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Response of Local Academia to the Internationalization of Research Policies in a Non-Anglophone Country¹

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Abstract: World University Rankings (WUR) are growing in prominence in the eyes of governments and universities around the world. Often this encourages the introduction of state- or institution-wide policies and regulations that put academics and graduate students under performative pressure to publish in international, peer-reviewed journals with a high impact factor (e.g., Scopus- or Web of Science-indexed journals). Such publication requirements are part of the broader internationalization of research (IoR) policies being

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implemented in many countries. This article adopts a faculty-based perspective and explores the response of academia to IoR policies in Kazakhstan, a developing country that actively pursues a strategy of integrating local academia into the global scientific community. The authors develop a typology of responses based on a literature review to guide the data collection and interpretation. Data for this study were collected through document analysis and semi-structured interviews. Findings suggest that IoR policies lead to a variety of responses from academia, including gaming and token conformity.

Keywords: internationalization of research; Kazakhstan; publish or perish; academic integrity; research practices; scientific community

Resposta del mundo académico local a la internacionalización de las políticas de investigación en un país no anglófono

Resumen: Las clasificaciones mundiales de universidades (WUR) están ganando importancia a ojos de los gobiernos y las universidades de todo el mundo. A menudo, esto fomenta la introducción de políticas y regulaciones a nivel estatal o institucional que ponen a los académicos y a los estudiantes de posgrado bajo una importante presión en cuanto a su rendimiento, para que publiquen en revistas internacionales revisadas por pares con un elevado factor de impacto (p. ej., revistas indexadas en Scopus o Web of Science). Estos requisitos de publicación son parte de unas políticas de internacionalización de la investigación (IoR) más amplias que se están implementando en muchos países. Este artículo adopta una perspectiva centrada en el personal docente y explora la respuesta del mundo académico a las políticas de IoR en Kazajistán, un país en desarrollo que sigue de manera activa una estrategia de integración del mundo académico local dentro de la comunidad científica global. Los autores desarrollan una tipología de respuestas basada en una revisión de la literatura para guiar así la recopilación e interpretación de los datos. Los datos para este estudio se han recopilado mediante el análisis de documentos y entrevistas semiestructuradas. Los hallazgos sugieren que las políticas de IoR conducen a una gran variedad de respuestas por parte del mundo académico, incluidos los juegos y la conformidad de las pruebas.

Palabras-clave: internacionalización de la investigación; Kazajistán; publicar o perecer; integridad académica; prácticas de investigación; comunidad científica

Resposta da academia local à internacionalização das políticas de pesquisa em um país não anglófono

Resumo: O World University Rankings (WUR) está tendo um destaque cada vez maior perante governos e universidades em todo o mundo. Frequentemente, isso incentiva a introdução de políticas e regulamentos estaduais ou institucionais que colocam acadêmicos e alunos de pós-graduação sob pressão de performance para publicar em periódicos internacionais revisados com um alto fator de impacto (por exemplo, os periódicos indexados Scopus ou Web of Science). Esses requisitos de publicação fazem parte das políticas mais amplas de internacionalização da pesquisa (IdP) que estão sendo implementadas em muitos países. Este artigo adota uma perspectiva baseada no corpo docente e explora a resposta das universidades às políticas de IdP no Cazaquistão, um país em desenvolvimento que busca ativamente uma estratégia de integração das universidades locais à comunidade científica global. Os autores desenvolvem uma tipologia de respostas com base em uma revisão da literatura para orientar a coleta e interpretação dos dados. Os dados para este estudo foram coletados por meio de análise documental e entrevistas semiestructuradas. As descobertas sugerem que as políticas de IdP conduzem a uma variedade de respostas das universidades,

incluindo conformidade de jogos e tokens.

Palavras-chave: internacionalização da pesquisa; Cazaquistão; publicar ou perecer; integridade acadêmica; práticas de pesquisa; comunidade científica

Response of Local Academia to the Internationalization of Research Policies in a Non-Anglophone Country

The internationalization of higher education (HE) has many aspects, including internationalization strategies and policies, student and academic mobility, curriculum, and research (Mihut et al., 2017). Among these aspects, student mobility and national or institutional internationalization strategies have received major attention from scholars, whereas the number of studies on the internationalization of research (IoR) is limited (Woldegiyorgis et al., 2018). This might be due to perceptions of research as inherently an international activity (Rostan et al., 2014). Some scholars propose a term re-internationalization of research, which is ongoing in the context of higher education globalization (Teichler, 2004). Although “academe has always been international in scope” (Altbach, 2004, p. 24), the increased competition among nations and universities to advance in World University Rankings (WUR) and in Research and Development (R&D) has led to the adoption of IoR policies in non-anglophone countries, as major WURs calculate research impact and rankings based on publications in Scopus- or WoS indexed-journals that are predominantly published in English.

