

Publication integrity and a proposed Publications Quality Framework

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higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

Why this presentation?
CM

Research Outputs Policy, 2003 & 2015 (revision)

- To remind ourselves of the *Research Outputs Policy* imperatives
- To provide an update on considerations and improvements being made following “The Quality of South Africa’s Research Publications” study report of 2019
- To present findings of further analyses carried out on the research outputs submissions following the above-stated study report
- To respond to the question: Why does all of this matter? What is the big deal?
- To further explain the retention of research outputs units which had been found to be based on unethical publications practices instituted by the DHET at least in the past three years
- To provide the sector with an update on the developments that are being put in place regarding efforts to improve the quality of research publications from the universities, which are subsidised with state funding
- To fulfil the seemingly increasing interest and the need for knowledge in the area of unethical practices in research outputs publications

Research Outputs Policy, 2003 & 2015 (revision)

- “The purpose of this policy is to encourage research productivity by rewarding quality research output at public higher education institutions. The policy is not intended to measure all output, but to enhance productivity by recognising the major types of research output produced by higher education institutions and further use appropriate proxies to determine the quality of such output” (Research Outputs Policy, 2015: paragraph 2.2).
- Peer-review (blind, double-blind, etc.) is one of the proxies and is a cornerstone of academic publishing and, in turn, a proxy for quality. One of the fundamental principles in academic peer-review is that there must exist a chance that one’s argument or methodologies utilised to determine findings and arrive at the conclusions in the draft manuscript may be refuted on the basis of stronger, time-tested theories and methodologies, therefore, which may lead to the article being declined from publication. For such a chance to exist, which is another principle is that it must be pre- rather than post-publication (refer to the policy).

Research Outputs Policy: Basic Principles

- The focus of subsidy is on 'scholarly publishing' which refers to publications by scholars (academics and experts) for a niche market consisting mainly of academics and researchers (not normally students) (2.6).
- The policy is a tool for the distribution of research subsidy to public higher education institutions in South Africa. The Department subsidises institutions and not individual authors or academics. Institutions should be cautious of directly incentivising individual authors as this practice is promoting perverse behaviour in some cases (3.1).
- The policy aims to support and encourage scholarship. Institutions and academics must remember the importance of research integrity when submitting their claims and are urged to focus on quality research and not maximum accrual of subsidy funds (4.1).
- The Department may consider punitive measures (such as the docking of units) against an institution which persistently makes incorrect claims that compromise the integrity of scholarship or research. Such punitive measures shall be applied fairly and the process of introduction of such punitive measures shall be made transparent as will the process of arriving at the punitive measures (4.5).
- Institutions may consider establishing a Research Integrity Committee, which could be a Senate Committee that would primarily ensure institutional compliance with respect to such aspects as the conduct of researchers (4.6).

The Quality of South Africa's Research Publications Study Report, 2019

Recommendation:

Recommendation 7c: We need ongoing research and analysis of SA scholarly publishing in order to maintain the requisite levels of vigilance and ensure that the public investment in the subsidy systems meets the highest standards of research quality and integrity.

Timeframe:

This recommendation can be implemented immediately

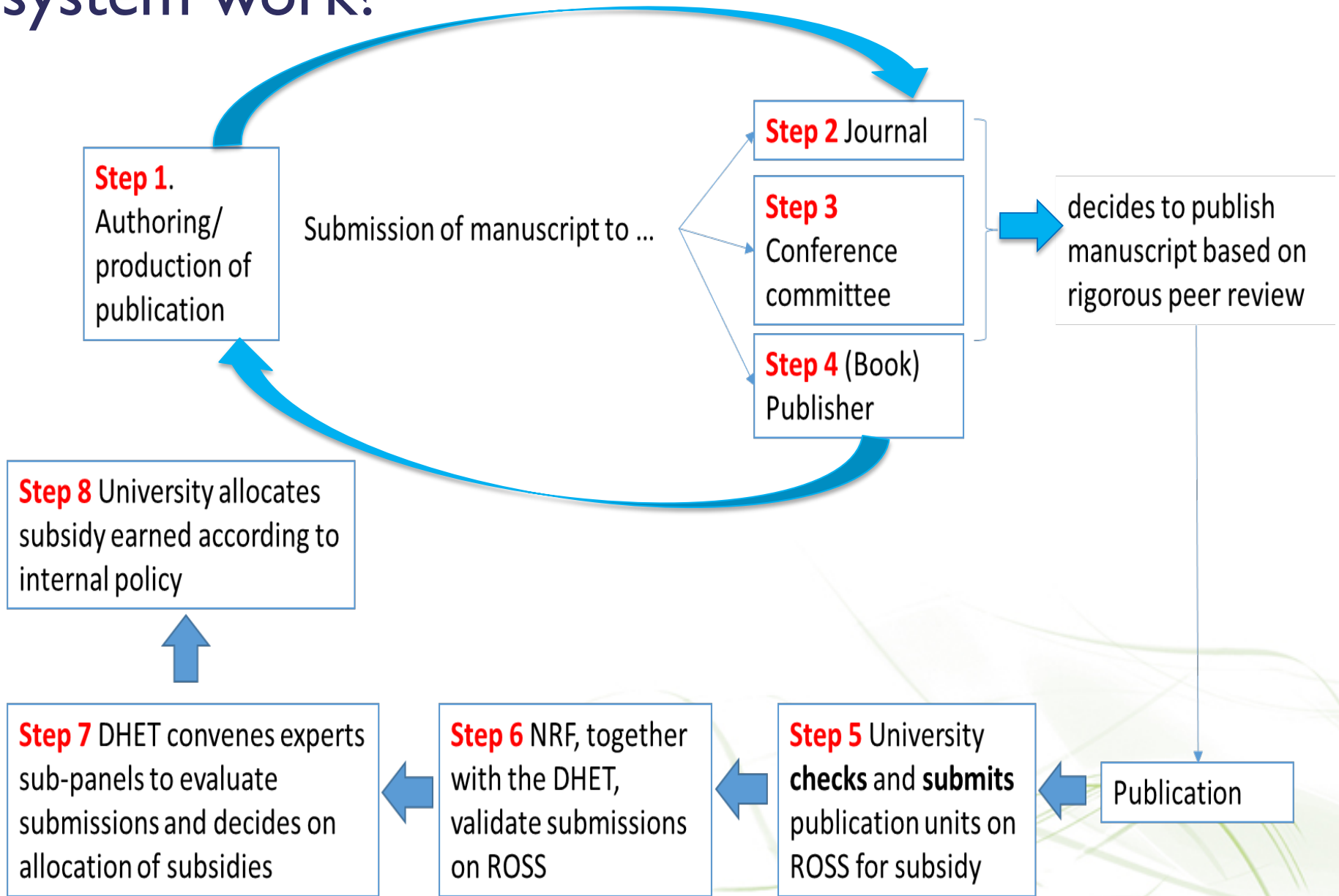
Agency:

DHET in partnership with CREST

Comments:

Our specific recommendation is that CREST and the DHET (which may include staff from other directorates) set up a research working group that would identify possible lines of research and studies of high importance and subsequently design and implement such studies. Some of these studies could coincide with the attainment of a formal qualification.

How does the DHET publication subsidy system work?



DHET investment in scholarly publications between 2012 and 2019 alone was R16 billion

Year	Article units	Conf. proc. units	Book and chapter units	Total publications units	Research Masters graduates	Doctorates (3)	Unweighted total	Weighted total output	RO grants	Unit value (R 000)
2012	11 035,72	747,29	580,8	12 363,81	6076,04	1879	20 318,85	24 076,85	R2 770 101	115 000
2013	11 997,38	1 236,92	774,37	14 008,67	6460,21	2051	22 519,88	26 621,88	R3 013 169	113 000
2014	13 135,36	1 301,32	879,68	15 316,36	7229,23	2258	24 803,59	29 319,59	R3 186 831	109 000
2015	13 959,64	1 349,58	994,77	16 303,99	7316,70	2530	26 150,69	31 210,69	R3 346 481	107 000
2016	14 590,78	1 321,13	2 269,07	18 180,98	7968,38	2797	28 946,36	34 540,36	R3 822 396	110 660
2017	15 938,89	1 274,41	2 207,94	19 421,24	8009,80	3057	30 488,04	36 602,04	R4 460 732	121 870
2018	15 708,43	1 294,63	1 964,93	18 968,00	8609,54	3344	30 921,53	37 609,53	R4 900 289	130 290
2019	17 194,20	1 270,80	2 554,70	21 019,70	8637,00	3419	33 075,70	39 913,70	R4 986 527	123,635

Why it matters: The imperative to conduct research with integrity (JM)

Quality and integrity in science

When we think of 'quality' or 'excellence' in science we most likely think of the 'truthfulness' of our research and results: Will our findings stand the test of 'peer review'; the scrutiny of other scholars working on the same topics. In its 'primitive' form, scientific quality is an epistemological concept (how truthful is our knowledge claims). But the results of our research are the end-product of a process of (human) decision-making: from the initial choice of topics, the framing of research questions, research design and methodological choices and eventually to decisions about publication. In this decision-making process scientists and academics make choices that either conform to sound ethical principles (research integrity) or not. The Mertonian ideal of the disinterested scientist who pursues truth and objectivity increasingly seems to be comprised and increasingly evident in the questionable publication behaviours of scientists.

So our focus is on some of the more 'ambivalent' ethical issues in publication practices

- Is it wrong for an author to publish a disproportionate number of papers in the same issue of a journal volume?
- Is it wrong for an editor of a journal to publish multiple papers in 'his/her' journal over the course of a year?
- Is it wrong for members of the editorial board of a journal to publish 'excessive' numbers (and what would be the threshold) of papers in 'their' journal?
- Is it wrong to publish a paper in a predatory journal and if so, why?
- Is it wrong for an author or authors to 'cut' up a single paper/report into the smallest publishing units ('salami slicing') and why?
- Is it wrong for an author or authors to misrepresent their institutional affiliations?

So what exactly are the ethical principles or norms that ‘underpin’ these questionable behaviours?

