. *ESREA triennial European research conference*. https://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-60335

Dawar, H. (2001). Strukturelle Voraussetzungen für die Entfaltung unternehmerischer Initiative in Entwicklungsländern. In D. Sadowski (Ed.), *Entrepreneurial Spirits* (pp. 137–161). Springer. https://doi.org/10.1007/978-3-322-89484-7

de Boer, H., Enders, J., & Schimank, U. (2007). On the way towards new public management? the governance of university systems in england, the netherlands, austria, and germany. In D. Jansen (Ed.), *New forms of governance in research organizations* (pp. 137–152). Springer. https://doi.org/10.1007/978-1-4020-5831-8_5

de Carvalho, G., Schmid, A., & Fischer, J. (2020). Classifications of health care systems: Do existing typologies reflect the particularities of the global south? *Global Social Policy*, *21*(2), 278–300. https://doi.org/10.1177/1468018120969315

de Castro, P., Herb, U., Rothfritz, L., Schmal, W. B., & Schöpfel, J. (2024). Galvanising the open access community: A study on the impact of plan s. https://doi.org/10.5281/zenodo.12523229 de Sousa Santos, B. (2018). *The end of the cognitive empire: The coming of age of epistemologies of the south*. Duke University Press. https://doi.org/10.1215/9781478002000

de Sousa Santos, B. (2021). Postcolonialism, decoloniality, and epistemologies of the south. *Oxford Research Encyclopedia of Literature*. https://doi.org/10.1093/acrefore/9780190201098.013.1262

Dees, W. (2015). Bildungsforschung - eine bibliometrische Analyse des Forschungsfeldes. https://doi.org/10.25656/01:10296

Demeter, M., & Toth, T. (2020). The world-systemic network of global elite sociology: The western male monoculture at faculties of the top one-hundred sociology departments of the world. *Scientometrics*, *124*, 2469–2495. https://doi.org/10.1007/s11192-020-03563-w

Demir, S. B. (2018). Predatory journals. who publishes in them and why? *Journal of Informetrics*, *12*(4), 1296–1311. https://doi.org/10.1016/j.joi.2018.10.008

Deppe, A., & Beucke, D. (2017). Ursprünge und Entwicklung von Open Access. In K. Söllner & B. Mittermaier (Eds.), *Praxishandbuch Open Access* (pp. 12–20). De Gruyter Saur. https://doi.org/10.5281/zenodo.802639

Deutsche Forschungsgemeinschaft (DFG). (2024). Guidelines and supplementary instructions – open access publication funding [Accessed March 2, 2025]. https://www.dfg.de/resource/blob/167600/8f5f5d19970b93d43a327d2647b0882d/12-21-en-data.pdf

Di Césare, V., & Robinson-Garcia, N. (2024). What is local research? towards a multidimensional framework linking theory and methods. https://doi.org/10.5281/zenodo.14033473

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160. https://doi.org/10.2307/2095101

DiMaggio, P. J., & Powell, W. W. (1991). Introduction. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 1–40). University of Chicago Press.

Diodato, V. P., & Gellatly, P. (1994). *Dictionary of bibliometrics*. Routledge. https://doi.org/10.4324/9780203714133

Döbler, T. (2020). Wissensmanagement. open access, social networks, e-collaboration. In W. Schweiger & K. Beck (Eds.), *Handbuch online-kommunikation* (pp. 1–30). Springer VS. https://doi.org/10.1007/978-3-658-18017-1_17-1

Dobrovolny, J. L., & Fuentes, S. C. G. (2008). Quantitative versus qualitative evaluation: A tool to decide which to use. *Performance Improvement*, *47*, 7–14. https://doi.org/10.1002/pfi.197

Döring, N., & Bortz, J. (2016). Forschungsstand und theoretischer Hintergrund. In N. Döring & J. Bortz (Eds.), *Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften* (5th ed., pp. 157–179). Springer VS. https://doi.org/10.1007/978-3-642-41089-5_6

Dörner, O., & Schäffer, B. (2012). Zum Verhältnis von Gegenstands- und Grundlagentheorien zu Methodologien und Methoden in der Erwachsenen- und Weiterbildungsforschung. In O. Dörner & B. Schäffer (Eds.), *Handbuch Qualitative Erwachsenen- und Weiterbildungsforschung* (pp. 11–22). Verlag Barbara Budrich. https://doi.org/10.2307/j.ctvddzk9g.4

Dos Santos Costa, G., Mallows, D., & Santos Costa, P. L. (2020). Paulo freire, the decolonial curriculum and the experience of the professional masters in youth and adult education in bahia, brazil. *The Adult Learner: The Irish Journal of Adult and Community Education*, 96–110.

Elfert, M., & Rubenson, K. (2015). Adult education research: Exploring an increasingly fragmented map. *European Journal for Research on the Education and Learning of Adults*, *6*(2), 125–138. https://doi.org/10.3384/rela.2000-7426.rela9066

English, L. M., & Mayo, P. (2012). Post-colonialism and adult education. In L. M. English & P. Mayo (Eds.), *Learning with adults. a critical pedagogical introduction* (pp. 69–73). SensePublishers. https://doi.org/10.1007/978-94-6091-768-4_7

Fanelli, D. (2010). Do pressures to publish increase scientists' bias? an empirical support from us states data. *PLoS ONE*, *5*(4), 1–7. https://doi.org/10.1371/journal.pone.0010271

Faulstich, P. (1981). *Arbeitsorientierte Erwachsenenbildung*. Verlag Moritz Diesterweg.

Federal Republic of Nigeria. (2004). *National policy on education*. NERDC Press.

Fejes, A., & Nylander, E. (2014). The anglophone international(e): A bibliometric analysis of three adult education journals, 2005–2012. *Adult Education Quarterly*, *64*(3), 222–239. https://doi.org/10.1177/0741713614528025

Fejes, A., & Nylander, E. (2015). How pluralistic is the research field on adult education? dominating bibliometrical trends, 2005–2012. *European Journal for Research on the Education and Learning of Adults*, *6*(2), 103–123. https://doi.org/10.3384/rela.2000-7426.rela9063

Fejes, A., & Nylander, E. (2017). The economy of publications and citations in educational research: What about the 'Anglophone bias' ? *Research in Education*, *99*(1), 19–30. https://doi.org/10.1177/0034523717740146

Fejes, A., & Nylander, E. (2018). Adult education research: Publication strategies and collegial recognition. In M. Milana, S. Webb, J. Holford, R. Waller, & P. Jarvis (Eds.), *The palgrave international handbook on adult and lifelong education and learning* (pp. 761–777). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-55783-4_39

Fejes, A., & Nylander, E. (2019a). Adult learning: A pluralistic research field. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (pp. 119–128). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-10946-2

Fejes, A., & Nylander, E. (2019b). The politics of publications and citations: A cross country comparison. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (Vol. 24). Springer. https://doi.org/10.1007/978-3-030-10946-2_6

Fejes, A., & Wildemeersch, B. (2015). Editorial: Cartographies of research on adult education and learning. *European Journal for Research on the Education and Learning of Adults*, *6*(2), 99–101. https://doi.org/10.25656/01:11449

Feng, J., Zhang, Y., & Zhang, H. (2017). Improving the co-word analysis method based on semantic distance. *Scientometrics*, *111*, 1521–1531. https://doi.org/10.1007/s11192-017-2286-1

Ferguson, G. (2007). The global spread of english, scientific communication and esp: Questions of equity, access and domain loss. *Iberica*, (13), 7–38.

Field, J., Lovell, T., & Weller, P. (1991). Research quality in continuing education: A study of citations patterns. *Research Paper in Continuing Education*, *3*, 2–27.

Fieldhouse, R. (1984). Cold war and colonial conflicts in british west african adult education, 1947–1953. *History of Education Quarterly*, *24*(3), 359–371. https://doi.org/10.2307/368013

Finch, J., Bell, S., Bellingan, L., Campbell, R., Donnelly, P., Gardner, R., Hall, M., Hall, S., Kiley, R., van der Stelt, W., Sweeney, D., Sykes, P., Tickell, A., et al. (2013). Accessibility, sustainability, excellence: How to expand access to research publications. executive summary. *International Microbiology*, *16*(2), 125–132. https://doi.org/10.2436/20.1501.01.187

Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.

Freire, P. (1980). *Erziehung als Praxis der Freiheit. Beispiele zur Pädagogik der Unterdrückten*. Rowohlt.

Frosio, G., & Derclaye, E. (2014). *Open access publishing: A literature review* (tech. rep.). CREATe Working Paper. https://doi.org/10.2139/ssrn.2697412

Fuchs, E. (2007). Internationale Nichtregierungsorganisationen als Global Players. Zur Herausbildung der transnationalen Zivilgesellschaft am Beispiel der Kinderrechtsbewegung. *Zeitschrift für Pädagogik*, *53*(2), 149–165. https://doi.org/10.25656/01:4390

García, A. B. (2024). Science as a public good: The role of community and digital technologies for equity, sustainability and development in the global south. *Annals of Library and Information Studies*, *71*, 445–456. https://doi.org/10.56042/alis.v71i4.14248

García, A. B., López, E. A., & García, A. M. (2023). Perspectives of the latin american non-commercial journal publishing and south-south collaboration before commercial business models for open access. *Access: An International Journal of Nepal Library Association*, *2*(1), 191–199. https://doi.org/10.3126/access.v2i01.58993

García-Peñalvo, F. J., García de Figuerola, C., & Merlo, J. A. (2010). Open knowledge: Challenges and facts. *Online Information Review*, *34*(4), 520–539. https://doi.org/10.1108/14684521011072963

Gauch, S. (2023). Territorien der Bibliometrie: Evaluation, Exploration, Kuration, Reflexion. In D. Kaldewey (Ed.), *Wissenschaftsforschung* (pp. 259–292). De Gruyter Oldenbourg. https://doi.org/10.1515/9783110713800-013

Gehring, P. (2023). Angenommen, das Wissenschaftlertracking sei die Spitze – was ist dann der Eisberg? In U. Schimank (Ed.), *Open Access – DEAL – Wissenschaftlertracking: Das wissenschaftliche Publikationssystem im Wandel* (pp. 43–91). BBAW. https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus4-39274

Gibb, T. L. (2008). Bridging canadian adult second language education and essential skills policies: Approach with caution. *Adult Education Quarterly*, *58*(4), 318–334. https://doi.org/10.1177/0741713608318893

Giles, J. (2007). Pr's "pit bull" takes on open access. *Nature*, *445*(7126), 347. https://doi.org/10.1038/445347a

Gillen, M. (1993). Adult education as a maturing field: Evidence from citation practices. In M. Taylor & R. Bedard (Eds.), *Proceedings of the 12th annual conference of the canadian association for the study of adult education* (pp. 173–178). University of Ottawa.

Gillen, M. (1994). Knowledge utilization in the field of adult education: Evidence from referencing practices. *Proceedings of the 13th Annual Conference of the Canadian Association for the Study of Adult Education*, 178–183.

Gough, D., Oliver, S., & Thomas, J. (2013). Learning from research. systematic reviews for informing policy decisions [Accessed January 30, 2025]. https://apo.org.au/node/71119

Gover, A., Loukkola, T., & Peterbauer, H. (2019). *Student-centred learning. approaches to quality assurance*. European University Association.

