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A review and theorization of structural academic inequalities that may influence scholarly publishing

Abstract

There is a far-reaching scholarly discussion on specific structural disadvantages that might hinder getting published. This paper will cover most of these hindrances in a holistic framework. Based on an extensive literature review, a differentiation was made between disadvantages that influence career development and disadvantages that might directly influence peer review and editorial decisions, formulating specific propositions that capture the direction of potential inequalities. The theoretical summary shows that structural disadvantages might negatively affect getting published. A theoretical model showing was constructed that shows the disadvantages can be conceptually separated but in real life are intersectional in nature. These results imply that mapping the potential disadvantages behind scholarly work is essential if journals aim to publish a more inclusive and diverse set of scholarly work.

Keywords: structural disadvantage, bias, publication output, academic career

JEL classification: I23

INTRODUCTION

In line with the globalization of academic knowledge production and higher education, publishing in international journals has become a mandatory prerequisite of academic success for both research institutions and individual scholars. However, the internationalization of academia does not necessarily mean the internationalization of the publishing market. Research shows that both leading international publishers and the most prominent journals are almost exclusively located in economically developed Western countries, typically in the US, the UK and the Netherlands (Goyanes–Demeter, 2020). Thus, scholars argue that since the field of international publishing is governed by Western norms and values, scholars from non-Western world regions such as Asia, Latin-America, Africa or the Middle East might suffer severe disadvantages when they aim to publish their work (Chan–Torgler, 2020). Several factors play a significant role in publication productivity, which fall into two major categories: personal and environmental. The publication output at the level of individual researchers is strongly influenced by personal factors (such as academic rank or qualification); on the other hand, environmental and situational factors can shape the research output and productivity of organizations. However, the structural disadvantage is predominantly based on the membership of individuals in different kinds of social groups or categories, which, in

turn, is critical for one`s ability to cope with stressors related to structural disadvantage.

To situate our theoretical work, we asked how the literature reflects on the relationship between scholarly publishing and structural disadvantage. We reviewed studies focusing specifically on the defined levels of structural disadvantage and applied our reasoning in the context of research performance through a theoretical map of structural disadvantage.

This paper contributes to the existing literature on inequalities in international publishing in two fundamental ways. First, we offer a detailed literature review on structural disadvantages in global academic knowledge production. This is the first attempt to describe a set of potential academic inequalities in a common framework, addressing some propositions that capture the publishing disadvantages. Second, we offer a structural scheme to categorize different kinds of academic disadvantages. We argue that there are two levels of possible disadvantages to publishing. The first level includes those disadvantages that are related to the professional conditions and careers of potential authors that make their likelihood of publishing in international journals lower than their peers with a non-disadvantaged background. The second level categorizes those disadvantages that have an immediate relation to publishing as they are related to the information provided throughout the publishing process. Moreover, structural disadvantages influence the first and the second levels, as they are most likely associated with both the development of researchers' careers and their chances of being published in international journals.

The structure of our paper is the following: First, review the literature regarding structural disadvantages and factors influencing scholarly publishing; second, we define what we mean by structural disadvantages in scholarly publishing and how we differentiate them from personal features of academic performance such as talent, effort, achievements, and engagement; then we conceptualize the first level, second level, and cumulative (both first and second level) disadvantages to clarify how we categorized different kinds of disadvantages. After that, an extensive literature review introduces disadvantages that are most typically discussed in the literature of academic publishing and related fields, and we formulate propositions for each type that express the direction of the corresponding disadvantage. Finally, we offer a theoretical map that helps readers see the relations between different kinds of inequalities and formulate some tentative recommendations that professionals in both the publishing industry and research assessment could use if they aim to develop more inclusive policies in their corresponding fields.