- In the case of predatory publishing it is often argued that academics who do this (and especially consistently over time) are complicit in violating good editorial practice (lack of peer review/ intentional deception about editorial practices/pursuit of profit over true scholarship)
- In the case of excessive publication by an editor or members of the editorial board, it is argued again that ‘peer review’ may be compromised especially if there is insufficient transparency about journal review processes
- In the case of the senior academic insisting on co-authorship in all or most cases with junior faculty or students, it is argued that good practice in terms of the rules of authorship (e.g. degree of contribution) may be violated
- But what are the principles at work in the case of an author who ends up publishing multiple papers in the same issue of a journal? Is it dishonesty (questionable authorship practices) and/or simply **greed** (chasing the money?)

Why does it matter?

The erosion of public trust in science

Science as an institution is unique in that it is one of the few self-organizing systems in society. It 'governs' itself – science does not have a president or a parliament. Michael Polanyi referred to this as the “Republic of science” where scientists govern themselves (that's why we do not easily tolerate the interference of outsiders in how we conduct our business). And the core governance principle of science is peer-review. But, this governance arrangement is premised on a commensurate social contract between science and the state: the state provides funds for science on the condition that science adheres to the rule of good scientific practice. And good scientific practice is inextricably linked to and built on effective peer review. In short: public trust in science is premised on science pursuing truth with integrity. So when there is (growing) evidence that the core principles of peer review are being comprised and, even worse, deliberately undermined through unethical behaviour, we should not be surprised if the public's trust in science also diminishes. And of course – especially when such unethical behaviour feeds of a system funded with taxpayer's money!

From unacceptable to questionable to unethical (even fraudulent) publication practices

- Article is published in a journal does not appear on one of the approved lists
- Article is published in a predatory journal (list provided by DHET in 2018)
- Article is submitted more than once for subsidy
- More than 25% of articles in one issue of a Journal is authored by the same institution (by implication also the same individual)

Violations of the DHET publication policy guidelines

- Article is published in a predatory journal (not on any DHET list)
- Excessive publication in the same journal by editor/ editorial board
- Excessive publication in the same volume by the same author

Questionable publication practices

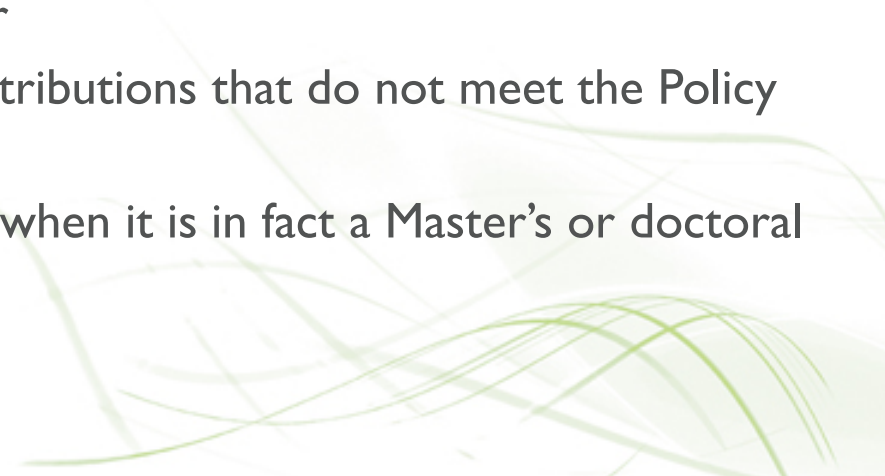
- Ghost authorship
- Plagiarism of someone others publication (or part of)
- Self-plagiarism (e.g. simultaneous publication of same article in two or more journals)
- Different forms of gaming behaviour (such as salami publishing and publication cartels)

Unethical (fraudulent) publication practices

Illustrative examples of questionable
publication practices (JM)

SA examples of questionable and fraudulent publication practices

In this section we give examples of questionable and unethical – even fraudulent – publication practices by SA academics. The examples were found through the work of CREST over the past six years and reported in three studies to ASSAf and the DHET. In addition, annual monitoring of the publication submissions to the DHET by CREST (also for the 2020 submissions) continued to reveal even more examples of such practices. For the purposes of this presentation we have selected only examples from 5 of the categories referred to in the previous slide. These are:

1. Continued publication in predatory journals
 2. Excessive numbers of contributions to a single issue of a journal/ Salami-publishing as a form of gaming behaviour
 3. Submission of excessive conference contributions that do not meet the Policy criteria
 4. Claiming subsidy for a book publication when it is in fact a Master's or doctoral thesis
 5. New forms of excessive behaviour
- 

I. Continued publishing in predatory journals

The wide-spread practice of predatory publishing by SA academics was first revealed in a number of studies in 2017 and in subsequent reports.