Greene, D., & Cross, J. P. (2017). Exploring the political agenda of the european parliament using a dynamic topic modeling approach. *Political Analysis*, *25*(1), 77–94. https://doi.org/10.1017/pan.2016.7

Greve, J., & Heintz, B. (2005). The "discovery" of world society: Emergence and limits of the theory of world society. In B. Heintz, R. Münch, & H. Tyrell (Eds.), *Weltgesellschaft: Theoretische zugänge und empirische problemlagen* (pp. 89–119). De Gruyter Oldenbourg. https://doi.org/10.1515/9783110509441-005

Grossmann, A., & Brembs, B. (2021). Current market rates for scholarly publishing services. *F1000Research*, *10*(20). https://doi.org/10.12688/f1000research.27468.2

Grotlüschen, A., Belzer, A., Ertner, M., & Yasukawa, K. (2024). The role of adult learning and education in the sustainable development goals. *International Review of Education*, *70*, 205–221. https://doi.org/10.1007/s11159-024-10066-w

Grotlüschen, A., & Buddeberg, K. (2020). Piaac and the south – is southering the new othering? global expansion of dominant discourses on adult literacy. *European Journal for Research on the Education and Learning of Adults*, *11*(2), 167–181. https://doi.org/10.25656/01:20281

Grotlüschen, A., & Buddeberg, K. (2023). Surveys of lifelong learning as contributors to neoliberal processes of "southering". In K. Evans, W. O. Lee, J. Markowitsch, & M. Zukas (Eds.), *Third international handbook of lifelong learning* (pp. 1111–1134). Springer Nature. https://doi.org/10.1007/978-3-031-19592-1_53

Gu, X., & Blackmore, K. L. (2016). Recent trends in academic journal growth. *Scientometrics*, *108*, 693–716. https://doi.org/10.1007/s11192-016-1985-3

Gukenbiehl, H. L. (2016). Institution und Organisation. In H. Korte & B. Schäfers (Eds.), *Einführung in Hauptbegriffe der Soziologie* (pp. 173–193). Springer VS. https://doi.org/10.1007/978-3-658-13411-2_8

Gülay, S. (2015). Die Einführung des Neuen Steuerungsmodells im deutschen Hochschulsystem. Erklärungsansätze für den Wandel im Management und der Verwaltung von Hochschulen [Accessed January 29, 2025]. http://kups.ub.uni-koeln.de/id/eprint/6073

Guzmán-Valenzuela, C., & Gómez, C. (2019). Advancing a knowledge ecology: Changing patterns of higher education studies in latin america. *Higher Education*, *77*(1), 115–133. https://doi.org/10.1007/s10734-018-0264-z

Hack, L. (2005). In search of the lost totality: From marx' societal formation of capitalism to wallerstein's "world-systems analysis" ? In B. Heintz, R. Münch, & H. Tyrell (Eds.), *Weltgesellschaft: Theoretische Zugänge und empirische Problemlagen* (pp. 120–158). De Gruyter Oldenbourg. https://doi.org/10.1515/9783110509441-006

Hall, M. (2012). Green or gold? open access after finch. *Insights: The UKSG Journal*, *25*(3), 235–240. https://doi.org/10.1629/2048-7754.25.3.235

Hamann, J. (2016). The visible hand of research performance assessment. *Higher Education*, *72*(6), 761–779. https://doi.org/10.1007/s10734-015-9974-7

Hammarfelt, B., & Hallonsten, O. (2022). Are evaluative bibliometrics neoliberal? a historical and theoretical problematization. *Social Science Information*, *61*(4), 414–438. https://doi.org/10.1177/05390184231158195

Hanemann, U., & Robinson, C. (2022). Rethinking literacy from a lifelong learning perspective in the context of the sustainable development goals and the international conference on adult education. *International Review of Education*, *68*, 233–258. https://doi.org/10.1007/s11159-022-09949-7

Hanson, C., & Jaffe, J. (2020). Decolonizing adult education. In T. S. Rocco, M. C. Smith, R. C. Mizzi, L. R. Merriweather, & J. D. Hawley (Eds.), *The handbook of adult and continuing education* (pp. 341–349). Routledge. https://doi.org/10.4324/9781003447849-42

Hanson, M. A., Gómez Barreiro, P., Crosetto, P., & Brockingtion, D. (2023). The strain on scientific publishing. *Quantitative Science Studies*, *5*(4), 823–843. https://doi.org/10.1162/qss_a_00327

Hartz, S. (2009). Diffusionsprozesse in der Weiterbildung – eine Analyse aus der Perspektive des Neo-Institutionalismus. In S. Koch & M. Schemmann (Eds.), *Neo-Institutionalismus in der Erziehungswissenschaft* (pp. 133–159). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91496-1_16

Hasse, R. (2006). Der Neo-Institutionalismus als makrosoziologische Kulturtheorie. In K. Senge & K.-U. Hellmann (Eds.), *Einführung in den Neo-Institutionalismus* (pp. 150–159). VS Verlag für Sozialwissenschaft.

Hasse, R. (2013). Soziologische Institutionenanalyse: Grundlagen, Schwerpunkte, Perspektiven. In M. Künzler, F. Oehmer, M. Puppis, & C. Wassmer (Eds.), *Medien als Institutionen und Organisationen. Institutionalistische Ansätze in der Publizistik- und Kommunikationswissenschaft* (pp. 65–86). Nomos. https://doi.org/10.5771/9783845236926-65

Hasse, R., & Krücken, G. (2005). *Neo-Institutionalismus*. transcript Verlag. https://doi.org/10.14361/9783839400289

Haucap, J., et al. (2023). Ökonomische Effekte von Open-Access-Transformationsverträgen. In U. Schimank (Ed.), *Open Access – DEAL – Wissenschaftlertracking: Das wissenschaftliche Publikationssystem im Wandel* (pp. 115–135). BBAW. https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus4-39274

He, Q. (1999). Knowledge discovery through co-word analysis. *Library Trends*, *48*(1), 133–159. http://hdl.handle.net/2142/8267

Heck, T., Keller, C., & Rittberger, M. (2024). Coverage and similarity of bibliographic databases to find most relevant literature for systematic reviews in education. *International Journal on Digital Libraries*, *25*, 365–376. https://doi.org/10.1007/s00799-023-00364-3

Heinemann, A. M. B. (2023). Decolonize Erwachsenenbildung?! Eine hegemoniekritische und dekolonial informierte Betrachtung des Feldes. In Y. Akbaba & A. M. B. Heinemann (Eds.), *Erziehungswissenschaften dekolonisieren. Theoretische Debatten und praxisorientierte Impulse* (pp. 358–374). Beltz Juventa.

Heinze, R. G., Bogumil, J., & Gerber, S. (2011). Vom Selbstverwaltungsmodell zum Managementmodell? Zur Empirie neuer Governance-Strukturen im deutschen Hochschulsystem. In J. Schmid, K. Amos, J. Schrader, & A. Thiel (Eds.), *Welten der Bildung? Vergleichende Analysen von Bildungspolitik und Bildungssystemen* (pp. 121–147). Nomos.

Heise, C. (2018). *Von open access zu open science. zum wandel digitaler kulturen der wissenschaftlichen kommunikation*. Meson Press. https://doi.org/10.14619/1303

Hendricks, G., Tkaczyk, D., Lin, J., & Feeney, P. (2020). Crossref: The sustainable source of community-owned scholarly metadata. *Quantitative Science Studies*, *1*(1), 414–427. https://doi.org/10.1162/qss_a_00022

Henningsen, J. (2021). *Repräsentationen des Globalen Südens im evangelischen Religionsbuch. Eine Thematische Diskursanalyse vor dem Horizont postkolonialer Theorien*. Brill Deutschland GmbH. https://doi.org/10.30965/9783657793570

Herb, U. (2006). Die Farbenlehre des Open Access. *Telepolis*, *1*, 1–5. https://doi.org/10.22028/D291-23682

Herb, U. (2008). Vermessung der Wissenschaft [Accessed February 11, 2025]. *Telepolis*. http://eprints.rclis.org/12629/

Herb, U. (2012). Offenheit und wissenschaftliche Werke: Open Access, Open Review, Open Metrics, Open Science & Open Knowledge. In U. Herb (Ed.), *Open Initiatives: Offenheit in der digitalen Welt und Wissenschaft* (pp. 11–44). universaar. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-355578

Herb, U. (2015). *Open Science in der Soziologie: eine interdisziplinäre Bestandsaufnahme zur offenen Wissenschaft und eine Untersuchung ihrer Verbreitung in der Soziologie*. vwh Hülsbusch. https://doi.org/10.5281/zenodo.31234

Herb, U. (2017). Open Access zwischen Revolution und Goldesel: Eine Bilanz fünfzehn Jahre nach der Erklärung der Budapest Open Access Initiative. *Information - Wissenschaft & Praxis*, *68*(1), 1–10. https://doi.org/10.1515/iwp-2017-0004

Heredia, A. (2022). A tradition of open, academy-owned, and non-profit research infrastructure in latin america. *Information Services and Use*, *42*(3-4), 447–452. https://doi.org/10.3233/ISU-220177

Heylighen, F. (2007). Why is open access development so successful? stigmergic organization and the economics of information. In B. Lutterbeck, M. Bärwolff, & R. A. Gehring (Eds.), *Open source jahrbuch 2007* (pp. 165–180). Lehmanns Media. https://doi.org/10.48550/arXiv.cs/0612071

Hickling-Hudson, A., Matthews, J., & Woods, A. W. (2003). Education, postcolonialism and disruption. In A. Hickling-Hudson, J. Matthews, & A. W. Woods (Eds.), *Disrupting preconceptions: Postcolonialism and education* (pp. 1–16). Post Pressed.

Hill, L. H., Rogers-Shaw, C. A., & Carr-Chellman, D. J. (2023). But, is it adult education? disciplinary boundaries of adult education and higher education. *Adult Learning*, *34*(2), 59–67. https://doi.org/10.1177/10451595231159430

Hironaka, A. (2014). World society and social change. In *Greening the globe: World society and environmental change* (pp. 1–23). Cambridge University Press. https://doi.org/10.1017/CBO9781139381833.002

Hladchenko, M., & Moed, H. F. (2021). National orientation of ukrainian journals: Means-ends decoupling in a semi-peripheral state. *Scientometrics*, *126*, 2365–2389. https://doi.org/10.1007/s11192-020-03844-4

Hodge, S., Brandi, U., Hoggan-Kloubert, T., Knight, E., & Milana, M. (2023). Books, book reviews and oppression. *International Journal of Lifelong Education*, *42*(5), 445–450. https://doi.org/10.1080/02601370.2023.2262723

Hoff, L., & Hickling-Hudson, A. (2011). The role of international non-governmental organisations in promoting adult education for social change: A research agenda. *International Journal of Educational Development*, *31*(1), 187–195. https://doi.org/10.1016/j.ijedudev.2010.03.005

Hofmann, J., & Bergemann, B. (2014). Open Access: Auf dem Weg zur politischen Erfolgsgeschichte? – Teil I: OA im Gegenwind des wissenschaftlichen Zeitschriftenmarkts [Accessed January 30, 2025]. https://netzpolitik.org/2014/open-access-auf-dem-weg-zur-politischen-erfolgsgeschichte-teil-i-oa-im-gegenwind-des-wissenschaftlichen-zeitschriftenmarkts/

Holford, J., Hodge, S., Knight, E., Milana, M., Waller, R., & Webb, S. (2022). Lifelong education research over 40 years: Insights from the international journal of lifelong education. *International Journal of Lifelong Education*, *41*(6), 537–548. https://doi.org/10.1080/02601370.2022.2167445

Hoppers, C. A. O. (2013). Community engagement, globalisation, and restorative action: Approaching systems and research in the universities. *Journal of Adult and Continuing Education*, *19*(2), 94–102. https://doi.org/10.7227/JACE.19.2.7

Hornbostel, S. (1997). *Wissenschaftsindikatoren: Bewertungen in der Wissenschaft*. Westdeutscher Verlag. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-10611

Hufer, K.-P. (2016). *Politische Erwachsenenbildung. Plädoyer für eine vernachlässigte Disziplin*. wbv. https://doi.org/10.3278/6004482w

Hyun, Y. S., Cho, D., & Yoon, S. W. (2015). Landscape of human resource development research in korea: Results from author co-citation network analysis. *Human Resource Development International*, *18*(5), 446–463. https://doi.org/10.1080/13678868.2015.1079295

Ibba, S., Pani, F. E., Stockton, J. G., Barabino, G., Marchesi, M., & Tigano, D. (2017). Incidence of predatory journals in computer science literature. *Library Review*, *66*(6/7), 505–522. https://doi.org/10.1108/LR-12-2016-0108

Ilieva-Trichkova, P., Galloway, S., Schmidt-Hertha, B., Guo, S., Larson, A., Duckworth, V., & Maruatona, T. (2022). Researching inequality and lifelong education from

1982 to 2020: A critical review. *International Journal of Lifelong Education*, *41*(6), 597–614. https://doi.org/10.1080/02601370.2022.2148303

International Assessment of Agricultural Knowledge, Science and Technology for Development. (2009). Agriculture at a crossroads: Global report [Accessed March 3, 2025]. https://digitallibrary.un.org/record/648230

International Fund for Agricultural Development. (2021). Ifad annual report 2020 [Accessed March 3, 2025]. https://www.ifad.org/documents/38714170/43433979/ar2020_e.pdf/19b5e6f3-f47e-d4ba-0b7f-988232af1821?t=1626958249424.