1. LITERATURE REVIEW: INEQUALITIES IN SCHOLARLY PUBLISHING

Structural disadvantages can have a significant effect on both individuals and organisations. Therefore, from a knowledge management perspective, it is important to identify factors influencing the output-based metrics. At the level of researchers and organisations, it could have implications for how collaborations are managed, research performance is supported, and how individuals and research organisations should cope

with the stress triggered by structural disadvantages. While there might be a scholarly consensus about inequalities in international publishing, there are no actual policies amongst publishers, editors, or journal reviewers on how to ease the potential bias against disadvantaged scholars. Both sociologists of science and the representatives of other different disciplines investigated geographical, gender, racial and other potential favouritisms in the context of international publishing, but a specific review that integrates them in a holistic, theoretical based perspective is still missing.

In the context of an academic career, academics use their time, knowledge, and network of collaborators to contribute to global knowledge production. In an ideal situation, the scientific community, through reading and citation of their work, judge the usefulness and quality of that contribution. According to Shandera et al. (2021), the Resource, Achievement, Status and Events (RASE) framework can allow for the investigation of disparities' impact on academic career outcomes. The model shows that individuals use available *Resources* to produce *Achievements*. In the context of academic career, *Resources* allow academicians to perform their work. These resources include personal characteristics (knowledge, technical skills), monetary resources (grants, funding), social resources (time, professional network, social support) and personnel resources (graduate students, postdocs). *Achievements* are everything that a scholar would put on the CV list, such as publications, awards, invited seminars, and leadership positions. These *Achievements* are awarded by *Status. Status*, in general, is the reward from the community experiencing *Achievements. Status* is subjective and may include awards, invitations to events as a speaker, professorship, or an honorary position of affiliation. There is a high probability that *Resources* and *Achievements* can be influenced by some isolated *Events,* which, in turn, through the modification of *Resources* and *Achievements*, influence the *Status*. In this context, *additional Resources* are needed to repeat the cycle. These *Events* in a career trajectory are not controlled by individuals but are related to the internal and external environment and can have a positive or negative impact on the *Resources.*

The RASE model is a suitable tool for faculties to investigate how faculty members experience systematic disadvantages during academic career development. From the perspective of structural disadvantages, this framework is a potential tool to explore, at the initial step, how structural disadvantages can influence Resources (individual academicians, researchers), which can result in altered Achievement (scholarly publishing activity, development in academic career) and consequent Status (the recognition of researchers through their achievements).

Although structural disadvantages are an existing phenomenon in academia, the scientific literature focused mainly on the psychological effect of societal devaluation, such as the importance of connectedness (interpersonal relations or shared group identities) in coping with structurally induced stressors, personality, flexibility, emotional stability, sociability and independent activities. These conditions impact the satisfaction and effectiveness of academicians' activities and publication productivity. There are some other keywords used by researchers on the level of individuals, which can be connected to structural disadvantages. Ortlieb and Weiss (2018) asked what makes

academic careers less insecure. They found that the most important factors at the level of individuals decreasing academic insecurity are the willingness of mobility, self-attribution of previous career success, high proportion of working time spent with research and networking, and advanced career stage. Ogunsola et al. (2020) concluded that the desire for personal development, promotion, and respect from peers are the most prominent personal factors influencing research productivity. Demeter and Istratii (2020) highlighted the presence of global inequalities in publishing and knowledge production perpetuated by hybrid open-access publishing models. Rojo (2021) reflected on different academic inequalities occurring within academic spaces. The unequal distribution of economic and symbolic resources and the lack of recognition or misrecognition of individuals were named the most impactful inequalities. Deem et al. (2022) investigated inequalities in higher education. They showed that researchers studying inequalities came from several research fields, but only some are engaged in research. They also participate in teaching activities, as well as in the administration of their institutions. In this sense, many, but not all, inequality researchers have a personal interest in the research topic, and with high probability, they have knowledge and experience of discrimination.

There is also an ongoing discussion about different types of biases during the scientific peer-review process, such as gender bias, geographical bias or language bias. Thus, gender, geographical location/affiliation, and language can create a disadvantage when it comes to publishing.

Although the literature focusing on factors influencing scholarly publishing is extensive, the review of structural disadvantages having an impact on the performance and academic career of researchers is still missing; our paper fills this gap.