Because of this, the DHET sent communiques to all universities in 2018 which clearly stated (a) that article submissions in identified predatory journals would not qualify for subsidy (textbox) and (b) that submissions in journals that are suspected of being predatory will also not necessarily receive subsidy. As far as (a) is concerned, 11 journals were listed and this list remains in effect. A total of 81 number of submissions (61.8 units) to these journals were submitted for 2020 and are currently being reviewed. **In addition, it is also clear that there are new journal titles (even though these are in one of the journals lists) that are most likely predatory. See overleaf.**

Banks and Bank Systems
International journal of educational sciences
Journal of communication [Delhi]
Journal of economics [Delhi]
Journal of human ecology
Journal of psychology [Delhi]
Journal of social sciences
Journal of sociology and social anthropology
Problems and Perspectives in Management
Studies of tribes and tribals
Studies on Ethno-Medicine

In 2018 Dr Diane Parker, the then-Deputy Director-General: University Education, indicated that... the Department will continue with the verification process (of predatory journals), and should any journal be found not to be in line with the policy criteria, subsidy will be withdrawn.

Academy of Entrepreneurship Journal

Academy of
Entrepreneurship Journal

Q3

Business and
International
Management
best quartile

SJR 2020

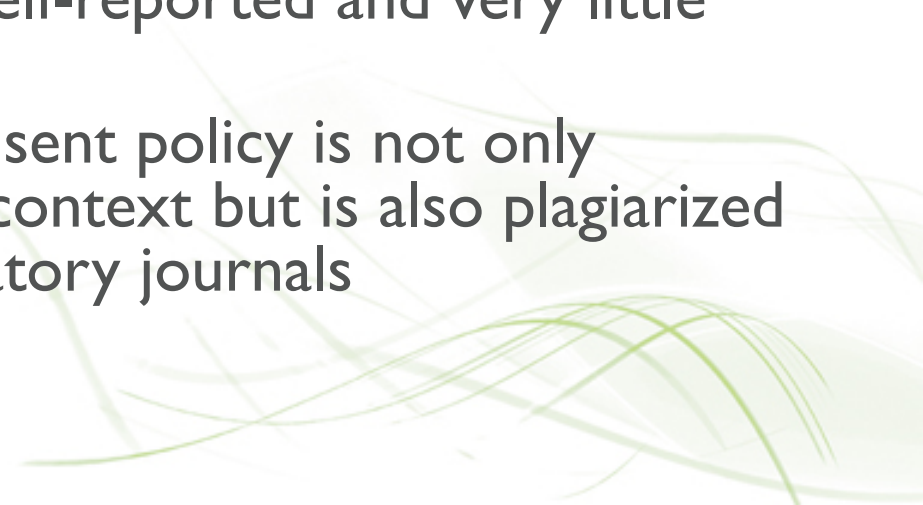
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Institution	# articles	# units
University 1	3	3
University 2	1	0,5
University 3	1	0,5
University 4	2	1,5
University 5	4	4
University 6	6	3,67
University 7	1	0,5
University 8	3	2,67
University 9	2	1,5
University 10	1	1
University 11	15	14,17
TOTAL	39	33,01

Academy of Entrepreneurship Journal

- The holding company of Allied Academies / Allied Business Academies is a subsidiary of OMICS, a known predatory publisher.
 - The UK postal address for ABA is 'shared' with iMedPub Ltd, Longdom Publishing, Trade Science Inc, Pulsus and Andrew John Publishing (owned by OMICS)
 - The journal refers to companies providing fake indexing services
 - The peer review process is self-reported and very little information is available
 - The Ethics Approval and Consent policy is not only inappropriate to the journal context but is also plagiarized from a variety of other predatory journals
- 


Academy of Entrepreneurship Journal: Indexing and Archiving




Journal of Academic Entrepreneurship: companies providing fake indexing

- Scope database: claims to be a collection of bibliographic citation database of scholarly research output and “the world’s most trust global citation database”
- CiteFactor: claims to index OA articles and journals.

Journal indexed with Citefactor are eligible for impact factor analysis [[Selection Criteria](#)]. While calculating the impact factor following four factors are considered along with scientific method & citation analysis.


- >Quality of Publication
 - >Manuscript Quality
 - >Presentational Quality
 - >Editorial Quality
- 

Journal of Academic Entrepreneurship: companies providing fake indexing

- Open J-Gate: was a free database of OA journals launched in February 2006 – defunct since December 2012
 - SIS: Scientific Indexing Services “was founded by renowned scientists”. It claims to be an academic database and offers “citation indexing, citation analysis, and maintains citation databases covering thousands of academic journals.”. SIS provides an annual *International Impact Factor Services (IIFS)*
- 

2. Excessive publication in a single volume (or issue) of a journal

Excessive publication in a single volume/issue of a journal (or published conference proceedings) is unacceptable on two grounds: (a) It most likely violates one of the existing rules of the DHET publication policy, viz. that no university (and hence also individual academics) may publish more than 25% of the articles in a single journal or issue in one year; (b) In addition this practice is also unacceptable as it may reflect the intentions of academics to publish papers that represent the smallest publishing units (SPU's otherwise known as 'salami slicing'). The latter is a common practice where academics are deliberately gaming the system to obtain as much monetary reward from their publications and – very likely – end up producing articles or papers of poor quality.



Example: Excessive publication by two academics from one university (salami slicing) in a single issue

15 articles submitted (translating into a claim for R1.8 million) by the same two authors in one journal (*Journal of Disability and Human Development*) in ONE issue (vol. 19:3) that is only accessible as a e-book that you must buy for \$135.....And the same two authors have submitted claims for similar submissions in a number of other journals as well.