Jahn, N., & Tullney, M. (2016). A study of institutional spending on open access publication fees in germany. *PeerJ*, *4*, e2323. https://doi.org/10.7717/peerj.2323

Jakobi, A. P. (2009). Die weltweite Institutionalisierung lebenslangen Lernens. Neo-Institutionalistische Erklärungen politischer Programmatiken. In S. Koch & M. Schemmann (Eds.), *Neo-Institutionalismus in der Erziehungswissenschaft* (pp. 172–189). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91496-1_9

Jandrić, P., & Hayes, S. (2019). The postdigital challenge of redefining academic publishing from the margins. *Learning, Media and Technology*, *44*(3), 381–393. https://doi.org/10.1080/17439884.2019.1585874

Jansson, D. R. (2017). The work of southering: ”southern justice” and the moral landscape of uneven racism. *Southeastern Geographer*, *57*(2), 131–150. https://doi.org/10.1353/sgo.2017.0014

Jaselskis, E. J., & Talukhaba, A. (1998). Bidding considerations in developing countries. *Journal of Construction Engineering and Management*, *124*(3), 185–193. https://doi.org/10.1061/(ASCE)0733-9364(1998)124:3(185)

Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 143–163). University of Chicago Press.

Käpplinger, B. (2015). Adult education research between field and rhizome – a bibliometrical analysis of conference programs of esrea. *European Journal for Research on the Education and Learning of Adults*, *6*(2), 139–157. https://doi.org/10.3384/rela.2000-7426.rela9061

Käpplinger, B. (2019). Adult education research from rhizome to field? a bibliometrical analysis of conference programs of esrea from 1994 to 2016. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (pp. 157–177). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-10946-2

Kempka, A. (2018). *Die disziplinäre Identität der Erziehungswissenschaft. Ein bibliometrisch-netzwerkanalytischer Zugang.* Klinkhardt.

Keupp, H. (2007). Unternehmen Universität. Vom Elfenbeinturm zum Eventmarketing. *Blätter für deutsche und internationale Politik*, *52*(10), 1189–1198.

Khanna, S., Raoni, J., Smecher, A., Alperin, J. P., Ball, J., & Willinsky, J. (2024). Details of publications using software by the public knowledge project. https://doi.org/10.7910/DVN/OCZNVY

Khoo, S. Y.-S. (2019). Article processing charge hyperinflation and price insensitivity: An open access sequel to the serials crisis. *LIBER Quarterly: The Journal of the Association of European Research Libraries*, *29*(1), 1–18. https://doi.org/10.18352/lq.10280

Kieser, A., & Walgenbach, P. (2010). *Organisation.* Schäffer-Poeschel Verlag.

Kim, K., & Chung, Y. (2018). Overview of journal metrics. *Science Editing*, *5*(1), 16–20. https://doi.org/10.6087/kcse.112

Kimotho, S. G. (2019). The storm around beall's list: A review of issues raised by beall's critics over his criteria of identifying predatory journals and publishers. *African Research Review*, *13*(2), 1–11. https://doi.org/10.4314/afrrev.v13i2.1

Kitano, N., & Miyabayashi, Y. (2023). China's foreign aid as a proxy of oda: Preliminary estimate 2001–2022. *Journal of Contemporary East Asia Studies*, *12*(1), 264–293. https://doi.org/10.1080/24761028.2024.2316532

Kleiner, M. (2010). Qualität statt Quantität. *Forschung, Das Magazin der Deutschen Forschungsgemeinschaft*, *1*, 2–3.

Knöchelmann, M. (2021). The democratisation myth: Open access and the solidification of epistemic injustices. *Science & Technology Studies*, *34*(2), 65–89. https://doi.org/10.23987/sts.94964

Kozak, M., Iefremova, O., & Hartley, J. (2016). Spamming in scholarly publishing: A case study. *Journal of the Association for Information Science and Technology*, *67*(8), 2009–2015. https://doi.org/10.1002/asi.23521

Kretschmann, R., Linten, M., & Heller, L. (2013). Literatur und Information – Datenbanken Fachliteratur, Literaturrecherche und -verwaltung. In M. Ebner & S. Schön (Eds.), *L3T. Lehrbuch für Lernen und Lehren mit Technologien* (pp. 1–15). https://doi.org/10.25656/01:8344

Krücken, G., & Meier, F. (2008). Zur institutionellen Struktur des Terrorismus. Neo-institutionalistische Perspektiven auf den Nordirland-Konflikt. In T. Bonacker, R. Greshoff, & U. Schimank (Eds.), *Sozialtheorien im Vergleich* (pp. 111–122). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91172-4_6

Krücken, G., & Röbken, H. (2009). Neo-institutionalistische Hochschulforschung. In S. Koch & M. Schemmann (Eds.), *Neo-Institutionalismus in der Erziehungswissenschaft* (pp. 326–346). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91496-1_16

Kuchma, I., & Ševkušić, M. (2024). Landscape of no-fee open access publishing in africa. https://doi.org/10.5281/zenodo.12792474

Kurt, S. (2018). Why do authors publish in predatory journals? *Learned Publishing*, *31*(2), 141–147. https://doi.org/10.1002/leap.1150

Laine, C., & Winker, M. A. (2017). Identifying predatory or pseudo-journals. *Biochemia Medica*, *27*(2), 285–291. https://doi.org/10.11613/BM.2017.031

Lamba, M., & Madhusudhan, M. (2022). Topic modeling. In M. Lamba & M. Madhusudhan (Eds.), *Text mining for information professionals* (pp. 105–137). Springer. https://doi.org/10.1007/978-3-03085085-2_4

Larivière, V., Haustein, S., & Mongeon, P. (2015). The oligopoly of academic publishers in the digital era. *PLOS ONE*, *10*(6), 1–15. https://doi.org/10.1371/journal.pone.0127502

Larson, J. (2018). Other voices: Authors' literary-academic presence and publication in the discursive world system. *Discourse: Studies in the Cultural Politics of Education*, *39*(2), 521–535. https://doi.org/10.1080/01596306.2016.1278357

Larsson, S. (2010). Invisible colleges in the adult education research world. *European Journal for Research on the Education and Learning of Adults*, *1*(1–2), 97–112. https://doi.org/10.25656/01:4154

Larsson, S., Fejes, A., Österlund, L., & Nylander, E. (2019). Invisible colleges in research on adult learning. a bibliometric study on international scholarly recognition. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (pp. 73–97). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-10946-2_5

Lebeau, Y. (2003). Extraversion strategies within a peripheral research community: Nigerian scientists' responses to the state and changing patterns of international science and development cooperation. *Science, Technology and Society*, *8*(2), 183–213. https://doi.org/10.1177/097172180300800203

Leiber, T. (2017). University governance and rankings. the ambivalent role of rankings for autonomy, accountability and competition. *Beiträge zur Hochschulforschung*, *39*(3–4), 30–51. https://www.bzh.bayern.de/fileadmin/news_import/3-4-2017-Leiber.pdf

Leišytė, L., & Peksen, S. (2020). Nationale Evaluationssysteme für Forschung in Hochschulen – Gender Bias im europäischen Vergleich. In I. Welpe, J. Stumpf-Wollersheim, N. Folger, & M. Prenzel (Eds.), *Leistungsbewertung in wissenschaftlichen Institutionen und Universitäten: Eine mehrdimensionale Perspektive* (pp. 13–41). De Gruyter Oldenbourg. https://doi.org/10.1515/9783110689884-002

Lengyel, P. (1986). *International social science. the unesco experience*. Transaction Books.

Leong, Y. R., Tajudeen, F. P., & Yeong, W. C. (2021). Bibliometric and content analysis of the internet of things research: A social science perspective. *Online Information Review*, *45*(6), 1148–1166. https://doi.org/10.1108/OIR-08-2020-0358

Leung, X. Y., Sun, J., & Bai, B. (2017). Bibliometrics of social media research: A co-citation and co-word analysis. *International Journal of Hospitality Management*, *66*, 35–45. https://doi.org/10.1016/j.ijhm.2017.06.012

Leydesdorff, L. (2001). *The challenge of scientometrics: The development, measurement, and self-organization of scientific communications*. Universal Publishers.

Lin, C.-Y. (2010). *Organisation von Planungsinformation durch CMS und GeoWeb - Stadtplanerisches Handeln in der Wissensgesellschaft am Beispiel der Region Kaohsiung in Taiwan* [Doctoral dissertation, Fachbereich ARUBI, Kaiserslautern]. https://nbn-resolving.org/urn:nbn:de:hbz:386-kluedo-24681

Long, H. B. (1983). Characteristics of adult education research reported at the adult education research conference, 1971–1980. *Adult Education Quarterly*, *33*(2), 79–96. https://doi.org/10.1177/0001848183033002001

Long, H. B., & Agyekum, S. K. (1974). Adult education 1964-1973: Reflections of a changing discipline. *Adult Education*, *24*(2), 99–120. https://doi.org/10.1177/074171367402400202

López Piñeiro, C., & Hicks, D. (2015). Reception of spanish sociology by domestic and foreign audiences differs and has consequences for evaluation. *Research Evaluation*, *24*(1), 78–89. https://doi.org/10.1093/reseval/rvu030

Lorenz, L. M. (2014). Forschungsinfrastrukturen in der Erwachsenenbildung unter der besonderen Berücksichtigung von Open Access [Accessed January 30, 2025]. https://www.die-bonn.de/id/31056/about/html

Luukkonen, T. (1990). Bibliometrics and evaluation of research performance. *Annals of Medicine*, *22*(3), 145–150. https://doi.org/10.3109/07853899009147259

Ma, L. (2022). Metrics and epistemic injustice. *Journal of Documentation*, *78*(7), 392–404. https://doi.org/10.1108/JD-12-2021-0240

Ma, L., Buggle, J., & O'Neill, M. (2023). Open access at a crossroads: Library publishing and bibliodiversity. *Insights: The UKSG Journal*, *36*(1), 1–10. https://doi.org/10.1629/uksg.613

Margoni, T., & Peters, D. (2016). Creative commons licenses. empowering open access. https://doi.org/10.2139/ssrn.2746044

Markowitz, D. M., Powell, J. H., & Hancock, J. T. (2014). The writing style of predatory publishers [Conference Paper, June 15–18]. *ASEE Annual Conference & Exposition*. https://doi.org/10.18260/1-2--23192

Martens, K. (2002). Alte und neue Players — eine Begriffsbestimmung. In C. Frantz & A. Zimmer (Eds.), *Zivilgesellschaft international: Alte und neue NGOs. Bürgerschaftliches Engagement und Nonprofit-Sektor* (pp. 25–49). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-322-94941-7_2

Martini, R. (2024). Promotionen und Habilitationen in der Erziehungswissenschaft. In B. Schmidt-Hertha, A. T., R. Martini, & I. Züchner (Eds.), *Datenreport Erziehungswissenschaft 2024. Erstellt im Auftrag der Deutschen Gesellschaft für Erziehungswissenschaft (DGfE)* (pp. 201–218). Barbara Budrich. https://doi.org/10.3224/84743042