2. METHODOLOGY

We first performed a systematic literature review to evaluate and interpret published research relevant to structural disadvantage. The inclusion criteria were: Web of Science indexed research article or review (without the restriction of publication date); language: English; focusing on structural disadvantage. The exclusion criteria contained documents without download permission and non-English research papers.

With this approach, we collected 261 research articles and 11 review articles. Some titles were removed, as they were not relevant to our research question. A total of 107 research papers were included for further studies. The thematic data analysis allowed us to identify the three different levels of structural disadvantages discussed in this study.

We identified different categories of structural disadvantage within each level of structural disadvantage, summarized in Table 1. For each category, a systematic literature review was performed in the Web of Science database. The inclusion criteria were: research article; language: English; and focusing on the identified category of structural disadvantage.

Table 1 The three levels of structural disadvantages with appropriate categories included for further literature research

First level structural disadvantage	Second level structural disadvantage	Cumulative disadvantages
Family status	Seniority, impact and co-authorship	Gender disadvantages
Parental background	Affiliation bias	Geopolitical disadvantages
Minority position	Linguistic disadvantages	
Sexual orientation		
Country of origin		
Teaching load		
Disabilities		
Caregiver		

Source: Own table

3. RESULTS

3.1. PROBLEMATIZING STRUCTURAL DISADVANTAGE

The paper assumes that structural disadvantages are not contingent upon individual behaviour. Structural disadvantages are hinged on external (contextual or personal) factors/biases that affect scholars' research output to a great extent (Demeter, 2020). These factors do not depend on what scholars do or accomplish (voluntary behaviour) but are determined by societal features that are given and cannot be changed by individual scholars. Accordingly, factors associated with voluntary or intentional behaviour are not considered structural. We define voluntary behaviour as all individual strategies that change the course of actions and that can be relatively appraised *a priori.* For example, if scholars decide to have kids, they voluntarily decide to have kids, which can change their life course, including their career trajectory. Other scholars might decide to avoid having kids because it may jeopardize their careers (Cameron et al., 2016). That is why having kids is not a structural disadvantage because scholars know *a priori* that having kids most likely implies changing career trajectories. Therefore, structural disadvantages are those conditions that do not depend on scholars' decisions or efforts but on predetermined structural conditions such as gender, country of origin, economic status and other societal features discussed below.

3.2. FIRST LEVEL OF DISADVANTAGES

Structural features that make the related scholars' professional work and career development harder are categorized as first-level disadvantages. These features are generally considered a burden to an academic career. In our categorization schema, first level disadvantages work without direct relation to article submissions, but they have an unquestionable indirect effect on publication success. In the following paragraphs, we introduce the most frequently discussed types of first level disadvantages.

3.2.1. FAMILY STATUS

As far as we know, the relationship between family status (financial status, poverty) and research performance/academic career has not been studied directly. However, previous studies show that family background affects children's educational achievement and academic performance (Li–Qiu, 2018). Family income can significantly influence children's academic and educational development in middle to late childhood (Cheang–Goh, 2018). Poverty has a negative impact on the enrolment of disadvantaged children to higher educational institutions and subsequent academic achievement (Dahill-Brown et al., 2016). The achievement gap between lower and higher income children is present at both school entry and educational achievement, as well as at the level of excellence. Students from low-income families are generally under-represented in talent programs (Peters–Engerrand, 2016). However, the literature focusing on the follow-up of talented students at higher educational institutions and/or academic performance is missing. Thus, our proposition in relation to familiar background is that

Scholars whose families had a poor financial position are disadvantaged when it comes to publishing in international journals (Proposition 1a).

3.2.2. PARENTAL BACKGROUND

Poor academic performance of children can be attributed to several factors, including their family size and status. Family financial resources are associated with parents' educational attainment, indicating that the educational background of parents affects the socio-economic status of the family, directly affecting children's academic performance (Schlechter–Milevsky, 2010). Thus, the suitable family background and the higher educational level of parents might predict better academic achievement and occupational status in adulthood, which can be manifested in future research performance. If we consider that material, cultural, and social resources influence the performance and achievement of students, then it can have a long-lasting effect on the performance of young adults and future researchers. Thus, our proposition is that

Scholars whose parents had strong academic backgrounds are advantaged when it comes to publishing in international journals (reversed effect) (Proposition 1b).