Prevalence and correlates of angina pectoris among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of arthritis among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of back pain among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of cataract among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of depression among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of edentulism in a national sample of older adults in Mexico

Prevalence and correlates of fruit and vegetable intake among older adults in Mexico

Prevalence and correlates of loneliness among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of obesity among older adults in Mexico: A national cross-sectional survey

Prevalence and correlates of oral health problems among a nationally representative sample of older adults in Mexico

Prevalence and correlates of past and current tobacco use among a nationally representative sample of older adults in Mexico

Prevalence and correlates of risky alcohol use among a nationally representative sample of older adults in Mexico

Prevalence and correlates of short and long sleep among a nationally representative population-based sample of older adults in Mexico

Prevalence and correlates of stroke among a nationally representative population-based sample of older adults in Mexico

Prevalence, social and health correlates of sleep problems among a nationally representative population-based sample of older adults in Mexico

3. Submission of excessive conference contributions in one Proceedings that do not meet the Policy criteria



In 2020 a total of 48 submissions were made for subsidy for papers presented at the conference above. 40 of these submissions were authored by academics from one university. Note the date of the conference (December 2020). On the website of this conference there is a link to the “Proceedings”. When one clicks on it, it consists merely of a list of all papers ‘presented’ at the conference (740 in all!) but no information is provided (as per the Policy) about evidence of peer-review, list of reviews, names of the organizing or scientific committee.

Proceedings

ISSN: 2169-8767 (U.S. Library of Congress)

ISBN: 978-1-7923-6123-4

ID 003 IoT Based Security Management Framework for Heterogeneous Network Environment

Ajibo Chinenye Augustine, Chinaeke-Ogbuka Ifeanyi Maryrose, Dept. of Systems Innovation Graduate School of Engineering Science, Osaka University, Japan. Dept. of Electronic Engineering, University of Nigeria Nsukka, Nigeria
Eustace M. Dogo, Dept. of Computer Engineering, Federal University of Technology Minna, Niger State Nigeria
Ogbuka Cosmas Uchenna, Dept. of Electrical Engineering/ACE-SPED, University of Nigeria, Nsukka, Nigeria

4. Student theses submitted as books

7 units claimed

Thesis, 2014

Book, 2020

Introduction (pp. vii-xii)

Introduction

Evaton is one of the oldest remaining freehold locations in South Africa yet its history is less well-known compared to locations and townships that were established after it. The history of Evaton can be better understood within the broader context of economic and rural transformation that took place from the late nineteenth to the mid-twentieth century. This was a period that witnessed crucial developments that included industrialisation, the growth of urbanisation, the influx of Africans¹ who serviced the towns and manufacturing industries, as well as the movement of sharecroppers and labour tenants from white farms. For the Union government, all these historical

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5. New forms of unethical behaviour

The case of the European Journal of Economics, Law and Social Sciences

A recent enquiry by a SA university about a possible predatory journal (the *European Journal of Economics, Law and Social Sciences*) and payment of page fees to staff who published excessively in one issue of this journal (October 2021) generated a deeper investigation and revelations about a whole host of problems. Although this is not a SA journal it currently appears on the DOAJ list and hence in theory qualifies for subsidy. Our investigation revealed the following:

- This journal (EJELS) is one of three journals published by the same private publishing house (the *Academic Journal of Business, Administration, Law and Social Sciences* and the *Balkan Journal of Interdisciplinary Research*)
- The editor-in-chief of EJELS (Dr Lena Hoffman) is the editor-in-chief of two of these journals.
- On the home page of the publishing house (The International Institute for Private, Commercial and Competition Law - IIPCCL) the mission of the publisher reads as follows:

IIPCCL is an independent organization delivering supports and services to education and research in Austria, Albania, Macedonia, Kosovo, Montenegro, Croatia and the world.

International Institute for Private-, Commercial-, and Competition Law is established in 2001 in Graz (Austria) and a Branch is registered in Tirana (Albania).

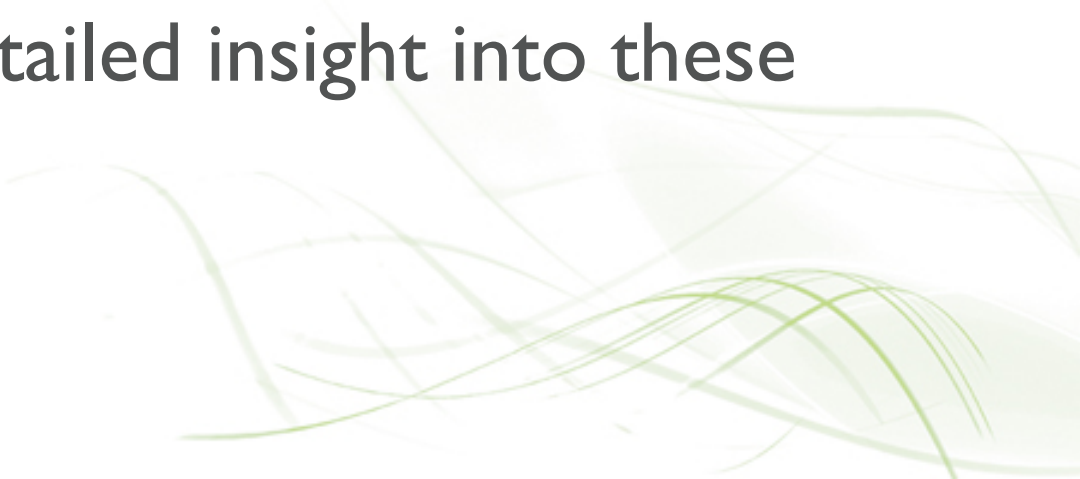
The case of the European Journal of Economics, Law and Social Sciences (2)