Matys, T. (2014). Macht, Kontrolle und Entscheidungen in Organisationen. In *Studientexte zur Soziologie*. Springer. https://doi.org/10.1007/978-3-658-01626-5_4

Max Planck Society. (2003). Berlin declaration on open access to knowledge in the sciences and humanities [Accessed March 8, 2025]. https://openaccess.mpg.de/67605/berlin_declaration_engl.pdf

Max Planck Society. (2025). Berliner Erklärung. Signatoren [Accessed March 08, 2025]. https://openaccess.mpg.de/3883/Signatories

Mayo, P. (2005). "in and against the state" : Gramsci, war of position, and adult education. *Journal for Critical Education Policy Studies*, *3*(2), 66–90. https://www.um.edu.mt/library/oar//handle/123456789/1463

Mbembe, J. A. (2016). Decolonizing the university: New directions. *Arts and Humanities in Higher Education*, *15*(1), 29–45. https://doi.org/10.1177/1474022215618513

Mboa Nkoudou, T. H. (2020). Epistemic alienation in african scholarly communications: Open access as a pharmakon. In M. P. Eve & J. Gray (Eds.), *Reassembling scholarly communications: Histories, infrastructures, and global politics of open access* (pp. 25–40). MIT Press. https://doi.org/10.7551/mitpress/11885.003.0006

McIntyre, J., & Grudens-Schuck, N. (2004). Research in adult education and training. In G. Foley (Ed.), *Dimensions of adult learning: Adult education and training in a global era* (pp. 167–186). Routledge. https://doi.org/10.4324/9781003115366-13

McLean, S. (2017a). Colonial encounters in the classroom: Adult educators making sense of inuit resistance to schooling. *Studies in the Education of Adults*, *49*(1), 26–44. https://doi.org/10.1080/02660830.2017.1283758

McLean, S. (2017b). From territory to human resources: A history of colonial adult education in the central arctic. *Historical Studies in Education*, *29*(2), 26–47. https://doi.org/10.32316/hse/rhe.v29i2.4507

Meagher, K. (2021). Introduction: The politics of open access — decolonizing research or corporate capture? *Development and Change*, *52*(2), 340–358. https://doi.org/10.1111/dech.12630

Meijer, G. (2023). Statement zu DEAL und Wissenschaftsfreiheit. In U. Schimank (Ed.), *Open Access – DEAL – Wissenschaftlertracking: Das wissenschaftliche Publikationssystem im Wandel* (pp. 108–114). BBAW. https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus4-39274

Memon, A. R. (2018). Predatory journals spamming for publications: What should researchers do? *Science and Engineering Ethics*, *24*, 1617–1639. https://doi.org/10.1007/s11948-017-9955-6

Mense-Petermann, U. (2006). Das Verständnis von Organisation im Neo-Institutionalismus. Lose Kopplung, Reifikation, Institution. In K. Senge & K.-U. Hellmann (Eds.), *Einführung in den Neo-Institutionalismus* (pp. 62–74). VS Verl. für Sozialwissenschaft.

Messerschmidt, A. (2017). Weltoffene Erwachsenenbildung für eine Gesellschaft zwischen Pluralität und Ungleichheit [Accessed March 03, 2025]. https://www.werkstatt-kritische-bildungstheorie.de/veroeffentlichungen/

Meule, A. (2018). Wie unterscheidet man zwischen „guten" und „schlechten" Open Access Zeitschriften? *PPmP - Psychotherapie • Psychosomatik • Medizinische Psychologie*, *68*(1), 44–45. https://doi.org/10.1055/s-0043-122564

Meyer, H.-D. (2009). Institutionelle Isomorphie und Vielfalt – Zu einer überfälligen Korrektur in der Bildungsforschung. In S. Koch & M. Schemmann (Eds.), *Neo-Institutionalismus in der Erziehungswissenschaft* (pp. 292–307). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91496-1_14

Meyer, J. W. (1980). The world polity and the authority of the nation-state. In A. Bergesen (Ed.), *Studies of the modern world system* (pp. 109–138). Academic Press.

Meyer, J. W. (1994). Rationalized environments. In W. R. Scott & J. W. Meyer (Eds.), *Institutional environments and organization* (pp. 28–54). SAGE Publications.

Meyer, J. W. (2005). *Weltkultur. Wie die westlichen Prinzipien die Welt durchdringen.* Suhrkamp.

Meyer, J. W., Boli, J., Thomas, G. M., & Ramirez, F. O. (2005). Die Weltgesellschaft und der Nationalstaat. In J. W. Meyer (Ed.), *Weltkultur: Wie die westlichen Prinzipien die Welt durchdringen* (pp. 85–132). Suhrkamp.

Meyer, J. W., & Ramirez, F. O. (2005). Die globale Institutionalisierung der Bildung. In J. W. Meyer & G. Krücken (Eds.), *Weltkultur: Wie die westlichen Prinzipien die Welt durchdringen* (pp. 212–234). Suhrkamp.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*(2), 340–363. https://doi.org/10.1086/226550

Meyer, U., & Kirchner, S. (2016). Entkopplung – ein folgenreicher Begriff des soziologischen Neoinstitutionalismus. *Nano-Papers*, *1*, 1–5. https://doi.org/10.14459/2016md1335554

Milana, M., Hodge, S., Holford, J., Waller, R., & Webb, S. (2016). Academic journals and the politics of publication in adult, continuing and lifelong education. *International Journal of Lifelong Education*, *35*(6), 587–589. https://doi.org/10.1080/02601370.2016.1243380

Mills, D. (2022). Decolonial perspectives on global higher education: Disassembling data infrastructures, reassembling the field. *Oxford Review of Education*, *48*(2), 474–491. https://doi.org/10.1080/03054985.2022.2072285

Mills, D., & Branford, A. (2022). Getting by in a bibliometric economy: Scholarly publishing and academic credibility in the nigerian academy. *Africa*, *92*(5), 839–859. https://doi.org/10.1017/S0001972022000481

Mills, D., & Inouye, K. (2021). Problematizing 'predatory publishing': A systematic review of factors shaping publishing motives, decisions, and experiences. *Learned Publishing*, *34*(2), 89–104. https://doi.org/10.1002/leap.1325

Mittermaier, B. (2015). Double Dipping beim Hybrid Open Access – Chimäre oder Realität? *Informationspraxis*, *1*(1), 1–24. https://doi.org/10.11588/ip.2015.1.18274

Moed, H. F., De Moya-Anegon, F., Guerrero-Bote, V., Lopez-Illescas, C., & Hladchenko, M. (2021). Bibliometric assessment of national scientific journals. *Scientometrics*, *126*(4), 3641–3666. https://doi.org/10.1007/s11192-021-03883-5

Morris, S. A., & van der Veer Martens, B. (2008). Mapping research specialties. *Annual Review of Information Science and Technology*, *42*(1), 213–295. https://doi.org/10.1002/aris.2008.1440420113

Morris, S. A., & Yen, G. G. (2004). Crossmaps: Visualization of overlapping relationships in collections of journal papers. *Proceedings of the National Academy of Sciences of the United States of America*, *101*(Suppl 1), 5291–5296. https://doi.org/10.1073/pnas.0307604100

Neubacher, F., & Grote, U. (2016). Rurale Kriminalität in Entwicklungsländern. *Monatsschrift für Kriminologie und Strafrechtsreform*, *99*(3), 199–214. https://doi.org/10.1515/mkr-2016-0303

Nwagwu, W. E. (2015). Counterpoints about predatory open access and knowledge publishing in africa. *Learned Publishing*, *28*(2), 114–122. https://doi.org/10.1087/20150205

Nylander, E., & Fejes, A. (2019). The research field of adult education and learning: Widening the field. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (Vol. 24). Springer. https://doi.org/10.1007/978-3-030-10946-2_13

Nylander, E., Fejes, A., & Milana, M. (2022). Exploring the themes of the territory: A topic modelling approach to 40 years of publications in international journal of lifelong education (1982–2021). *International Journal of Lifelong Education*, *41*(1), 27–44. https://doi.org/10.1080/02601370.2021.2015636

Nylander, E., & Holmer, D. (2022). The latent structure of educational offerings—tracing topics from folk high school catalogues through large-scale content analyses. *Zeitschrift für Weiterbildungsforschung*, *45*, 295–319. https://doi.org/10.1007/s40955-022-00222-w

Nylander, E., Österlund, L., & Fejes, A. (2019). Exploring the adult learning research field by analysing who cites whom. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (Vol. 24). Springer. https://doi.org/10.1007/978-3-030-10946-2_4

Oduaran, A. (2001). Access initiatives in botswana and nigeria. *Journal of Adult and Continuing Education*, *7*(2), 51–62. https://doi.org/10.1177/147797140100700204

OECD. (2005). *Digital broadband content: Scientific publishing*. https://doi.org/10.1787/9789264065901-en

OECD. (2008). *Oecd glossary of statistical terms*. https://doi.org/10.1787/9789264055087-en

OECD. (2021). Dac list of oda recipients effective for reporting on 2021 flows [https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-ODA-Recipients-for-reporting-2021-flows.pdf].

Oermann, M. H., Nicoll, L. H., Chinn, P. L., Ashton, K. S., Conklin, J. L., Edie, A. H., Amarasekara, S., & Williams, B. L. (2018). Quality of articles published in predatory nursing journals. *Nursing Outlook*, *66*(1), 4–10. https://doi.org/10.1016/j.outlook.2017.05.005

Olivarez, J. D., Bales, S., Sare, L., & vanDuinkerken, W. (2018). Format aside. applying beall's criteria to assess the predatory nature of both oa and non-oa library and information science journals. *College & Research Libraries*, *79*(1), 52–67. https://doi.org/10.5860/crl.79.1.52

Oliver, C. (1991). Strategic responses to institutional processes. *The Academy of Management Review*, *16*(1), 145–179. https://doi.org/10.2307/258610

Omobowale, A. O., Akanle, O., Adeniran, A. I., & Adegboyega, K. (2014). Peripheral scholarship and the context of foreign paid publishing in nigeria. *Current Sociology*, *62*(5), 666–684. https://doi.org/10.1177/0011392113508127

Omolewa, M. A. (1974). The foundation of adult education institutions in nigeria, 1923-1960: A study of the objectives of adult education in colonial nigeria. *Bulletin of the Association of African Universities*, *1*(2), 44–51.

Open Science Monitor. (2022). Trends for open access to publications [Accessed December 22, 2022]. https://ec.europa.eu/info/research-and-innovation/strategy/goals-research-and-innovation-policy/open-science/open-science-monitor/trends-open-access-publications_en

Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research*, *2*(1), 1–28. https://doi.org/10.1287/isre.2.1.1

Ozyurt, O., & Ayaz, A. (2022). Twenty-five years of education and information technologies: Insights from a topic modeling based bibliometric analysis. *Education* *and Information Technologies*, *27*, 11025–11054. https://doi.org/10.1007/s10639-022-11071-y

Padmalochanan, P. (2019). Academics and the field of academic publishing: Challenges and approaches. *Publishing Research Quarterly*, *35*, 87–107. https://doi.org/10.1007/s12109-018-09628-2

Panther, S. (2014). Institutions in a world system. contours of a research program. http://dx.doi.org/10.17169/refubium-23221

Papadopoulos, D. (2023). Individualising processes in adult education research: A literature review. *International Journal of Lifelong Education*, *42*(1), 8–21. https://doi.org/10.1080/02601370.2022.2135141

Pescador, I. G., & Arzadun, P. (2025). Sustainable development goals (sdgs) through business models: A bibliometric and content analysis [ahead-of-print]. *Management Research*. https://doi.org/10.1108/MRJIAM-09-2024-1595

Peter, C. (2010). Organisation und Profession sozialer Arbeit: kognitive Vermittlungsprozesse. Eine neo-institutionalistische Betrachtung [Accessed February 27, 2025]. https://nbn-resolving.de/urn:nbn:de:hbz:6-67409384781

Petersen, W. (2023). *Alles Gold was glänzt?* (Tech. rep. No. 514). Berliner Handreichungen zur Bibliotheks- und Informationswissenschaft. https://doi.org/10.18452/27538

Peterson, T. (2017). Why apc waivers don't work globally [Accessed December 21, 2024]. https://oanarchy.wordpress.com/2017/05/06/why-apc-waivers-dont-work-globally/

Petrisor, A.-I. (2018). Predatory publishers using spamming strategies for call for papers and review requests. a case study. *Journal of Library and Information Technology*, *38*(3), 199–207. https://doi.org/10.14429/djlit.38.3.12551

Picht, G. (1964). *Die deutsche Bildungskatastrophe: Analyse und Dokumentation*. Walter-Verlag.