3.2.3. MINORITY POSITION

It is extremely difficult to reveal why minority people are underrepresented in academic publishing. The "underrepresentation" of minorities is an existing phenomenon, but the exact mechanism beyond that is unknown. Powell (2017) found that PhD candidates belonging to underrepresented minority ethnic groups are half as likely to submit research for publication as their non-underrepresented minority group counterparts. Still, the reason behind this finding is an open question. In addition, Hofstra et al. (2020) analysed data from nearly all US PhD recipients, including their dissertation (for nearly 30 years) and found that demographically underrepresented students innovate at a higher rate than the majority of students. Still, their novel contributions are less likely to provide them with academic positions, which could partially explain their underrepresentation in influential positions in academia and international journals.

A recent mind-provoking paper (Wild, 2019) found that in 2014 in South Africa, black academics authored 18% of research papers, 10% of papers were attributed to Indian researchers, and 4% to multiracial researchers. In general, these researchers produced approximately 3.5% of South Africa's research output in 1990, and this proportion increased to 32%. The white population comprises only 8% of the inhabitants but occupies half of the university posts, and their representation as journal authors is higher than 60%. Moreover, it has been shown by Ginther et al. (2018) that publications can serve as predictors of racial and ethnic differences in NIH research awards. They collected metadata from 2,937 Biographical Sketches submitted between 2003 and 2006 including training, scholarly activities and publications. In the presence of crucial data, the authors analysed the relationship between the race and ethnicity of the applicants and the probability of receiving a grant. Their data regarding publication history and associated bibliometric revealed that black applicants reported significantly fewer papers and fewer citations, and their papers were published in journals with a lower impact factor. Thus, the authors suggest that there is a strong black/white funding gap; however, this is based on the scores on applications, including publication data. According to that, our next proposition is that

"Minority people are disadvantaged when it comes to publishing in international journals" (Proposition 1c).

3.2.4. SEXUAL ORIENTATION

Sexual orientation is not testable at the level of manuscripts of research papers directly; however, based on self-declarations of LGBT+ researchers, such as "feeling invisible" (Powell, 2017), we can assume that sexual minorities face several systemic burdens during their academic careers. Hughes (2018), for example, found that sexual minority graduates were 7% less likely than heterosexuals to stay within their STEM degrees. As reviewed in a Nature report (Gibney, 2019), nearly one-third of physical scientists from sexual and gender minorities considered leaving their job because of their workplace climate. Thus, our proposition regarding sexual orientation and publishing success is that

LGBTQ+ scholars are disadvantaged when it comes to publishing in international journals (Proposition 1d).

3.2.5. COUNTRY OF ORIGIN

The analysis of published research toward high- and low-income countries and institutions revealed a global North-South research gap, which still exists. Thus, the highest scientific contribution originates from the US, UK, Canada, Australia, and Europe (Skopec et al., 2020). Moreover, North America and Europe receive 42.3% and 35.3% of the world's citations, and the global contribution to all research activity of Africa, South America, and Oceania is less than 5% (Bornmann et al., 2014). Extensive literature discusses that scholars from peripheral world regions face severe academic burdens, including burdens to accumulate linguistic, academic, social and institutional capital (Demeter–Goyanes, 2021). Thus, our proposition is that

Scholars born in economically less wealthy (noncore) countries are disadvantaged when it comes to publishing in international journals (Proposition 1e).