We can define internationalization as multiple ways, strategies, or policies to “cope with or exploit globalization” (Altbach, 2004, p. 6). IoR involves “de-bordering of research activities and patterns of contacts between academic staff that cross-cut, redefine and obscure territorial borders” (Trondal, 2010, p. 352). While it is impossible to reverse the globalization process, governments, institutions, scholarly communities, and individuals can adopt certain measures in response to it. Government- and institution-level strategies towards IoR are well documented (Antelo, 2012; Dewey & Duff, 2009; Jones & Oleksiyenko, 2011; Pohoryles & Cvijetic, 2002). They include but are not limited to requirements for international collaboration when applying for grants and the use of quantity and impact (measured by journal impact factor or number of citations to article) of publication in international peer-reviewed journals indexed in Scopus and Web of Science Core Collection as the main indicators of research productivity. The tenure and salaries of faculty often depend on such quantitative productivity indicators.

Despite state bureaucracy and university managers’ efforts to internationalize local scientific communities, the outcome mostly depends on how faculty members respond to these policies and strategies. Compared to other aspects of HE internationalization, IoR requires extensive collaboration on the faculty level. For example, internationalization through student mobility mostly depends on managerial expertise and implementation, with faculty contribution limited to classroom activities (Woldegiyorgis et al., 2018). Whereas IoR can be viewed as an endogenous process led by individual scholars with constrained ability of hierarchical governance structures to affect its outcomes (Trondal, 2010). Moreover, internationalization policies designed by administrators for commercial ends, or perceived as such, can lead to resistance in academe (Turner & Robson, 2007). While managers tend to focus on the competitive position of a university and on revenue generation, faculty members’ intrinsic motivation for internationalization rests on the notions of collaboration, engagement, and knowledge sharing (Turner & Robson, 2007). This divergence between organization level and faculty level motivation for IoR needs to be explored.

Following a call for exploration of different approaches towards IoR in different contexts (Woldegiyorgis et al., 2018), this paper aims to investigate national and institutional IoR policies and faculty members' responses to them in Kazakhstan. The country joined the Bologna process in 2010, and subsequently introduced educational reforms designed to promote internationalization. As part of this process, Kazakhstan adopted a credit system and switched to a three-cycle higher education system (bachelor's-master's-doctoral studies). Public universities with national university status introduced internationalization on an institutional level to improve their positions in QS World University Rankings (QS rankings). Moving up in QS rankings published by Quacquarelli Symonds Limited requires a higher degree of internationalization in non-anglophone countries in terms of research, as it relies on citations per faculty member based on data from the SCOPUS database that consists mostly of journals published in English.

Although Kazakhstan has moved towards greater autonomy in higher education based on reforms implemented since 2010, the Ministry of Education and Science of the Republic of Kazakhstan (MoES) has a significant level of control over research funding, degree granting, and other functions, and can successfully advance its agenda for internationalization of research. The MoES sets requirements for conferring PhD degrees and granting MoES academic ranks of associate and full professor. It also administers the allocation of government research funding, a major source of financing for individual scholars and institutions. As part of these requirements, all doctoral students must have a foreign co-supervisor and are required to publish at least one article in a SCOPUS- or WoS-indexed journal to receive a PhD. degree. Principal investigators of projects funded through MoES must attract foreign collaborators and have a minimum number of publications (depending on research field) published in international peer-reviewed journals. Public and private universities have tended to follow the guidelines and encouragement from the MoES and introduced similar publication and international collaboration requirements as part of their institutional policies. Publication requirements are often introduced as part of key performance indicators (KPIs) for academic staff. Some universities set high publication awards for publishing in international peer-reviewed journals.

Local academics responded in varying ways to these policies. One of the visible responses was predatory publishing practices skyrocketing after the introduction in 2011 of a requirement to publish in journals listed in Scopus and the Web of Science Core Collection. Therefore, we stress the importance of faculty-level investigation, since the success of IoR largely depends on how faculty perceive and act in response to national or institutional strategies and policies. There is a need for a dialogic approach towards internationalization of research with a focus on engagement with academe in designing policies in order to avoid resistance or unethical practices, including publishing in predatory journals (Turner & Robson, 2007).

The contribution of this research is twofold. First, it adds to the literature on internationalization of research by conceptualizing different types of faculty responses to IoR policies. Second, the empirical evidence from Kazakhstan provides rich data for scholars and practitioners in developing countries that have been implementing similar IoR policies and share certain contextual characteristics.

The paper is constructed as follows. The next section reviews prior research on faculty responses to IoR policies and publication requirements. Based on a synthesis of the previous literature, we define four "ideal types" of faculty responses that serve as a conceptual toolkit for further empirical research. The method section then introduces the research questions that guided the study and discusses the methodological decisions that we made in relation to methods, data collection, and analysis procedure, and the selection of participants for the investigation. The next section presents the findings emerging from the study. In the final section we conclude the paper by

summarizing and discussing the main findings in the context of the existing literature and ponder the implications and limitations of the study.