Pieper, D. (2017). Open-Access-Publikationsgebühren. In K. Söllner & B. Mittermaier (Eds.), *Praxishandbuch Open Access* (pp. 77–86). De Gruyter. https://doi.org/10.1515/9783110494068

Preece, J. (2009). Lifelong learning and development: A perspective from the 'south'. *Compare: A Journal of Comparative and International Education*, *39*(5), 585–599. https://doi.org/10.1080/03057920903125602

Preece, J., & Ntseane, G. (2004). Using adult education principles for hiv/aids awareness intervention strategies in botswana. *International Journal of Lifelong Education*, *23*(1), 5–22. https://doi.org/10.1080/0260137032000172033

Preisendörfer, P. (2016). Organisationskonzeptionen iii: Organisationen als offene systeme. In P. Preisendörfer (Ed.), *Organisationssoziologie* (pp. 149–175). Springer VS. https://doi.org/10.1007/978-3-658-10017-9_8

Prosser, D. C. (2003). From here to there. a proposed mechanism for transforming journals from closed to open access. *Learned Publishing*, *16*(3), 163–166. https://doi.org/10.1087/095315103322110923

Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science*, *14*, 681–695. https://doi.org/10.1007/s11625-018-0627-5

Pyne, D. (2017). The rewards of predatory publications at a small business school. *Journal of Scholarly Publishing*, *48*(3), 137–160. https://doi.org/10.3138/jsp.48.3.137

Quack, S. (2006). Institutioneller Wandel : Institutionalisierung und De-Institutionalisierung. In K. Senge & K.-U. Hellmann (Eds.), *Einführung in den Neo-Institutionalismus* (pp. 172–184). VS Verlag für Sozialwissenschaften.

Quijano, A. (2007). Coloniality and modernity/rationality. *Cultural Studies*, *21*(2–3), 168–178. https://doi.org/10.1080/09502380601164353

Rabesandratana, T. (2019). Radical open-access plan delayed a year as revised effort seeks more support [Accessed January 02, 2025]. *Science*. https://doi.org/10.1126/science.aay2255

Rachal, J., Hemby, K., & Grubb, R. (1996). Institutional publication productivity in selected gerontology journals, 1984–1993. *Educational Gerontology*, *22*(3), 281–291. https://doi.org/10.1080/0360127960220306

Rachal, J., Shelley, K., & William, D. (2008). Publication productivity in research in higher education and the journal of higher education, 1995–2005. *Educational Research Quarterly*, *31*(4), 50–66.

Rachal, J., & William, D. (2005). Institutional and individual publication productivity in selected adult education journals, 1993–2002. *Canadian Journal for the Study of Adult Education*, *19*(1), 1–20. https://cjsae.library.dal.ca/index.php/cjsae/article/view/1818

Rafols, I., Ciarli, T., & Chavarro, D. (2015). Under-reporting research relevant to local needs in the global south. databases biases in the representation of knowledge on rice. *Globelics Conference*. https://doi.org/10.31235/osf.io/3kf9d

Raju, R., & Raju, R. (2009). The progression from repositories to institutional repositories: A comparative examination of repositories at the durban university of technology and stellenbosch university. *International Conference on African Digital Libraries and Archives*. http://hdl.handle.net/10019.1/8415

Ramirez, F. (2001). Frauenrechte, Weltgesellschaft und die gesellschaftliche Integration von Frauen. In B. Heintz (Ed.), *Geschlechtersoziologie* (pp. 356–374). Westdt. Verlag.

Ramos Zincke, C. (2014). Local and global communications in chilean social science: Inequality and relative autonomy. *Current Sociology*, *62*(5), 704–722. https://doi.org/10.1177/0011392114521374

Reitz, T. (2023). Open-Access, DEAL-Verhandlungen und Wissenschaftsfreiheit. In U. Schimank (Ed.), *Open Access – DEAL – Wissenschaftlertracking: Das wissenschaftliche Publikationssystem im Wandel* (pp. 9–42). BBAW. https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus4-39274

Rekdal, O. B. (2014). Academic urban legends. *Social Studies of Science*, *44*(4), 638–654. https://doi.org/10.1177/0306312714535679

Roberts, M. E., Stewart, B. M., & Tingley, D. (2019). Stm. an r package for structural topic models. *Journal of Statistical Software*, *91*(2), 1–40. https://doi.org/10.18637/jss.v091.i02

Robertson, S. L., & Olds, K. (2017). Locating universities in a globalising world. In T. Strike (Ed.), *Higher education strategy and planning. a professional guide* (pp. 13–29). Routledge. https://doi.org/10.4324/9781315206455

Robinson, K. (1996). Citation analysis of the canadian authored papers presented at the 1990–1994 annual conferences of the canadian association for the study of adult education. *Canadian Journal for the Study of Adult Education*, *10*(2), 63–82. https://cjsae.library.dal.ca/index.php/cjsae/article/view/2073

Roor, T. (2025). Polyphonie vs. Homophonie – Über eine Publikationskultur im Wandel. *Debatte – Beiträge zur Erwachsenenbildung, Sonderheft*, (2), 72–86. https://doi.org/10.3224/84743088.06

Roor, T. (in press). Adult education research between the center and periphery—publication practices and topics of adult education researchers in countries of the so-called global south. *Internationales Jahrbuch der Erwachsenenbildung*, (48).

Roosendaal, H. E., & Geurts, P. A. T. M. (1999). Forces and functions in scientific communication: An analysis of their interplay [Accessed November 29, 2025]. *Conference on "Co-operative Research in Information Systems in Physic"*. https://research.utwente.nl/en/publications/forces-and-functions-in-scientific-communication-an-analysis-of-t

Rosenbaum, K. (2016). Von Fach zu Fach verschieden. Diversität im wissenschaftlichen Publikationssystem. In P. Weingart & N. Taubert (Eds.), *Wissenschaftliches Publizieren: Zwischen Digitalisierung, Leistungsmessung, Ökonomisierung und medialer Beobachtung* (pp. 41–74). De Gruyter Akademie Forschung. https://doi.org/10.1515/9783110448115-002

Rubenson, K., & Elfert, M. (2014). Changing configurations of adult education research: Exploring a fragmented map. In B. Käpplinger & S. Robak (Eds.), *Changing configurations in adult education in transitional times* (pp. 25–38). Peter Lang.

Rubenson, K., & Elfert, M. (2015). Adult education research. exploring an increasingly fragmented map. *European Journal for Research on the Education and Learning of Adults*, *6*(2), 125–138. https://doi.org/10.3384/rela.2000-7426.rela9066

Rubenson, K., & Elfert, M. (2019). Examining the "weak field" of adult education. In A. Fejes & E. Nylander (Eds.), *Mapping out the research field of adult education and learning* (pp. 157–177). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-10946-2_2

Russo, M. G., Di Fabio Rocca, F., Spairani, J. A., & Sardi, M. L. (2023). ¿Indexar para no perecer?: Trayectoria de la Revista Argentina de Antropología Biológica entre 1996 y 2023. *Revista Ucronías*, *9*, 79–100. https://doi.org/10.5281/zenodo.12526119

Rutz, R. (2007). Nationallizenzen aus Sicht und im Förderspektrum der Deutschen Forschungsgemeinschaft (DFG): Grundlagen und Einbindung in die Förderstrukturen. *GMS Medizin – Bibliothek – Information*, *7*(2), 1–5. http://www.egms.de/en/journals/mbi/2007-7/mbi000084.shtml

Said, E. W. (1979). *Orientalism.* Pantheon.

Sandhu, S. (2012). Grundlagen und Kernbegriffe des Neo-Institutionalismus. In S. Sandhu (Ed.), *Public Relations und Legitimität. Organisationskommunikation* (pp. 73–150). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-19304-5_3

Schaefers, C. (2002). Der soziologische Neo-Institutionalismus. Eine organisationstheoretische Analyse- und Forschungsperspektive auf schulische Organisationen. *Zeitschrift für Pädagogik*, *48*(6), 835–855. https://doi.org/10.25656/01:3863

Schäfer, C. K. (2009). Neo-Institutionalismus als theoretische Perspektive. In C. K. Schäfer (Ed.), *Corporate Volunteering und professionelles Freiwilligen-Management. Eine organisationssoziologische Betrachtung* (pp. 37–60). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91851-8_3

Schäfer, H.-B., & Ott, C. (2020). Wirtschaftswissenschaft, Handlungsrechte und ökonomische Analyse des Rechts. In H.-B. Schäfer & C. Ott (Eds.), *Lehrbuch der ökonomischen Analyse des Zivilrechts* (pp. 49–105). Springer Gabler. https://doi.org/10.1007/978-3-662-46257-7_3

Schäfer, M. (2000). Globalisierung als Herrschaft. Eine Auseinandersetzung mit dem makrosoziologischen Neoinstitutionalismus von Meyer et al. *Soziale Welt*, *51*(3), 355–375. http://www.jstor.org/stable/40878321

Schaffert, S., & Schmidt, B. (2004). Inhalt und Konzeption der 'Bildungsforschung'. *Bildungsforschung*, *1*(1), 1–13. https://doi.org/10.25656/01:4671

Schemmann, M. (2007). *Internationale Weiterbildungspolitik und Globalisierung: Orientierungen und Aktivitäten von OECD, EU, UNESCO und Weltbank.* wbv. https://doi.org/10.3278/14/1099w

Schemmann, M. (2008). CONFINTEA V aus der World Polity Perspektive. *Bildung und Erziehung*, *61*(2), 173–185. https://doi.org/10.7788/bue.2008.61.2.173

Schiltz, M. (2018). Science without publication paywalls: Coalition s for the realisation of full and immediate open access. *Frontiers in Neuroscience*, *12*, 656. https://doi.org/10.3389/fnins.2018.00656

Schimank, U. (2007). Governance-Perspektive. Analytisches Potential und anstehende Fragen. In H. Altrichter, T. Brüsemeister, & J. Wissinger (Eds.), *Educational Governance. Handlungskoordination und Steuerung im Bildungssystem* (pp. 231–260). Springer VS.