3.2.6. TEACHING LOAD

In their report, Wolszczak-Derlacz and Parteka (2010) presented an empirical analysis of the scientific productivity of Polish higher education institutions. They found that the teaching load negatively impacts the research performance measured by a number of publications in Poland. Rørstad and Aksnes (2015) highlighted that tenured personnel at Norwegian universities tend and are able to dedicate approximately 40% of their working time to research. They also found that the publication activity of associate professors is generally 20–30% lower than the publication activity of professors, and post-docs have a lower publication rate than their professors. The lowest publication rate is associated with PhD students. According to Hattie and Marsh (1996), the rank of researchers influences the time spent on teaching, so academics at lower ranks are more likely to expend more time on teaching responsibilities; in addition, researchers or academicians devote more of their time to teaching and service activities produce less research output. Thus, our proposition is that

Scholars with many lectures (being on a lecturer or teaching track) are disadvantaged when it comes to publishing in international journals (Proposition 1f).

3.2.7. DISABILITIES

For people with disabilities, the possibility of performing research is becoming more difficult. This has been investigated from a personal perspective. Ableism is an endemic phenomenon within academia and the disclosure of an illness can lead to stigmatization within the workplace. Some researchers found that disadvantaged scholars are not taken seriously, and their research output is considered through the lens of a disabil-

ity (Brown–Leigh, 2018). Moreover, the proportion of disabled within academia is still lower than the proportion of disabled within society. Thus, our proposition is that

Scholars with a permanent illness are disadvantaged when it comes to publishing in international journals (Proposition 1g).

3.2.8. CAREGIVER

Generally, taking care of someone is time-consuming and sometimes extremely strenuous mentally and physically. Personal stories show how caregiving influences a scientific career. Moreover, Woolston (2019) revealed that 10% of PhD student–respondents were responsible for caring for a child under 12, and the same proportion said they were taking care of an adult. Thus, our proposition is that

Scholars in charge of relatives (sons, daughters, fathers, etc.) with a permanent illness are disadvantaged when it comes to publishing in JCR journals (Proposition 1h).

3.3. SECOND LEVEL OF DISADVANTAGES

Second level disadvantages are those structural features that make the publication of a given paper harder in themselves. These features are generally considered a burden to publishing in top-tier international journals. Empirical evidence shows that, given the same quality, those papers submitted by females, other than white, non-Western and other disadvantaged authors, are more likely to be rejected from top journals. Recently, some leading international journals even made it mandatory to indicate the place of authors' PhD diplomas in the submission site, which can be another source of prestige bias. In our categorization scheme, second level disadvantages work on the level of publication chances, so only those features can be conceived as a second level disadvantage that the submission metadata itself can grasp.

3.3.1. SENIORITY, IMPACT AND CO-AUTHORSHIP

It has been shown by Li et al. (2019) that junior researchers co-publishing with top researchers have a higher probability of becoming highly cited. Moreover, they found a positive correlation between institutional prestige and co-authorship with leading scientists and the institution's prestige and the likelihood of becoming a top-cited scientist. Additionally, there is a possibility of publication bias by which scholars from noncore regions try to connect with co-authors from central countries to make it easier to publish their work in international journals. For some countries, such as Brazil, collaboration with academicians in the Anglosphere is crucial to be highly cited (Martinez–Sá, 2020). Thus, our proposition is that

Highly cited scholars or scholars who publish with highly cited scholars are advantaged when it comes to publishing in international journals (reversed) (Proposition 2a).

3.3.2. AFFILIATION BIAS

The study of Tomkins et al. (2017) showed that single-blind reviewing confers a significant advantage to papers with famous authors or authors from high-prestige institutions. The importance of institutions in publishing was suggested and supported by Piper and Wellmon (2017)\"Publication, Power, and Patronage: On Inequality and Academic Publishing,\" Critical Inquiry (forthcoming, who found that the top 20% of universities represented 86% of published papers in four leading humanities journals. The top 10% of universities counted 51% of papers. They conclude that the power and influence of elite institutions extend to publishing. The affiliation or prestige bias is an existing phenomenon, especially where reviewers and authors are in a formal or informal relationship with leading research institutions. Thus, our proposition is that

Scholars enrolled in top universities are advantaged when it comes to publishing in international journals (reversed) (Proposition 2b).