Synthesizing the Literature: Typology of Faculty Responses

Among the various aspects of IoR policies that induce international scholarly collaboration, the requirement to publish in international peer-reviewed journals is the main policy tool employed on national and institutional levels in developing countries. Publication requirements may be considered as simply an extension of managerialism in higher education in developed and anglophone countries such as the US, the UK, Australia, and New Zealand (Berg et al., 2016; MacDonald & Kam, 2007). However, for non-anglophone and developing countries, requirements to publish in international peer-reviewed journals are the main element of internationalization strategies. These requirements are often referred to as “publish or perish” due to growing pressure on faculty to fulfill them. Writing about the effects of such pressures on faculty, Miller et al. (2011) note that “prevailing knowledge has been based on anecdotal rather than empirical evidence” (p. 422). Although still scarce, scholarly attention to faculty-level responses to IoR and publication requirements has been increasing. In this section we review the literature on the response of academia to various IoR policies and provide a classification of responses.

The way academics react to various national- and institutional-level policies and strategies related to internationalization of research can be categorized into four response types grouped under the two broader headings of resistance and adaptation. Resistance can take the forms of *principled resistance* and *token conformity*, whereas *gaming* and *embracement* can be viewed as manifestations of adaptation.

The categorization of the variety of faculty responses mentioned in the literature under these four types serves as an analytical tool for interpretative analysis. The use of typologies can be traced back to Max Weber’s ideal types. Weber used them as logical constructs to explain empirical reality (Weber, 1949). More recent methodological guides on the classification of attributes of certain phenomena under relevant types can be found in (Kluge, 2000). The types or ideal types are used in descriptive and explanatory studies in management and education (Hernes, 2005; Rageth & Renold, 2020). Developing such a conceptual framework based on typologies enabled us “to take a first step in the analysis of a topic that is little known or explored” and to “get a better handle on empirical reality” (Swedberg, 2018, p. 184) when collecting and analyzing data for the study. In this paper, we classify responses and conceptualize them based on the implied or associated actions and rationale for such actions. For example, the type of response that is termed “gaming” is associated with unethical publication practices and the rationale is often to gain material benefits such as promotion or monetary reward.

Resistance: Principled Resistance and Token Conformity

When internationalization of research in non-English speaking countries is perceived as academic (neo-)colonialism, the response to it might be that of *principled resistance*. This is evident, for instance, in (Liu, 2017) study of the impact of WUR on faculty scholarship at a Taiwanese university. The analysis indicated that four out of 12 participants persistently chose to publish all of their academic work in the Chinese language, thus resisting the tenure review rubric reinforced by the policy to publish in English language, high impact-factor journals. Such a conclusion was further supported by the fact that three of these scholars were active supporters of the Anti-SCI (Science Citation Index) movement in Taiwan. The author goes on to suggest that faculty with PhDs from local non-English-medium instruction universities do not consider publishing in English and may not exhibit the urge to pursue international visibility. One of the research participants, Wang,

published exclusively in Chinese and still succeeded in getting promoted to the associate level at a local university and, on top of that, received an award for one of his research papers. This type of scholarship by local academics can be considered as a “resistance to the cultural control, or the English supremacy” (Liu, 2017, p. 102) that is stimulated by the academic promotion system geared towards internationalization. In the study of returnee scholars in Mainland China, the authors find that senior scholars emphasize publishing in local journals in Chinese, thus affecting the preferences of early career researchers who received their doctorates abroad, this phenomenon being more evident in the social science fields (Li & Xue, 2020).

On the other hand, in non-Anglophone, post-totalitarian contexts (such as Kazakhstan) where academic freedom is an issue and governmental organizations (e.g., ministries) and the leadership of educational institutions hold considerable administrative power, resistance by local scholars to state-driven internationalization policies is not expected to be open or active. Under these circumstances, academics might resort to *token conformity*. In other words, faculty may refrain from publicly defying top-down research internationalization procedures and instead choose to pretend to accept them, when in fact they do not approve of such policies at all. This accords with Teelken's (2012) description of *symbolic compliance* which he defines as “the pretension of enthusiasm, while remaining vague” (p. 278). He suggests that academics are in this case likely to “only react or adapt to changes at a superficial or cosmetic level, especially when traditional values are deeply embedded” (p. 278). Such a response appears more subtle and covert than principled resistance and is thus more complicated. Faculty scholarship in such an event will not be stimulated by the pursuit of impact generation, international visibility, or capacity building, but with an intention to comply technically in order to, perhaps, avoid punitive measures if publication criteria are not met. A PhD candidate publishing an article in a predatory journal (Bartholomew, 2014) with the sole purpose of getting the degree, or a faculty member publishing just enough articles in low impact or predatory journals in order to keep his/her job or pass the tenure review, productivity evaluation, or accreditation/attestation processes are typical examples of token conformity. Research productivity is likely to drop once their immediate, primary goal is achieved. Such behavior might occur in response to the increasing emphasis on performance measurement mechanisms in higher education institutions and not on the content of scholarly output, which is a manifestation of neoliberal agenda of managerialism in HE internationalization (i.e., quantification of scholarship; standardizing research excellence and teaching) (Berg et al., 2016).