Schimank, U. (2009). Governance-Reformen nationaler Hochschulsysteme. In J. Bogumil & R. G. Heinze (Eds.), *Neue Steuerung von Hochschulen. Eine Zwischenbilanz* (pp. 124–139). Ed. Sigma. https://doi.org/10.5771/9783845269757

Schmidt, N. (2020). *The privilege to select: Global research system, european academic library collections, and decolonisation* [Doctoral dissertation, Lund University: Faculties of Humanities and Theology]. https://doi.org/10.5281/zenodo.4011296

Schmidt, N. (2021). Überlegungen für die Dekolonialisierung wissenschaftlicher Bibliotheken in Europa. *LIBREAS. Library Ideas*, *40*, 1–13. https://doi.org/10.18452/23808

Schmidt-Hertha, B., Rittberger, M., & König, A. (2024). Forschung und Publikationskulturen. In B. Schmidt-Hertha, A. Tervooren, R. Martini, & I. Züchner (Eds.), *Datenreport Erziehungswissenschaft 2024. Erstellt im Auftrag der Deutschen Gesellschaft für Erziehungswissenschaft (DGfE)* (pp. 173–200). Barbara Budrich. https://doi.org/10.3224/84743042

Schmidt-Hertha, B., & Tippelt, R. (2014). Erziehungswissenschaft und das Verhältnis zu ihren Bezugsdisziplinen vor dem Hintergrund der Stellen- und Besetzungspraxis (1995 bis 2012). *Zeitschrift für Pädagogik*, *60*(Beiheft), 172–183. https://doi.org/10.25656/01:9093

Schneider, N. (2017). Between promise and skepticism: The global south and our role as engaged intellectuals. *The Global South*, *11*(2), 18–38. https://doi.org/10.2979/globalsouth.11.2.02

Schofer, E. (1999). Science associations in the international sphere, 1875–1990: The rationalization of science and the scientization of society. In J. Boli & G. Thomas (Eds.), *Constructing world culture: International nongovernmental organiza-*

tions since 1875 (pp. 249–266). Stanford University Press. https://doi.org/10.1515/9781503617681-014

Schubert, T., & Sooryamoorthy, R. (2010). Can the centre–periphery model explain patterns of international scientific collaboration among threshold and industrialised countries? the case of south africa and germany. *Scientometrics*, *83*, 181–203. https://doi.org/10.1007/s11192-009-0074-2

Schüßler, I., & Egetenmeyer, R. (2018). Akademische Professionalisierung – zur Situation der Studiengänge in der Erwachsenenbildung/Weiterbildung in Deutschland. In R. Tippelt & A. Hippel (Eds.), *Handbuch Erwachsenenbildung/Weiterbildung* (pp. 1071–1088). Springer VS. https://doi.org/10.1007/978-3-531-19979-5_53

Scott, W. R. (1986). *Grundlagen der Organisationstheorie*. Campus-Verlag.

Scott, W. R. (1994). Institutional environments and organizations: Structural complexity and individualism. In W. R. Scott & J. W. Meyer (Eds.), *Institutional environments and organizations. structural complexity and individualism* (pp. 81–99). SAGE.

Scott, W. R. (2008). *Institutions and organizations: Ideas and interests* (3rd ed.). Sage Publications.

Scott, W. R., & Meyer, J. W. (1991). The organization of societal sectors: Propositions and early evidence. In W. W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 108–140). University of Chicago Press.

Sebald, G. (2020). Selektivität. In M. Berek, K. Chmelar, O. Dimbath, H. Haag, M. Heinlein, N. Leonhard, V. Rauer, & G. Sebald (Eds.), *Handbuch Sozialwissenschaftliche Gedächtnisforschung* (pp. 1–19). Springer VS. https://doi.org/10.1007/978-3-658-26593-9_9-1

Seeber, M. (2022). Efficacy, efficiency, and models of journal peer review: The known and unknown in the social sciences. In T. Engels & E. Kulczycki (Eds.), *Handbook on research assessment in the social sciences* (pp. 67–82). Edward Elgar Publishing. https://doi.org/10.4337/97818003725

Seeber, M. (2024). Changes in scientific publishing and possible impact on authors' choice of journals. *ChemTexts*, *10*(5), 1–8. https://doi.org/10.1007/s40828-024-00190-3

Seethapathy, G. S., Santhosh Kumar, J. U., & Hareesha, A. S. (2016). India's scientific publication in predatory journals. need for regulating quality of indian science and education. *Current Science*, *111*(11), 1759–1764. https://doi.org/10.18520/cs/v111/i11/1759-1764

Segupta, P. (2021). Open access publication: Academic colonialism or knowledge philanthropy? *Geoforum*, *118*, 203–206. https://doi.org/10.1016/j.geoforum.2020.04.001

Senge, K. (2006). Zum Begriff der Institution im Neo-Institutionalismus. In K. Senge & K.-U. Hellmann (Eds.), *Einführung in den Neo-Institutionalismus* (pp. 35–47). Springer VS.

Sezgin, A., Orbay, K., & Orbay, M. (2022). Educational research review from diverse perspectives: A bibliometric analysis of web of science (2011–2020). *Sage Open*, *12*(4), 1–13. https://doi.org/10.1177/21582440221141628

Shen, C., & Björk, B.-C. (2015). 'Predatory' open access: A longitudinal study of article volumes and market characteristics. *BMC Medicine*, *13*, 230. https://doi.org/10.1186/s12916-015-0469-2

Shih, C. F. (2010). Academic colonialism and the struggle for indigenous knowledge systems in taiwan. *Social Alternatives*, *29*(1), 44–47. http://faculty.ndhu.edu.tw/~cfshih/journal-articles/201003-1.pdf

Sievert, C., & Shirley, K. (2014). Ldavis: A method for visualizing and interpreting topics. *Proceedings of the Workshop on Interactive Language Learning, Visualization, and Interfaces*, 63–70. https://doi.org/10.3115/v1/W14-3110

Silge, J., & Robinson, D. (2017). *Text mining with r: A tidy approach*. O'Reilly Media.

Silva, A., & Avrichir, I. (2024). Decoupling institutional pressure: How and why academic journals do it. *International Journal of Organizational Analysis*, *32*(6), 1165–1179. https://doi.org/10.1108/IJOA-01-2023-3604

Simard, M.-A., Butler, L.-A., Alperin, J. P., & Haustein, S. (2024). We need to rethink the way we identify diamond open access journals in quantitative science studies. *Quantitative Science Studies*, *5*(4), 1042–1046. https://doi.org/10.1162/qss_c_00331

Smith, A., Merz, L., Borden, J., Gulick, C., Kshirsagar, A., & Bruna, E. (2021). Assessing the effect of article processing charges on the geographic diversity of authors using elsevier's "mirror journal" system. *Quantitative Science Studies*, *2*(4), 1123–1143. https://doi.org/10.1162/qss_a_00157

Smith, L. C. (1981). Citation analysis. *Library Trends*, *30*(1), 83–106. https://hdl.handle.net/2142/7190

Spivak, G. C. (1994). Can the subaltern speak? In P. Williams & L. Chrisman (Eds.), *Colonial discourse and post-colonial theory: A reader* (pp. 66–109). Pearson Education. https://doi.org/10.4324/9781315656496

Springer Nature. (2024a). Hybride options [Accessed December 29, 2024]. https://www.springernature.com/de/open-science/about/green-or-gold-routes-to-OA/hybrid-options

Springer Nature. (2024b). Springer Nature: Plan S sollte Autoren und Förderern die Vorteile von Open Access noch besser vermitteln [Accessed December 11, 2024]. https://group.springernature.com/de/group/media/springer-nature-plan-s/16462738

St. Clair, R. (2011). Writing ourselves into being: A review of the canadian journal for the study of adult education/la revue canadianne pour l'étude de l'éducation des adultes. *The Canadian Journal for the Study of Adult Education*, *23*(2), 27–44. https://doi.org/10.56105/cjsae.v23i2.952

Stang, R., & Becker, A. (Eds.). (2020). *Zukunft Lernwelt Hochschule. Perspektiven und Optionen für eine Neuausrichtung*. De Gruyter.

Statista. (2021). Nigeria: Durchschnittsalter der Bevölkerung von 1950 bis 2020 und Prognosen bis 2050 [Accessed January 30, 2025]. https://de.statista.com/statistik/daten/studie/1096576/umfrage/durchschnittsalter-der-bevoelkerung-in-nigeria/

Steele, T., & Taylor, R. (1994). Indian adult education and the post-colonial legacy. *International Journal of Lifelong Education*, *13*(6), 457–464. https://doi.org/10.1080/0260137940130605

Steiner-Khamsi, G. (2003). Innovation durch Bildung nach internationalen Standards? In I. Gogolin & R. Tippelt (Eds.), *Innovation durch Bildung. Schriften der Deutschen Gesellschaft für Erziehungswissenschaft (DGfE)* (pp. 141–162). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-322-80938-4_10

Stempfhuber, M. (2009). Die rolle von „open access“ im rahmen des wissenschaftlichen publizierens. *Diskussionspapiere der Alexander von Humboldt-Stiftung*, *12*(1), 116–131.

Stollfuß, S., Schindler, C., Rummler, K., Missomelius, P., & Hug, T. (2021). Qualitätssicherung für wissenschaftliche Veröffentlichungen: Für eine differenzierte und fachgerechte Betrachtung disziplinärer Publikationskulturen. *MedienPädagogik: Zeitschrift für Theorie Und Praxis Der Medienbildung*, (Statements and Frameworks), 1–4. https://doi.org/10.21240/mpaed/00/2021.10.27.X

Stollorz, V. (2018). Pseudo Journale – worum es sich handelt und wie die Wissenschaft gegensteuert.

Sun, Q., & Kang, H. (2022). Learning through academic collaborations in/with the east: North american adult education scholars' insights. *Adult Education Quarterly*, *72*(1), 3–23. https://doi.org/10.1177/07417136211050119

Süß, S. (2008). Soziologischer Neoinstitutionalismus. *WiSt - Wirtschaftswissenschaftliches Studium*, *37*(2), 63–68. https://doi.org/10.15358/0340-1650-2008-2-63

Swert, K. D. (2012). Calculating inter-coder reliability in media content analysis using krippendorffs alpha.

Tan Luc, P., Xuan Lan, P., Nhat Hanh Le, A., & Thanh Trang, B. (2022). A co-citation and co-word analysis of social entrepreneurship research. *Journal of Social Entrepreneurship*, *13*(3), 324–339. https://doi.org/10.1080/19420676.2020.1782971

Taubert, N. C., & Weingart, P. (2010). Open Access - Wandel des wissenschaftlichen Publikationssystems. In T. Sutter & A. Mehler (Eds.), *Medienwandel als Wandel von Interaktionsformen* (pp. 159–181). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-92292-8_8

Tavares de Souza, M., Dias da Silva, M., & de Carvalho, R. (2010). Integrative review: What is it? how to do it? *Einstein (São Paulo)*, *8*(1), 102–106. https://doi.org/10.1590/S1679-45082010RW1134

Taylor, E. W. (2001). Adult education quarterly from 1989 to 1999: A content analysis of all submissions. *Adult Education Quarterly*, *51*(4), 322–340. https://doi.org/10.1177/07417130122087322

Taylor, E. W., Beck, J., & Ainsworth, E. (2001). Publishing qualitative adult education research: A peer review perspective. *Studies in the Education of Adults*, *33*(2), 163–179. https://doi.org/10.1080/02660830.2001.11661452

Teixeira da Silva, J. A. (2017). Jeffrey beall's "predatory" lists must not be used. they are biased, flawed, opaque and inaccurate. *Bibliothecae.it*, *6*(1), 425–436. https://doi.org/10.6092/issn.2283-9364/7044

Teixeira da Silva, J. A., Adjei, K. O. K., Owusu-Ansah, C. M., Sooryamoorthy, R., & Balehegn, M. (2019). Africa's challenges in the oa movement: Risks and possibilities. *Online Information Review*, *43*(4), 496–512. https://doi.org/10.1108/OIR-04-2018-0152

Teixeira da Silva, J. A., & Kimotho, S. G. (2021). Signs of divisiveness, discrimination and stigmatization caused by jeffrey beall's "predatory" open access publishing blacklists and philosophy. *The Journal of Academic Librarianship*, *48*(3), 1–7. https://doi.org/10.1016/j.acalib.2021.102418

Tella, A., & Onyancha, B. (2020). Scholarly publishing experience of postgraduate students in nigerian universities. *Accountability in Research*, *28*(7), 395–427. https://doi.org/10.1080/08989621.2020.1843444

Tenzin, J., & Lee, C. (2022). Are we still dependent? academic dependency theory after 20 years. *Sociology Lens*, *35*(1), 2–13. https://doi.org/10.1111/johs.12355

Thelwall, M., & Kousha, K. (2021). Researchers' attitudes towards the h-index on twitter 2007–2020: Criticism and acceptance. *Scientometrics*, *126*(6), 5361–5368. https://doi.org/10.1007/s11192-021-03961-8

Theurer, T. (2024). Kartierung des Forschungsfeldes Politische Erwachsenenbildung auf Basis eines probabilistischen Themenmodells. *Internationales Jahrbuch der Erwachsenenbildung*, *47*, 93–119. https://doi.org/10.3278/I77017W006

Thiong'o, N. w. (1981). *Decolonising the mind. the politics of language in african literature*. Zimbabwe Publishing House.