3.3.3. LINGUISTIC DISADVANTAGES

Politzer-Ahles et al. (2020) provided preliminary evidence of linguistic bias in academic reviewing by analysing the relationship between "good research" and "good English". In their experiment, the scientific content of four abstracts was the same, but the type of English was different, indicating that one was written by a native English speaker wrote and the others were not. They found that non-standard abstracts were labelled as poor compared to standard English ones. On the level of scientific papers, Saposnik et al. (2014) found that the acceptance rate of papers from English-speaking countries was higher compared to non-English speaking ones (29.9% vs. 15.8%). Moreover, on the level of reviewers, it has been shown by Link (1998) that non-US reviewers rank US papers slightly more favourably than non-US papers. Thus, our proposition is that

Scholars in English-speaking countries and English academic institutions are more advantaged when it comes to publishing in international journals (Proposition 2c).

3.4. CUMULATIVE DISADVANTAGES

Cumulative disadvantages are structural features that work on the first and second levels. The non-core position is a typical example. Poor education, poor financial and institutional background are severe burdens to high-quality research (1st level), and editors–and in the case of single-blind review, reviewers as well–have information on the affiliation of the scholar that submitted the paper and, according to empirical evidence, it might make them biased against the paper at some level (2nd level). The same holds for gender (it is harder for women to lead an academic career, and editors/reviewers might also be biased against female authors).

3.4.1. GENDER DISADVANTAGES

The academic career progress of female scholars is generally thought to be burdened by several, in most cases, interconnected factors. From a legion of possible social factors that hinder the career of women, we should mention the unfavourable distribution of family and household responsibilities in which women are typically disadvantaged, the possible career gaps that can be associated with childcare, the role stereotypes, unequal salaries or the higher dropout probability for females. Moreover, gender inequalities are more prominent on higher academic ranks. This can point out the cumulative nature of gender-based inequalities (Chan–Torgler, 2020; Demeter–Toth, 2020).

Submission-level disadvantages can be added to the disadvantages. Female scholars most likely face it throughout their academic career development. It has been statistically proven by Knobloch-Westerwick et al. (2013) that abstracts from male authors were associated with greater scientific quality evaluation than abstracts from female authors. Moreover, the male-typed topics received significantly higher ratings when they were authored by male authors (as opposed to female writers). They have also shown that female authors evoked greater collaboration interest if they worked on female-type topics, and male authors induced greater collaboration interest in male-type topics. The gender bias and the position-reach disbalance in the proportion of female scholars were studied by several authors. The conclusion is that there might be a considerable Matilda effect in science. For example, Fox and Paine (2019) found that the papers were equally likely to be sent for peer review by males and females. However, slightly worse peer-review scores were obtained for manuscripts with female first-author, and the possibility of rejection was also higher. Edwards et al. (2018) did not find a relationship between the gender pattern of authorship and the editorial decision in the Journal of Evolutionary Biology. However, they found significant differences between the representation of male and female authors within individual papers: female first-authors were six times less likely to be named as corresponding authors, and females were under-represented as first- and last authors compared to the baseline population of members of the European Society for Evolutionary Biology that published the abovementioned journal. In an earlier study Sabatier et al. (2006) examined the academic profiles of researchers, which were based not only on publications, but also on activities such as fund raising, teaching, managerial appointments and consulting. Their constructed model showed that women must demonstrate higher involvement in different networks than their male peers to be promoted (i.e., the transition from researcher status to higher senior scientist status). Moreover, the "transition" from one position to another at an academic level took more time for woman. Thus, our proposition is that

Female scholars are disadvantaged when it comes to publishing in international journals (Proposition 3a).

3.4.2. GEOPOLITICAL DISADVANTAGES

Similarly, to the cumulative nature of gender-based disadvantages, geopolitical bias also works on both the first and second levels. Amongst first level disadvantages, we have to mention the poor infrastructural and educational conditions of peripheral researchers, the low salaries that might drive peripheral researchers to have second and third jobs beyond academia, the absence of professional research support, and the epistemic dependency on the centre in terms of language, methodology and theorization (Demeter–Goyanes, 2021).