Adaptation: Gaming and Embracement

There is evidence, nonetheless, that the same neoliberal features of research internationalization that lead to systematic development and administration of various performance measurements and managerialism in higher education—quantification and commodification of research excellence, competition among countries and universities for “active researchers” who regularly publish in “quality journals”—can generate a response of *adaptation* from the scholars rather than resistance. Yet, adaptation may not necessarily imply noble sentiments about research productivity or positive scholarly practices. On the contrary, it may inadvertently end up promoting gamesmanship in scholarship. Although some instances of gamesmanship may qualify as “the art of winning games without actually cheating” (Macdonald & Kam, 2007, p. 641), there are many other cases that seriously compromise academic integrity and can be characterized harshly but fairly as deception, fraudulence, or corruption.

Academics may turn to *gaming* in order to stay ahead or outperform colleagues, for example in academic hiring/promotion/evaluation processes, payment for publication schemes, and research grant allocation procedures. Academic staff who engage in gaming intend to benefit from and

exploit the system but differ from those who symbolically comply in that they exhibit the distinctive characteristics of “research active” academics by constantly producing a high number of articles. For example, the 12 academics in Liu’s (2017) research project managed to produce a total of 135 publications during the course of their participation in the study, in order to score points in the algorithm that expedited academic promotion in the department. To this end, the participants sought recourse in gaming methods such as “co-authoring with scholars with minimal or no collaboration” (p. 107). Similarly, Macdonald and Kam (2007) report on how academics within one department can build a reciprocal relationship of playing the game of *gift/honorary authorship* (Smith, 1994) that allows them to benefit from a generous (up to 12,000 USD per author) publication reward system, albeit with minimal intellectual interchange or no evidence of actual collaboration. Other forms of unethical co-authorship include *coerced honorary authorship*. This is when “senior researchers can coerce their junior colleagues to list them as co-authors in the byline even if they do not meet the criteria of authorship” (Kovacs, 2013, p. 2). Kwok (2005) refers to this as *publication parasitism*. In some other cases, academics may use the services of ghost authors (Wislar et al., 2011) to get the entire paper written for them.

“Salami publication” (also known as segmented publication or salami slicing; Šupak Smolčić, 2013) represents an additional method of gaming. It can be defined as the publication of multiple articles that have been derived from a single study (Pierson, 2015). Salami publication may not be considered an academic transgression when authors, for instance, do it to “divide the findings into more than one paper to enhance meaning and provide the opportunity for the expertise of participants to be heard” (Happell, 2016, p. 29). Nevertheless, such a practice appears improper when the purpose is linked to quantity not quality, i.e., to extract as many articles as possible out of a single project for the purpose of boosting status (Norman & Griffiths, 2008).

However, when academics perceive internationalization of research as opportunity, a different, more positive form of adaptation response can take place: *embracement*. Engaging in international research collaboration may enhance scholars’ research capacity. This is because through cross-cultural research initiatives academics from different backgrounds come together and exchange ideas about “different theories, methodologies and field knowledge in order to reflect and relativize one’s own past conceptual frameworks, to broaden one’s horizon, to think comparatively and eventually to develop more complex perspectives” (Teichler, 2004, p. 23).

Moreover, evidence suggests that international research collaboration has a positive influence on research productivity (Abramo et al., 2011; He et al., 2009; Shin & Cummings, 2010). As a matter of fact, it appears that the more time scholars spend abroad working together with their international counterparts, the greater their research productivity and visibility become (Jonkers & Tijssen, 2008). These views are further supported by Kwiek’s (2015) study in which he juxtaposed the data from two divergent groups of academics: *internationalists* (faculty who engaged in international research collaboration), and *locals* (faculty who were not involved in international research activities) in order to investigate the impact of international academic cooperation in research on academic productivity and co-authorship of publications. The findings indicated that the *internationalists* across all fields, firstly, published papers and books at a significantly and consistently higher rate (twice as many as the locals), and also, unsurprisingly, produced more internationally co-authored publications than the locals. The categorization of faculty responses to IoR policies under four ideal types is presented in Table 1.

Table 1
Framework for Categorization of Responses

Ideal type response	Implied/Associated actions	Rationale
Principled resistance	Persistent publication in local venues in native language; resisting IoR policies through different means.	Promoting local publication regime; addressing local needs; stressing national level practical implications; preserving status quo; local/regional is good enough.
Token conformity	Publication in international peer reviewed journals only to meet minimum institutional requirements; considering publishing in predatory journals; reliance on publication brokers.	Securing job position; obtaining a degree (PhD) or tenure;
Gaming	Increasing research output with a focus on quantity rather than quality; use of corrupted co-authoring and salami publication strategies; reliance on publication brokers.	Appearing as an “active researcher” to obtain promotion; getting monetary rewards or “best researcher” awards; increasing chances in grant and fellowship applications.
Embracement	Increased collaboration; dissemination of results.	Self-realization; knowledge production; knowledge sharing; being an active researcher.