Tijssen, R. J. W., Mouton, J., van Leeuwen, T. N., & Boshoff, N. (2006). How relevant are local scholarly journals in global science? a case study of south africa. *Research Evaluation*, *15*(3), 163–174. https://doi.org/10.3152/147154406781775904

Tonidandel, S., Summerville, K. M., Gentry, W. A., & Young, S. F. (2021). Using structural topic modeling to gain insight into challenges faced by leaders. *The Leadership Quarterly*, *33*, 1–20. https://doi.org/10.1016/j.leaqua.2021.101576

Torres, R. M. (2002). Lifelong learning in the north, education for all in the south. In C. Medel-Añonuevo (Ed.), *Integrating lifelong learning perspectives* (pp. 3–11). UNESCO Institute for Education.

Trahar, S., Juntrasook, A., Burford, J., von Kotze, A., & Wildemeersch, D. (2019). Hovering on the periphery? 'decolonising' writing for academic journals. *Compare: A Journal of Comparative and International Education*, *49*(1), 149–167. https://doi.org/10.1080/03057925.2018.1545817

Tsang, M. (2021). Decolonial? postcolonial? what does it mean to 'decolonise ourselves'? [Accessed March 03, 2025]. https://blogs.ncl.ac.uk/decolonisesml/2021/01/21/decolonial-postcolonial-what-does-it-mean-to-decolonise-ourselves/

Tuhiwai Smith, L. (2008). *Decolonizing methodologies. research and indigenous peoples*. Zed Books.

Turki, H., Fraumann, G., Hadj Taieb, M. A., & Ben Aouicha, M. (2023). Global visibility of publications through digital object identifiers. *Frontiers in Research Metrics and Analytics*, *8*, 1207980. https://doi.org/10.3389/frma.2023.1207980

UNESCO. (2021). UNESCO Recommendation on Open Science [Accessed January 03, 2025]. https://doi.org/10.54677/MNMH8546

United Nations. (2019). World Urbanization Prospects: The 2018 Revision [Accessed January 02, 2025]. https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf

van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In Y. Ding, R. Rousseau, & D. Wolfram (Eds.), *Measuring scholarly impact* (pp. 285–320). Springer. https://doi.org/10.1007/978-3-319-10377-8_13

van Leeuwen, T. (2004). Descriptive versus evaluative bibliometrics. In H. F. Moed, W. Glänzel, & U. Schmoch (Eds.), *Handbook of quantitative science and technology research* (pp. 373–388). Springer. https://doi.org/10.1007/1-4020-2755-9_17

Vanderstraeten, R. (2011). Scholarly communication in education journals. *Social Science History*, *35*(1), 109–130. http://www.jstor.org/stable/23026434

Venn, C. (2006). *The postcolonial challenge: Towards alternative worlds*. SAGE. https://doi.org/10.4135/9781446220900

Vessuri, H., Guédon, J.-C., & Cetto, A. M. (2014). Excellence or quality? impact of the current competition regime on science and scientific publishing in latin america and its implications for development. *Current Sociology*, *62*(5), 647–665. https://doi.org/10.1177/0011392113512839

Vetter, T. (2022). Who publishes what? – a bibliometric study of papers from the global south in international journals of adult education research. *Internationales Jahrbuch der Erwachsenenbildung*, *45*, 107–128. https://doi.org/103278/I72685W007

Vetter, T., Mulliez, G., & Bonn, E. (2023). Between anything goes and methodical rigor: An empirical analysis of systematic literature reviews in adult education research. *International Yearbook of Adult Education*, *44*, 141–160. https://doi.org/10.3278/I73910W008

Vetter, T., & Schemmann, M. (2021). On the dark side of open access and new expectations of scientific productivity in adult education research. *Zeitschrift für Weiterbildungsforschung*, *44*(2), 75–95. https://doi.org/10.1007/s40955-021-00182-7

Waisbich, L. T., Roychoudhury, S., & Haug, S. (2021). Beyond the single story: 'Global South' polyphonies. *Third World Quarterly*, *42*(9), 2086–2095. https://doi.org/10.1080/01436597.2021.1948832

Walgenbach, P. (2014). Neoinstitutionalistische Ansätze in der Organisationstheorie. In A. Kieser & M. Ebers (Eds.), *Organisationstheorien* (pp. 295–345). Kohlhammer Verlag. https://doi.org/10.17433/978-3-17-029171-3

Walgenbach, P., & Meyer, R. (2007). *Neoinstitutionalistische Organisationstheorie*. Kohlhammer Verlag. https://doi.org/10.17433/978-3-17-029442-4

Wallerstein, I. (1976a). *The modern world-system: Capitalist agriculture and the origins of the european world-economy in the sixteenth century*. Academic Press.

Wallerstein, I. (1976b). A world-system perspective on the social sciences. *The British Journal of Sociology*, *27*(3), 343–352. https://doi.org/10.2307/589620

Wallerstein, I. (1990). Culture as the ideological battleground of the world-system. *Theory, Culture & Society*, *7*(2-3), 31–55. https://doi.org/10.1177/026327690007002003

Wallerstein, I. (1998a). The rise and future demise of world-systems analysis. *Review (Fernand Braudel Center)*, *21*(1), 103–112. http://www.jstor.org/stable/40241417

Wallerstein, I. (1998b). *Utopistics. or historical choices of the twenty-first century*. The New Press.

Wallerstein, I. (2004). *World-systems analysis: An introduction*. Duke University Press. https://doi.org/10.1515/9780822399018

Walsh, M. P., Kaliuzhna, N., Mchunu, N., Mostafa, M., Witzig, K., & Alves, T. (2024). Open scholarship and bibliodiversity. *Information Services and Use*, *44*(4), 297–308. https://doi.org/10.1177/18758789241296760

Wark, M. (2012). *Telesthesia: Culture, communication and class*. Polity Press.

Weber, M. (1972). *Wirtschaft und Gesellschaft. Grundriss der Verstehenden Soziologie. Studienausgabe*. Verlag J. C. B. Mohr.

Wegner, P. (2023). Deutschlands Erwachsenenbildung im postkolonialen Diskurs. Über das Potenzial des Zusammendenkens von postkolonialer Theorie und der kritischen politischen Erwachsenenbildung. In P. Baquero Torres, M.-A. Boger, L. Chamakalayil, C. Chadderton, S. Spieker, & A. Wischmann (Eds.), *Jahrbuch für Pädagogik 2023. Rassismuskritik und (Post)Kolonialismus* (pp. 146–159). Beltz Juventa. https://doi.org/10.25656/01:30607

Weiss, T. G. (2009). Moving beyond north–south theatre. *Third World Quarterly*, *30*(2), 271–284. https://doi.org/10.1080/01436590802681033

Whittemore, R., & Knafl, K. (2005). The integrative review. updated methodology. *Journal of Advanced Nursing*, *52*(5), 546–553. https://doi.org/10.1111/j.1365-2648.2005.03621.x

Wickens, C. M., & Sandlin, J. A. (2007). Literacy for what? literacy for whom? the politics of literacy education and neocolonialism in unesco- and world bank–sponsored literacy programs. *Adult Education Quarterly*, *57*(4), 275–292. https://doi.org/10.1177/0741713607302364

Woll, C. (2011). *Wie lassen sich Forschungsleistungen messen? Entwicklung eines Indikators zur Anwendung auf dem Gebiet der Berufsbildungsforschung* (tech. rep. No. 131). Bundesinstitut für Berufsbildung (BIBB). Bonn. http://nbn-resolving.de/urn:nbn:de:0035-0480-9

Xia, J., Harmon, J. L., Connolly, K. G., Donnelly, R. M., Anderson, M. R., & Howard, H. A. (2015). Who publishes in 'predatory' journals? *Journal of the Association for Information Science & Technology*, *66*(7), 1406–1417. https://doi.org/10.1002/asi.23265

Yance-Yupari, V. (2018). Using open journal systems in peruvian scientific journals. *Cultura*, *32*, 353–366. https://doi.org/10.24265/cultura.2018.v32.16

Young, R. J. C. (2016). *Postcolonialism: An historical introduction*. John Wiley & Sons. https://doi.org/10.1002/9781119316817

Zitt, M., Lelu, A., & Bassecoulard, E. (2011). Hybrid citation-word representations in science mapping: Portolan charts of research fields? *Journal of the American Society for Information Science and Technology*, *62*(1), 19–39. https://doi.org/https://doi.org/10.1002/asi.21440

A Appendix

Additional figures from sub-study 2

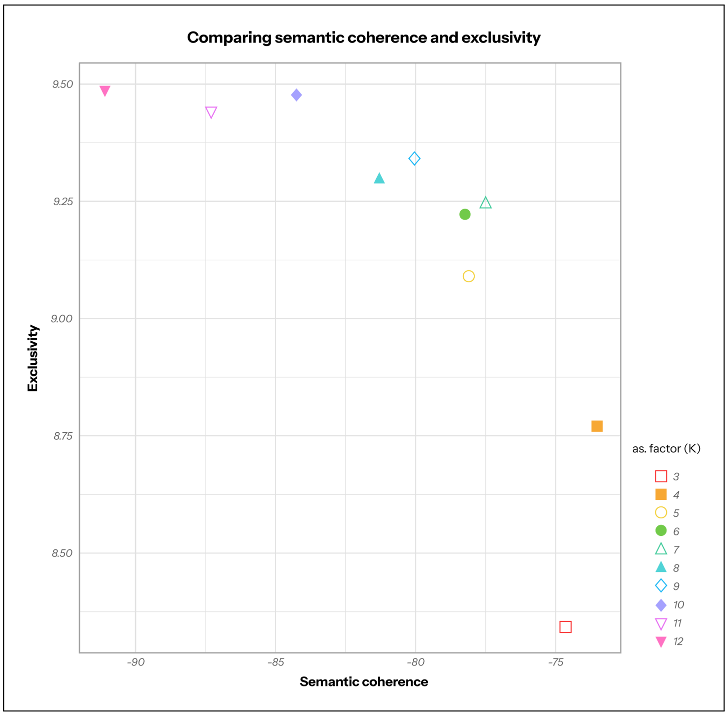

Figure 7: Overview: Quality of the topic models

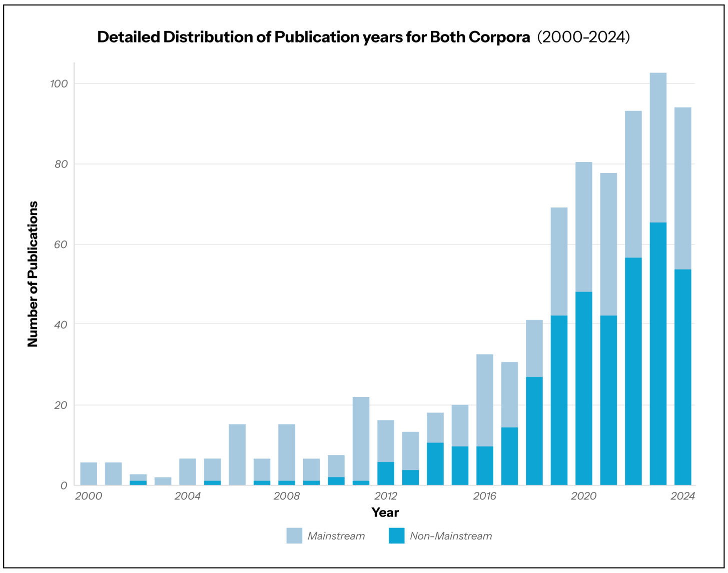

Figure 8: Detailed distribution of publication years for both Corpora

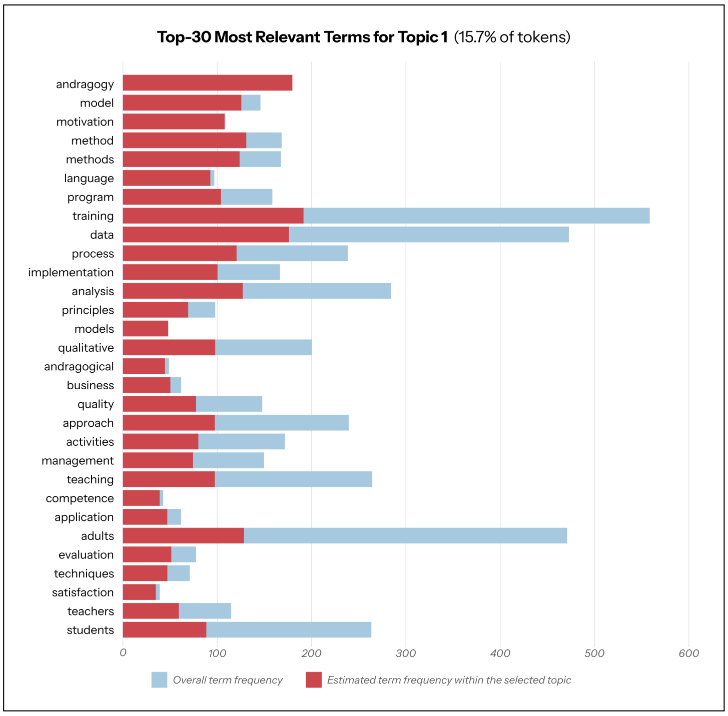

Figure 9: Topic 1 'Learner-centered implementation of andragogical concepts in practice-oriented continuing education programs'