- So what do we have here: a journal published by a private publisher whose explicit intention is to serve the field of Law in the Balkan states
- Its claims on Indexing are incorrect and misleading
- The publication fee – although not excessive (Euro 200 for the first author and then an additional 80 euros for other authors) is indicative of a possible predatory journal
- The members of the Editorial Board are nearly exclusively from three European countries.

[Road Directory of Open Access Scholarly Resources](#)
[WorldCat](#)
[World Wide Science](#)
[DOAJ](#)
[BASE – Bielefeld Academic Search Engine](#)
[ProQuest](#)
[OpenAIRE – EU supported initiative to foster Open Science in Europe](#)
[Baidu Scholar](#)
[vlexJustis – European Union](#)
[CNKI Scholar \(China National Knowledge Infrastructure\)](#)
[SUNCAT- Serials Union Catalogue for the UK research community \(UK\)](#)
[RePec](#)
[Ulrich's Periodicals Directory](#)
[SHERPA/ReMEO](#)
[SafetyLit](#)
[Google Scholar](#)

The case of the European Journal of Economics, Law and Social Sciences (3)

BUT the real problem becomes evident when one inspects the latest issue of the journal (October 2021). This is the third issue of the journal and consists of 91 articles of which 69 are authored by SA authors! This constitutes 76% of the author contribution. The next two slides give a more detailed insight into these contributions.



Authorships by institution

Row Labels	Papers	Share
UL	65	43,3%
TUT	31	20,7%
NWU	13	8,7%
UNISA	11	7,3%
UKZN	9	6,0%
UFH	7	4,7%
WSU	4	2,7%
UNIVEN	3	2,0%
NMU	2	1,3%
UMP	2	1,3%
UFS	1	0,7%
UJ	1	0,7%
UNIZULU	1	0,7%

The 69 papers were authored/co-authored by 113 authors. The proportional contributions of the SA institutions show large numbers of papers authored or co-authored by University of Limpopo, followed by TUT and NWU.

In terms of current subsidy unit values, these 69 papers would earn R8.5 million for the submitting universities AND the publisher would earn at least 14000 euros (R2,5 million) in page fees from SA taxpayer!

A journal about Law in the Balkan states!

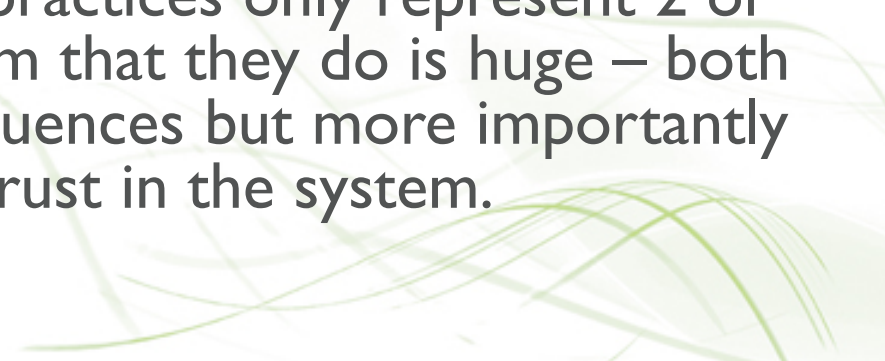
Seriously?

Effects of Hollywood Action Movies on Child Offenders in South Africa
'Heavy Yoke': Policing commercial burglary in Bronkhorstspuit, South Africa
A call for Paradigm Shift in Postgraduate Research Methodology Training
A Gender Impact Analysis of Kusile and Medupi Investment on Employment by Economic Sectors in South Africa: Application of Social Accounting Matrix
A quantitative study on service delivery protests in the South African municipalities: A case of Tzaneen municipal area
A Systematic Analysis of strategic management methods for conservation of Medicinal Plants in South African rural communities
Agenda setting effects of business news coverage on South African mines' corporate reputation
An Analysis of Police Perspectives on Road Fatalities and Road Users' Behaviour in the Umlazi Township, Kwazulu-Natal, South Africa
An analysis of the Plastic Regulations in Tackling the Soaring Littering of Plastic Shopping Bags in South Africa
An Ecological System Approach to Violence in High Schools in KwaZuluNatal
An evaluation of community policing partnerships in combating human trafficking in South Africa
An exploration of holistic road safety model to prevent pedestrian fatalities in the Limpopo Province of South Africa
Parents and practitioners' partnership in Early Childhood Education provisioning in East London

A journal about Law in the Balkan states!!