First level disadvantages are further reinforced on the second level when peripheral researchers might face bias regarding both research production and impact. Gonzalez-Brambila et al. (2016) analysed the scientific impact of developing nations. They found that developed countries outperform developing countries in all analysed dimensions (publication/researcher, citation/researcher, resident patents/unit of GDP, GERDS as % of GDP, BERD as % of GDP, citation/unit of GDP). They also found the measured publications and citations have an international collaboration bias for developing countries. Iyandemye and Thomas (2019) developed a computational pipeline that identifies the country of affiliation of an author from the PubMed database. They focused on biomedical journals and showed that the number of papers in high-income countries is higher compared to low-income countries. Skopec et al. (2020) analysed the geographic bias in knowledge diffusion. They found that a global North-South research gap still exists, with the most scientific contributions from the US, UK, Canada, Australia and Europe. Moreover, the citation counts increase exponentially with the increase of the gross domestic product. They say that low-and middle-income countries face a bias against the country from which the research originates, which can overwrite the scientific capability, production, and quality of research. Harris et al. (2017) performed a randomized, blinded crossover experiment with 347 English clinicians in the US (from 551, but only 63% responded) and showed that changing the source of a research abstract from a low- to a high-income country significantly improved how the study is viewed. The high-income country as a source or origin had a significant overall impact on respondent's ratings of relevance and recommendation to a peer.

The country of origin significantly affects the "path" of research papers, when 12 papers with altered authorships were resubmitted to the same journal, only one was submitted again, suggesting a strong geographical bias during the peer-review process (Peters–Ceci, 1982) accountability, reviewer bias, and competence have been raised, there has been very little direct research on these variables.The present investigation was an attempt to study the peer-review process directly, in the natural setting of actual journal referee evaluations of submitted manuscripts. As test materials we selected 12 already published research articles by investigators from prestigious and highly productive American psychology departments, one article from each of 12 highly regarded and widely read American psychology journals with high rejection rates (80%). The change of source of a research abstract from a low- to a high-income country signifi-

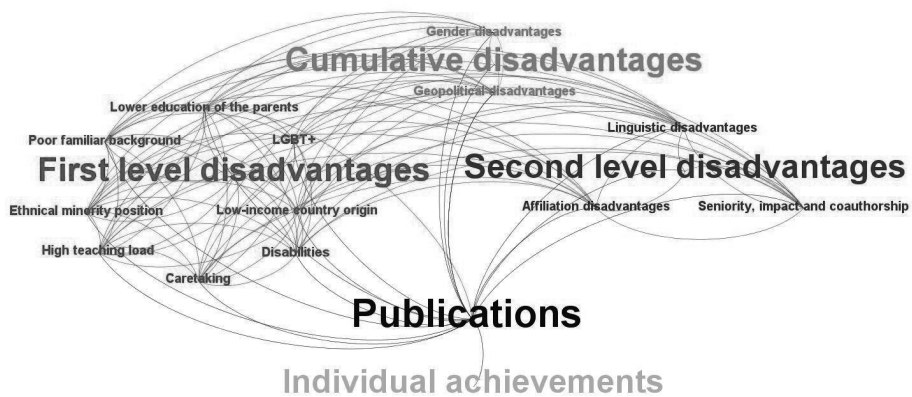
cantly improved how clinicians view the study; however, authors say that this is rather unconscious and there is a far-reaching implication for the diffusion of knowledge and innovation from low-income countries. In addition, Tomkins et al. (2017) performed a controlled experiment in which four committee members reviewed the presented papers: two had access to the author information, and two were reviewing blind. The results supported geographical bias in that those reviewers who had access to author information bid for 22% fewer papers and preferentially bid for papers from top universities and companies. Thus, our proposition is that

Scholars from geopolitically peripheral regions are disadvantaged when it comes to publishing in international journals (Proposition 3b).

3.5. A THEORETICAL MAP OF DISADVANTAGES IN ACADEMIC PUBLISHING

Based on our literature review and our propositions, we propose a theoretical map to represent academic disadvantages when assessing research performance. The idea is to capture global achievement behind academic records by considering all difficulties and disadvantages faced by different researchers (Figure 1).