Method

This study aimed to explore national- and institutional-level internationalization of research policies in Kazakhstan and examine the response of local academics to these policies. The following research questions guided the study: 1) What national- and institutional-level research internationalization policies exist in Kazakhstan? and 2) How do Kazakhstani academics respond to these IoR policies? To address these research questions, we adopted an exploratory interpretative approach to research design which drew on qualitative methods such as document analysis and semi-structured interviews.

In the exploratory stage we analyzed documents that included the most recent publication reports and data of Kazakhstani scholars from Clarivate Analytics (Web of Science), the Scopus database, and the Ministry of Education and Science of the Republic of Kazakhstan (MoES); state educational legislation; relevant national and institutional policy documents; PhD curriculum maps; syllabi; and various other public records. The selection criteria for documents involved the presence in them of formal requirements for the conferral of terminal degrees, assignment of academic ranks, faculty retention and promotion, and research funding. The education system in Kazakhstan, including higher education, is highly centralized with the MoES acting as the central governing body (OECD, 2018). By way of illustration, PhD education (i.e., the funding, the structure of the educational program, the content of the curriculum, assessment schemes), both in private and public institutions, is regulated more on a national rather than an institutional level. Therefore, terminal degrees are conferred by the MoES upon the recommendation of the inter-university dissertation committee. In regard to assigning academic ranks, there seems to be a parallel system in that the ranks from associate to full professor can be assigned separately both by universities and the MoES. The university level requirements for academic ranks are usually less demanding than national level requirements set by the MoES. Such peculiarities of the local regulatory environment require the careful review of both national and institutional level policies.

The analysis of the aforementioned documents informed the design of the semi-structured interview schedules. The interviews revolved around topics such as publication requirements, research culture, academic integrity, workload, self-efficacy, research activities, and overall research experience. The interviewees were allowed freedom in directing the course of the conversation to let any other topics to emerge. The idea here was to avoid imposing forced-choice responses by giving more prominence to the voice of the research participants than of the researchers. The interviews were recorded and coded based on attributes of the developed typology of responses (see Table 1). The coding was done directly on the audio material and the relevant text data was transcribed for further thematic analysis and comparison (Hahn, 2008).

Overall, we conducted nine in-person interviews throughout the study with nine different participants affiliated with five higher education institutions. The particular features that the research participants needed to have to qualify for interviews were: Kazakhstani citizenship, possession of a terminal degree or pursuing such a degree in local universities, employment in a Kazakhstani higher education institution, and engagement in research activities. To find suitable interviewees, we circulated individual electronic calls using our personal networks within institutions that we considered as research-intensive. These were both public and private universities that require international-level research output as part of faculty recruitment, retention, and promotion policies and have operational mechanisms in place (e.g., scientific councils, science or research departments, research directors, etc.) that oversee the development and enactment of these policies. We avoided universities that mostly focus on teaching and training, and hence have no clear policies related to the internationalization of research. Of the many positive responses that we initially received, we selected nine that met the above criteria for participants and institutions and were in locations which were geographically convenient for the conducting of interviews within the timeframe allocated for the project. As part of the confidentiality agreement with the participants, their real names, and the names of the institutions they are affiliated with are not referenced in this paper. Instead, we refer to our nine participants as “Participant A”, “Participant B” through to “Participant I.” Seven participants had terminal degrees in the form of PhD, Candidate or Doctor of Sciences diplomas.²

² Candidate of science degree was a necessary stage to obtain a full Doctor of Science degree in Kazakhstan prior to the 2011 reforms that adopted the Bologna system of Bachelor-Master-PhD track.

Three participants (including the Participant A who already had a Candidate of Sciences degree) were pursuing PhD degrees at local universities at the time of their participation in the project. Table 2 contains background information about the research participants.

Table 2
Summary of Participant Information

Participants	Workplace	Position	Academic degree	Terminal education
A	Institution #1	Senior Lecturer	Candidate of Sciences; PhD Candidate	Local state university
B	Institution #1	Assistant Professor	Doctor of Sciences	Local state university
C	Institution #1	Assistant Professor	PhD	Local state university
D	Institution #2	Associate Research Professor	PhD	Foreign university
E	Institution #2	Science Department Staff	PhD Candidate	Foreign university
F	Institution #2	Lecturer	PhD Candidate	Local state university
G	Institution #3	Researcher; Senior Manager	Candidate of Sciences	Local state university
H	Institution #4	Researcher; Science Department Chair	PhD	Foreign university
I	Institution #5	Lecturer	PhD	Local state university