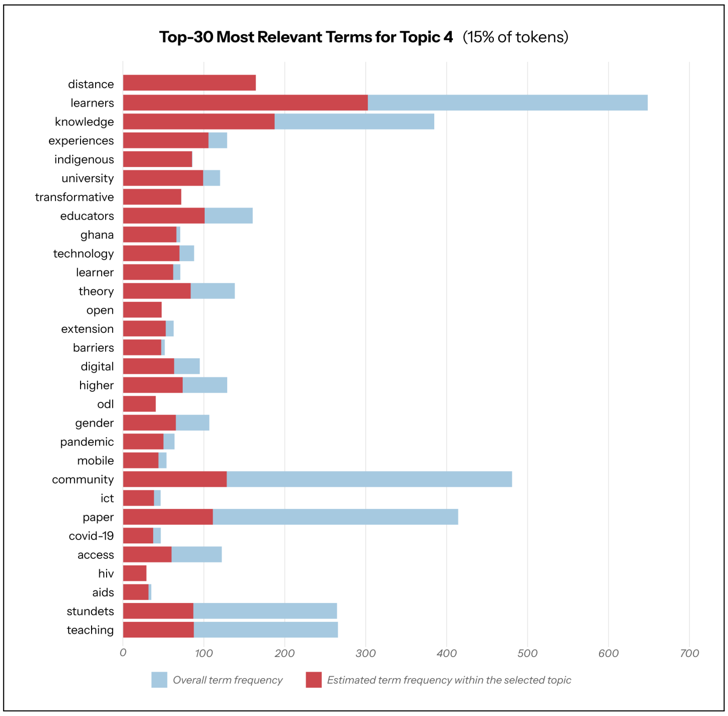

Figure 10: Topic 4 'Transformative learning in distance education contexts'

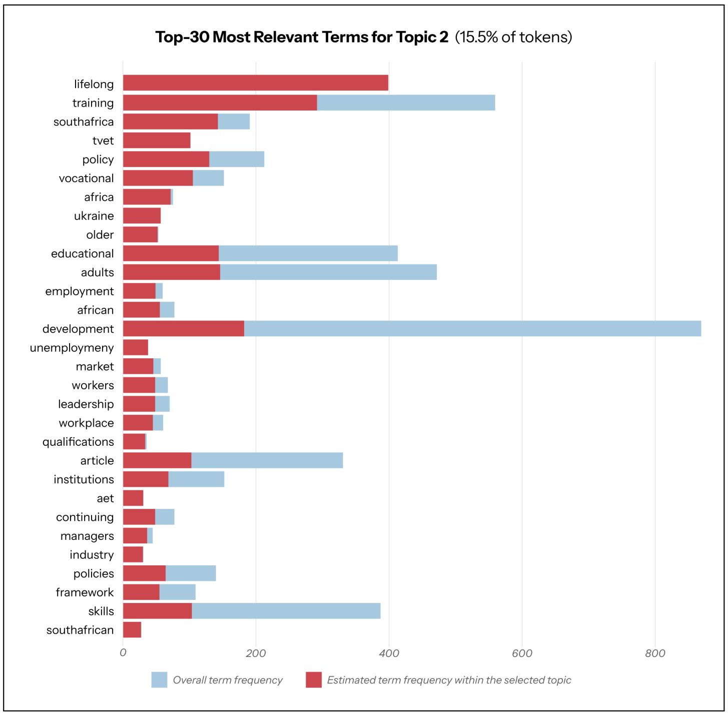

Figure 11: Topic 2 'VET and lifelong learning for employability and social justice'

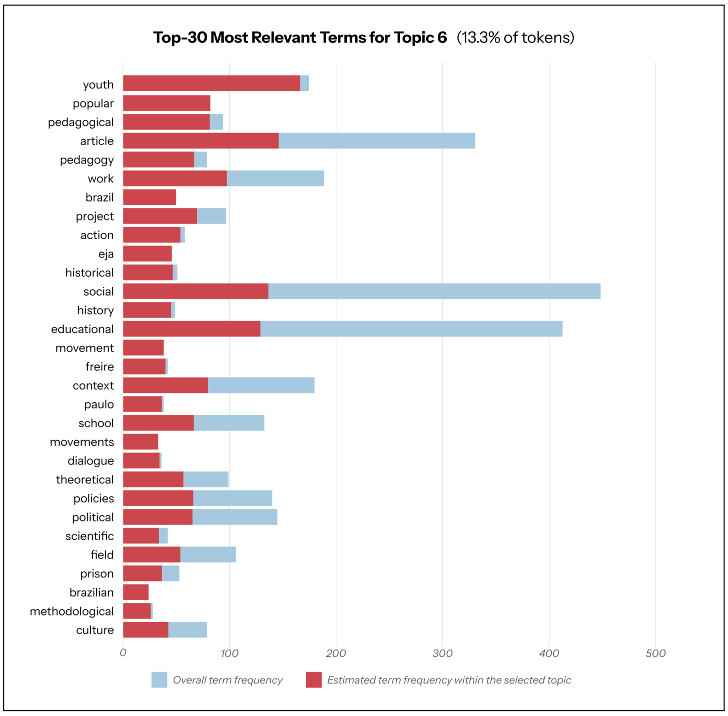

Figure 12: Topic 6 'Historical-political education perspectives in South America. Emancipation through social movements'

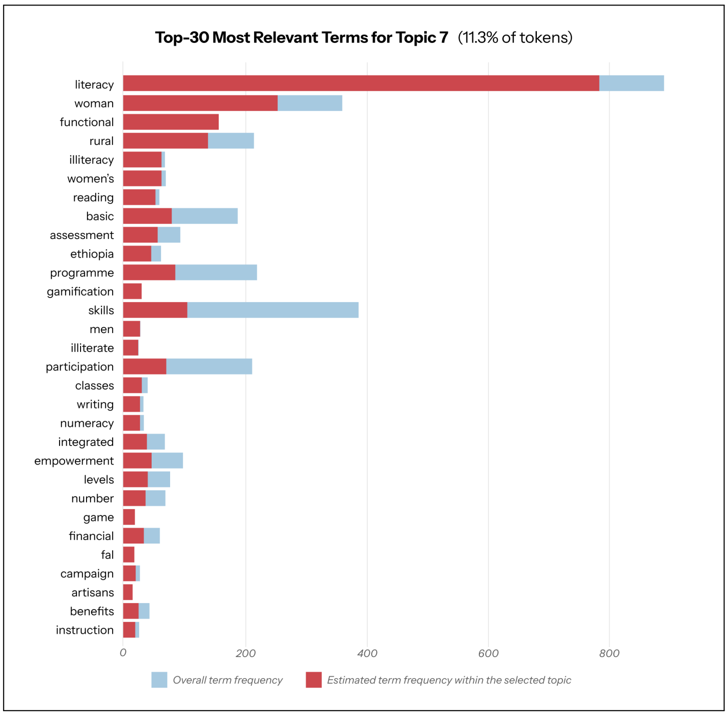

Figure 13: Topic 7 'Functional literacy and women's education. promoting autonomy and social participation in rural areas'

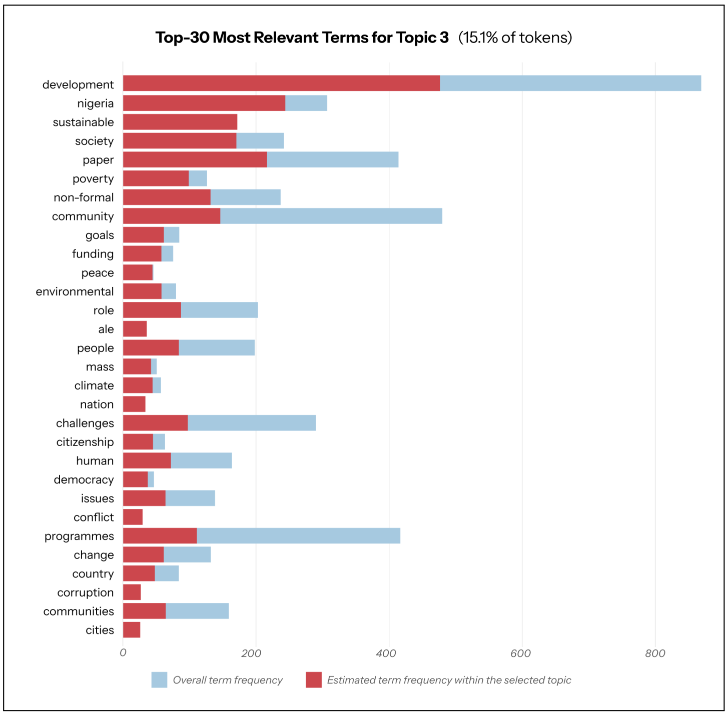

Figure 14: Topic 3 'Non-formal education for sustainable development, social justice, and climate protection'

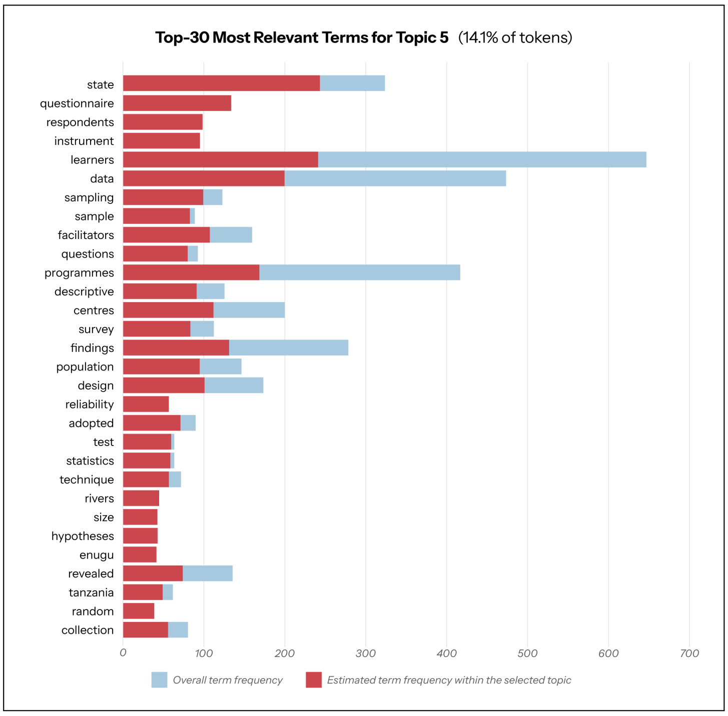

Figure 15: Topic 5 'Quantitative evaluation and data collection in regional education programs in Nigeria'