Figure 1 A theoretical map of structural disadvantages in academic publishing



Source: Own Figure

Our model on the structural disadvantages in academic publishing shows not just the structure of disadvantages on three levels but also sheds light on the intersectional nature of inequalities. Indeed, while first, second and cumulative disadvantages can be conceptually differentiated, an individual set of disadvantages that corresponds to a given scholar is always intersectional and probably includes disadvantages from different levels.

Several studies argue that social disadvantages are intersectional and cumulative (Demeter, 2020). For example, it is even harder to build an academic career for black

female scholars than for their male peers, not to mention the relative advantages of white male scholars (Chakravartty et al., 2018). However, family background or the country of residence have their effect, too, as, despite possible gender inequalities, female scholars with a diploma from Harvard and an affiliation at an Ivy League university could publish easier than their male peers from low ranked Global South – or even from lower ranked American – universities. The number of possible combinations of disadvantages is endless, however, individual achievements and efforts that obviously influence research production and publication should also be analysed (Goyanes–Demeter, 2021).

Our map of publishing disadvantages could be used in the context of a hiring process and grant applications to provide a fair comparison between researchers from different backgrounds. Moreover, if journal editors aim to select the best and the most diverse research to publish, they might want to consider structural disadvantages, especially those unconscious biases that can be burdening to publishing the works of disadvantaged scholars, even if they conducted highly valuable research. With a more conscious focus on possible disadvantages behind scholarly work, publishers and editors can develop more inclusive policies for assessing and selecting manuscripts. In line with a recent discussion on balancing inclusion and high-quality research (Chakravartty et al., 2018), we agree that research excellence should be the fundamental compass in publishing. Notwithstanding, this paper aims to point out that if we increase inclusiveness and diversity in publishing, we need to consider the wide arsenal of structural inequalities behind academic achievements, research and publication processes.

4. CONCLUSIONS

The aim of this study was to highlight structural disadvantages affecting scholarly publishing. Our results, based on the literature review, bring us to a fundamental question of whether it would be possible to modify the structural position of researchers and research organizations and how these changes can influence the relationship between structural disadvantages and metrics of research performance. Our study demonstrates three different levels of structural disadvantages; however, the weight of individual categories within different levels is still unclear. The major challenge is the methodological difficulty because the majority of structural disadvantages cannot be extracted from individuals' curriculum vitae or research papers. To analyse in more detail the interconnectedness and structural position of a researcher and research organizations may help to answer this question. Personal features can always be considered a burden on an academic career–especially first level disadvantages. They indirectly affect getting published; however, they cannot be identified during the paper submission process. Therefore, these scholars, experiencing higher barriers according to their life situation, must learn how to cope with these difficulties. On the other hand, second level disadvantages can be mitigated by direct intervention by researchers and research organizations. For example, one can avoid linguistic penalties by increasing the quality of the manuscript from the English language perspective.

We are aware that all studies are subject to limitation. First, we acknowledge that we did not have full access to all research papers despite using online databases for research paper searches. In this case, we used only abstracts for review. Second, the term "structural disadvantage" is used less than other keywords, such as "academic inequality" or "bias". To this end, research papers used in this study are not covering all research papers focusing on structural disadvantages. However, this detraction does not impact the validity of the findings.

In summary, this paper expands on the way structural disadvantages can affect scholarly publishing. The result can substantially affect interventions for both individuals and research organizations. Inequalities have been an intrinsic feature of science and can serve as a stressor for those not highly recognized in the science society. The limited recognition of scholars based on their internally and externally influenced performance by structural disadvantages can have a profound effect on motivation and a further drop in the scientific output of individual researchers. Research institutions need to recognize the existence of structural disadvantages and perform an appropriate analysis of their researchers. Although mitigating these disadvantages is not the responsibility of research institutions, the consequence of these factors influencing scholarly publishing activities and academic careers can be reduced by an appropriate internal policy focusing on researchers' increased motivation and well-being.

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