As with any research involving human participants, there were several important ethical considerations in our study that we identified and addressed. For instance, since this study was part of a broader research project funded by the MoES, the easiest way to gain access to research sites (i.e., the universities) would be by seeking official authorization from the ministry. However, we decided to pursue a bottom-up approach of contacting institutions and prospective participants directly as independent researchers to ensure that these stakeholders did not perceive us as examiners or inspectors sent from above. This was important in building mutual trust with the institutions and the participants. Furthermore, the participants of the study were invited to the project on a voluntary basis and were presented with consent forms which they signed upon agreement to the terms. In the consent forms 1) we outlined the aims and objectives of the study; 2) explained why participation is important, how the process will be organized and how the data will be

disseminated; 3) informed the participants of their right to withdraw from the project for any or no reason and at any time; and 4) pledged internal and external confidentiality and anonymity—that is to say, the identities of the participants would be anonymous both to the readers of the paper and the other participants of the study.

Findings

The findings are presented in two sub-sections. First, we start with the IoR policies that influence the PhD industry in Kazakhstan. The second part presents responses to the IoR policies that impact on faculty promotion and performance evaluation. Each part starts with a detailed description of the relevant IoR policies followed by the results of data analysis and interpretation.

Internationalization of PhD Programs

In 2011 the Committee for Control of Education and Science issued new order outlining the new requirements for obtaining a PhD degree (Ministry of Education and Science of the Republic of Kazakhstan, 2011). Among many criteria, PhD candidates are expected to publish articles related to their thesis topic prior to completing a 3-year program. These publications include a minimum of three articles published in local journals approved by the Kazakhstani Ministry of Education and Science; three articles published in international conference proceedings; and one article published in a journal with the 2-year journal impact factor (JIF) above zero or indexed in Scopus or Web of Science. Candidates need to fulfill these publication requirements before their Viva voce. The universities offering PhD programs should also ensure that PhD candidates consult with a foreign consultant (co-supervisor), who provides a written review before the Viva voce (Ministry of Education and Science of the Republic of Kazakhstan, 2011). PhD students are also required to complete a research internship at a foreign university (Ministry of Education and Science of the Republic of Kazakhstan, 2017).

Among these three main tools for the internationalization of PhD programs, the requirements to publish in Scopus- or WoS-indexed journals were the most challenging for PhD students, as was mentioned by current and former PhD students who participated in the study. The main reason stated was the lack of research skills among PhD students. A 2019 review of the curricula of PhD programs in public universities and in selected private universities with a research focus demonstrated that few universities offer research methods and related courses to PhD students. In 2020, MoES made Research Methods and Academic Writing courses requirements for all PhD programs, in order to improve the research skills of doctoral students (Ministry of Education and Science of the Republic of Kazakhstan, 2020).

Interview data shows that another challenge for doctoral students in fulfilling publication requirements seems to be inadequate support from supervisors. PhD supervisors often lack skills necessary to publish in international peer-reviewed journals. Referring to deficient English language proficiency, Participant A (a PhD Candidate at a local university) noted that “local supervisors have little idea about what topics are being discussed around the world.” Since supervisors face the same pressures as students, some of them engage in unethical co-authoring practices by mandating that doctoral students name them as first authors with no or minimum contribution to a published article. “When I was undertaking PhD studies, I always included my supervisor as the first author. [...] I had no choice but to agree to do everything to keep my job and get approval for a thesis defense” (Participant C).

As the PhD students completely depend on their supervisors and have no power to influence either national or institutional policies, the common response of PhD students to

publication requirements appears to be token conformity. One of the participants mentioned that only a few PhD students and faculty members are self-motivated in doing research and disseminating the results in international peer-reviewed journals (Participant I). Most of their peers in the PhD programs were trying to get articles published just to fulfill the requirement, and hence resorting to the services of publication brokers. Students relied on the input and support from foreign consultants in fulfilling Scopus or WoS requirements: a practice widely encouraged by their local supervisors and their departments. Some participants indicate that short research stays abroad have also provided them opportunities for networking with foreign scholars, resulting in valuable feedback for their research (Participants A, C, and I). Participant H, who as part of his job as a Science Department Chair oversaw PhD research projects, stated that it is rare for PhD students to get involved in publishing in international peer-reviewed journals for the sake of sharing knowledge that is useful and novel. “They do it because they are required to do so,” he told us. The interviewees who were PhD students at the time of their participation in the study, as well as recent graduates, seemed to agree that publication requirements are necessary to push the students to learn and improve; however, according to Participant H, many doctoral students “prefer to bypass these requirements.” Bypassing usually takes the form of using the services of publication brokers. Faculty members and PhD students often receive mass emails from companies that offer their assistance to get their names in journals indexed in the WoS/Scopus databases and charging from 1,000-5,000 USD. The cheapest way this is done occurs when the publication broker has an article ready to be published in some predatory journal and collects money from PhD students and “researchers” to include them as “co-authors.” The use of quotation marks is unavoidable, as those who use such practices hardly fit the definition of a researcher or co-author.

Faculty Promotion and Performance Evaluation as Part of IoR

The IoR policies introduced by the MoES of Kazakhstan in 2011 have also affected faculty promotion within universities and institutes. The country has two parallel systems of assigning academic ranks—national and institutional. On the national level, the academic ranks of ‘an associate professor’ and ‘a professor’ are assigned by the authorized body in the field of education and science to employees of scientific organizations and higher educational institutions. On January 16, 2019, the Ministry of Education and Science introduced changes into the order on awarding academic ranks (Ministry of Education and Science of the Republic of Kazakhstan, 2019). In addition to having a terminal degree and being full-time employees for a certain period of time, candidates for an associate professor rank are required to publish at least 14 articles in the area of their expertise, including at least: 10 publications in the journals recommended by the MoES, two in international scientific journals with impact factor higher than zero or indexed in Scopus / Web of Science, and two in international conference proceedings, plus a monograph. After working in the capacity of an associate professor for at least 5 years and publishing 28 articles (20 local and five international journal publications; three conference proceedings publications; and a monograph) one can be eligible for an academic rank of a professor. Exceptions are made for academics in the fields of military, art, and physical education who may publish only in local journals. In 2020, MoES modified publication requirements and limited the list of acceptable journals. Candidates for associate professor and full professor positions recognized by the MoES must publish in Q1, Q2 and Q3 journals in WoS and in journals that are in the 35th or higher percentile in the Scopus databases (Ministry of Education and Science of the Republic of Kazakhstan, 2020).

On the institutional level, public and private universities adopted different policies to encourage publication in the journals indexed in the WoS or Scopus databases. As previously mentioned, universities usually have more favorable retention and promotion criteria for faculty than

the MoES. However, faculty feels pressure to publish, as the number of publications is part of KPIs that are widely used in public and private universities. National research universities and selected private universities also provide additional payments per article published in an indexed journal, thus creating a competitive environment among the faculty members (Participants E and G). There are only a few universities that have special research-intensive positions that offer the same or higher pay for selected researchers with a significant reduction in teaching load (Participant E). However, the staff of many universities and research institutes are overloaded with teaching and administrative duties and required to publish in indexed journals. Some interviewees indicated that the teaching load at their main workplace is not an indicator of the workload (Participants E, G, and F). Many faculty members take additional teaching hours in other institutions due to low salaries paid at their main workplace. The same is true for purely research institutes.³ Their staff simultaneously engage in many projects and teach part-time at universities to maintain necessary income levels (Participant E).

The faculty responses to the IoR-related policies that require publication in indexed journals are mostly in the form of token conformity or gaming. For some faculty members, doing research is not a priority due to their teaching and administrative workload. Those who wish to be promoted to associate and full professor often try to do so by engaging in unethical co-authoring, or through working with publication brokers to achieve the required number of publications (Participants G and H). This is a kind of response that can be classified as token conformity. Such members of academia usually view publications as an investment in career growth and are not keen to show themselves as active researchers. The amount of such investment depends on the position of the faculty members. Those in administrative positions can rely on coercive or honorary co-authorship practices. Faculty members with limited networks for reciprocal co-authorship and not holding administrative positions often need to use publication brokers. There are extreme cases of borrowing significant amounts from banks to pay to brokers or co-authors who demand payment for inclusion in an author list (Participant G).

Token conformity can also occur among faculty members who do not aspire to an associate professorship but must publish due to KPIs set by the administrators at the university or institute level. This is implied in Participant C's interview:

Even if I wanted to focus on teaching I was required to publish at least one article per year in an international journal with a high impact factor. If one did not meet this requirement, she was at-risk-of-being-sacked due to professional incompetence. It shouldn't be like a duty of slaves who have to complete a certain task annually. It leads to plagiarism. People are ready to pay up to \$5000 for a publication. In my opinion, these very tough requirements force people to make this unpleasant and risky decision. (Participant C)

The kinds of KPIs that require X number of publications in the WoS or Scopus database can be set by the universities that have limited potential in terms of research, with a limited number of PhD holders.

Another widespread form of response to the national and institutional policies related to the IoR is gaming. Such a response is widespread in universities where the administration provides generous benefits based on the number of published articles. In one case, a professor co-authored a huge number of articles in completely different fields to win the scholarly contest that prioritized publication in indexed journals (Participant E, science department staff). In another institution, the

³ Most of the research in the Soviet period was concentrated in the research institutes outside the universities and many of these institutes are still running and are sponsored by the government through direct payments and research grants.

administration from the head of department to the vice-rector level had implemented the process of pre-submission review for all faculty members. All authors had to pass the pre-submission review before sending an article to a journal (Participant H). Although this system has a plausible rationale—to ensure the quality of submissions—it was mainly used to negotiate the inclusion of pre-submission committee members as co-authors of the article. Most problematic was that in many instances the list of authors was arranged based on administrative hierarchy and the main contributor might be placed towards the end of the list (Participant H). Such arrangements are a form of coercive co-authorship. Similar practices are mentioned in Participant C's account of her work experience at a local state university:

Back in the days when I used to agree [to coerced authorship], I was completely dependent on that person. I identify it as academic “uncleanness”; it is a sort of corruption, it is intimidation, manipulation, and extortion. If you have a look at the number of publications by deans, heads of departments, it is huge. For example, at my previous workplace the department chair had 62 publications (in English) in international journals within half a year. At the same time the person had 1.5 workload.⁴ (Participant C)

Although token conformity and gaming are the most widespread types of responses, there is evidence in the interview data that requirements for publication have also pushed universities and individual faculty members to invest in research and capacity-building. Some of the respondents do admit that they benefit professionally from such a focus on publication, networking with foreign co-supervisors, and other policies related to research internationalization:

Personally, this [publication requirements in international high-impact journals] has made me reevaluate everything I knew about conducting research. This is a positive thing, I believe. This requirement has created a necessity that we have to address, and it pushes us to look for ways to meet this requirement. This has helped me to identify areas in my knowledge and skills that need improvement. (Participant B)

Those motivated scholars have attended many seminars organized by their institutions and by representatives of the Elsevier and Clarivate Analytics. The knowledge and skills they obtained from such training and the experience gained from publishing their first papers in an indexed journal motivated them to do more research and share their knowledge:

It's like water trying to break through a wall: at first it's difficult until you find the first small hole to break through. Then it becomes easier, and water keeps flowing, making the hole bigger and bigger. And then you have broken through the wall altogether. When, after the first, second or third publication, the rating of the journal and the quality grows, you receive constructive criticism, you study, then a certain motivation and confidence appears that this can be done. (Participant D)

They view writing for an international journal in English as an opportunity to reach a wider audience and as a challenge that brings satisfaction upon completion. This kind of response can be classified as an embracing of IoR policies.

⁴ 1.0 workload is a standard workload allocated for one position. When person performs additional duties the workload increases and can be 1.25 or 1.5 with increase in salary.

Discussion and Conclusion

The main goal of this paper was to understand the response of academics in a non-anglophone, developing country to national and institutional IoR policies. We have constructed a typology of responses based on a literature review, and it served as a conceptual framework to guide the data collection and analysis. The findings suggest that the policies mainly focused on requiring publication in international peer-reviewed journals indexed in Scopus or WoS databases often lead to the gaming and token conformity response types.

Publication requirements for obtaining a PhD degree mostly led to the token conformity type of response, due to the lack of necessary research experience and training among PhD students. PhD students who study under a government scholarship are also required to finish their studies in 3 years, which puts additional pressure on them. Such pressure in terms of publication requirements and sponsorship duration lead to the spread of unethical practices, including reliance on publication brokers. Publication brokers usually cooperate with predatory journals and use corrupted co-authorship arrangements to get their clients' articles published.

The responses to the publication requirements for promotion to associate and full professor are mostly of the gaming and token conformity types. Gaming is more evident in the universities where faculty members can receive generous benefits for a publication in indexed journals. The gaming strategy is often an unintended result of performance evaluation systems in the education, retail, and other sectors (Franco-Santos & Otley, 2018). Token conformity is often a response by faculty members who are not interested in doing research but need higher academic ranks for administrative positions or need to publish as part of their universities' performance evaluation system.

Other aspects of IoR policies, such as requirements to include foreign scholars in research projects or to have a foreign co-supervisor for PhD students are viewed positively by participants. In some instances, the foreign supervisors are expected to be main contributors to publications in indexed journals, and to list PhD students and main supervisor as co-authors.

The study has certain limitations. For instance, the small sample size selected through purposive sampling. However, the participants provided rich information with no controversial facts or claims. Further, the findings of the research suggest the necessity for policy changes that lead to the embracement type of response, rather than encouraging token conformity and gaming.

One of our main recommendations is to avoid a one-size-fits-all approach in defining KPIs for academic staff. Requiring at least one publication each year in Scopus- or WoS-indexed journals from all PhD holders at university leads to the token conformity type of response. Publication requirements have to be adjusted based on faculty research skills, field, and workload. To promote IoR and avoid the token conformity type of response among PhD students who may lack basic research training before joining doctoral programs and depend on non-anglophone scientific supervisors (true for many post-Soviet countries), there is a need to implement national policies that include research methods courses at the bachelor's and master's levels and provide extensive research and language training during the first year of doctoral studies.

To minimize the gaming type of response in countries with limited research capacity, incentives such as post-publication awards must be minimized, and more funds should be allocated for research seed grants and research training. High publication awards may lead to unethical co-authoring and prioritizing journals with a higher percentile rather than publishing in journals relevant to the topic of the paper. Measuring scholarly impact and the productivity of scholars should involve more factors than number of publications and journal rankings. There is a need for further research into faculty responses to publish or perish practices, using strategic management and HRM theories.

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