Exploring the nexus between poverty, livestock looting and violence sprees: Provincial focus on South African civil unrest
Exploring the use of conventional identification methods and Deoxyribonucleic Acid technology [And related technologies] in combating stock theft: The selected Southern African Development Community initiatives
Exposure to Community Violence and Its Impact on Schools in Swayimana KwaZulu-Natal
Gender Based Labour Income Dynamics across 34 economic Sectors in South Africa: A Consequence of Kusile and Medupi Infrastructure Investment Programme
Gender equality in South Africa: Incorporating African culture into the constitution
Hetero-patriarchy as an impulse of tragedy in Can Themba's The Suit
Managing Repeat Offender Information in South Africa: The Need for a Motor Vehicle Crime Information Management Strategy
Menstrual hygiene: A human rights issue and a barrier to gender equality
Modeling oil price volatility in South African Economy: A comparison of GARCH and TGARCH models
Never-ending dilemma: Victimisation of survivors of sexual assault in the Western Cape Province, South Africa
Note on fiscal and monetary policies development in Nigeria and South Africa
Parents and practitioners' partnership in Early Childhood Education provisioning in East London

What do we learn from these examples?

- It is unfortunately the case that unethical publication practices by SA academics continue to take place and even proliferate. It is like a virus that has infected our academic publishing system and keep on mutating.
 - Earlier forms of blatant gaming of the system continue (especially in conference proceedings) whilst new forms are emerging.
 - It is important to emphasize that we do not think that the unethical behaviours that we have identified and continue to discover are representative of the majority of SA academics. But even if these practices only represent 2 or 3% of the population the harm that they do is huge – both in terms of monetary consequences but more importantly also in terms of the public's trust in the system.
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A Publications Quality Framework (PQF) (JM)

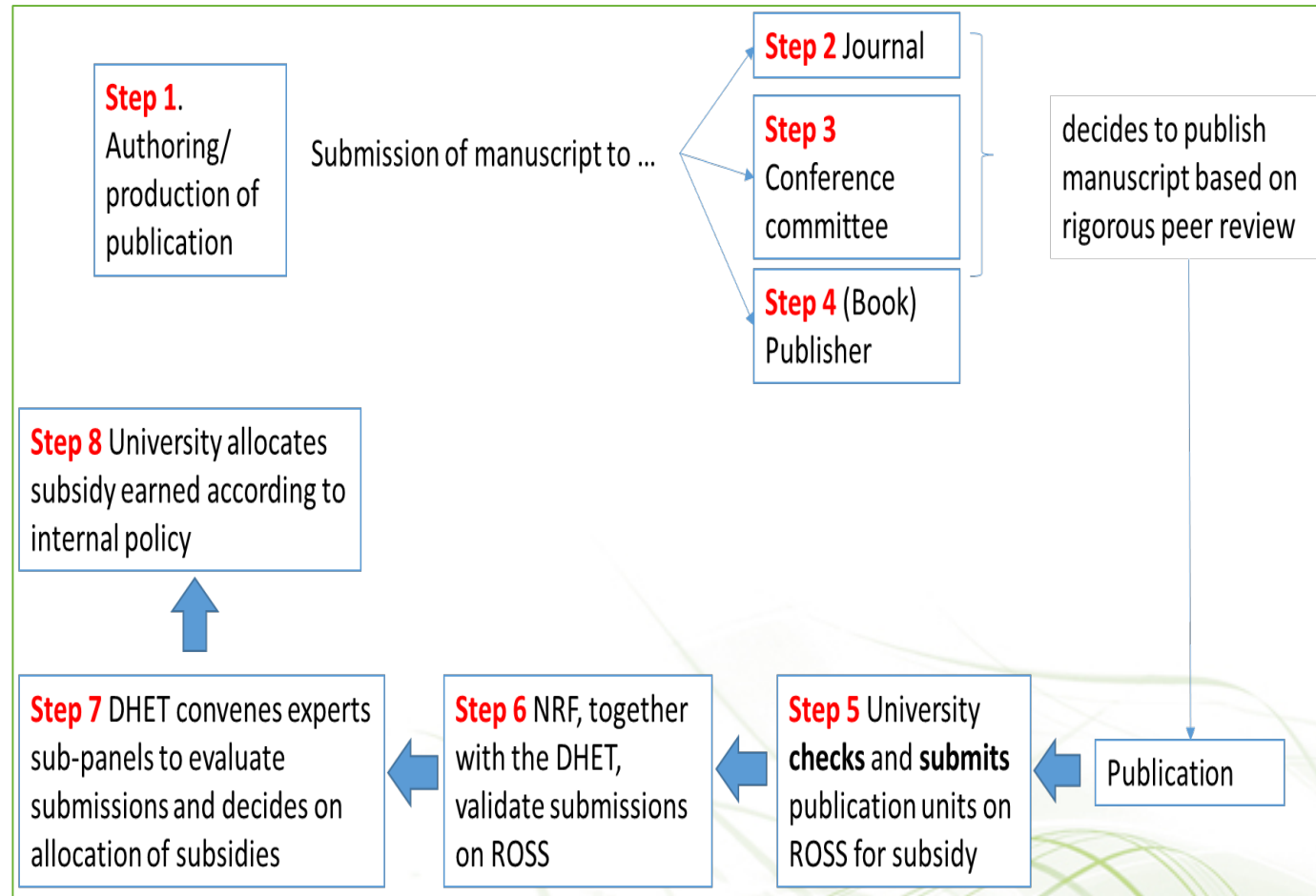
A positive development

The seriousness of these practices has been recognized by the DHET who has initiated two (complementary) initiatives:

- The development of a **Publications Quality Framework (PQF)** customised to counteract and sanction persistent cases of unethical, questionable and fraudulent publication practices. This framework will focus on ensuring that the current Policy Framework is strengthened by closing loopholes as well as introducing new measures to enforce compliance also by universities who are not applying the required controls and validation checks on submissions.
- The development of a **national collaborative programme** under the auspices of the UCDP and in partnership with the universities and other role-players (NRF/ ASSAf and SARIMA) to implement the PQF. This proposed programme will support the ongoing monitoring, evaluation and analysis of the funding system to ensure optimal and early interventions to strengthen the integrity of publication practices across the system.

The steps in the submission and approval of subsidy claims as framework for the collaborative programme

The aim of the proposed Publications Quality Framework (PQF) for Higher Education in South Africa is to ensure that every critical decision across the entire process of the production, publication and submission of publications for subsidy conforms to generally acceptably standards and norms of good practice in scientific publishing. The diagram depicts – in a simplified manner - these critical decisions or events as they apply to the South African case.



Step I: Production of the publication/Authoring of a publication

The challenge	Actions/ interventions
<ul style="list-style-type: none">• Plagiarism by authors• Simultaneous submissions of article manuscripts to different journals• Deliberate and continuous submission of manuscripts to predatory journals and publishers• Growing evidence of the existence of publication cartels• Excessive volumes of submissions of in all categories (journal articles, books and book chapters and conference proceedings)	<p>Most of these practices can be identified through regular monitoring of annual submissions.</p> <p>Such monitoring will be done where the individual submissions are captured in an integrated database which allows for cross checks between authors, journals and years of submission.</p>

Step 2: Submission of manuscript to an accredited or recognized journal

The challenge	Actions/ interventions
<ul style="list-style-type: none">• The DHET Policy requires institutions to submit audited subsidy claims for research outputs appearing in approved journal indexes and lists. In practice this means that the DHET trusts international lists to exercise sufficient internal quality checks to ensure that the journals included in their lists comply with the highest standards of editorial quality and integrity.• However, it is now well documented (not only in the CREST and ASSAf studies, but also in various overseas publications), that (a) international journal indexes and lists do not in fact exercise sufficient quality controls; and (b) that some local SA journals also do not meet acceptable levels of quality and integrity.	<p>All South African journals (irrespective of whether these journals are indexed), must be subjected to a rigorous and systematic quality review process every five years.</p> <p>In order to undertake such reviews, a draft Journal Quality and Integrity Index (JQII) has been developed which contains a set of quality criteria to be employed in the review of each journal</p>

Elaboration on the Journal Quality and Integrity Index (JQII)

Dimension	Indicator category	Journal-level indicators
CITATION VISIBILITY AND IMPACT	Citation impact	<ol style="list-style-type: none"> 1. Journal Impact factor (JIF) 2. Journal rank and quartiles 3. Proportion of journal self-citations 4. CPP for non-source items (SA journals not in bibliometric databases)
INTERNATIONAL FOOTPRINT AND REPUTATION	Foreign contribution	5. Proportion of foreign authored papers
	Foreign co-authorship	6. Proportion of foreign co-authored papers
	Institutional range	<ol style="list-style-type: none"> 7. Proportional share of institutions to total journal output 8. Proportional share of countries to total journal output
	Foreign representation	9. Proportion of non-SA members of the editorial board
INTEGRITY	Publisher integrity and transparency	10. The journal is transparent and truthful in the information that it provides on journal-related information
	Editorial integrity	<ol style="list-style-type: none"> 11. Profile of reviewers (heterogeneity measure) 12. Proportion of papers authored by members of the editorial board or the editor 13. Level of publication intensity by a single author
	Peer-review quality	<ol style="list-style-type: none"> 14. Article screening rate (rejection before peer review) 15. Article acceptance (rejection) rate (rejection after peer review)

Step 3: Submission of conference presentations to scientific conferences

The challenge	Actions/interventions
<p>Universities currently submit conference proceedings to the DHET without any standardisation of the names of conferences. This is particularly true for once-off conferences. The result is that a huge effort is required annually to clean and harmonize the names of conference titles before decisions about approval for submitted proceedings can be taken. In addition, we have also witnessed over the past decade and more the advent of predatory or fake conferences (not unlike the phenomenon of fake or predatory journals) which require additional scrutiny and vigilance as well as the overall gaming of conference subsidy by some universities.</p>	<p>The proposed action to address these challenges in the Framework is to implement a decision that is already contained in the 2015 Research Output Policy. The policy explicitly states that only conference proceedings that appear on a list of approved conference titles will qualify for subsidy. Although some initial work had been done to implement this rule, recent trends in conference submissions (referred to above), clearly show that the implementation of this policy (and related elaborations) has become much more urgent and needs to be prioritised in the Publication Quality Framework.</p>

Step 4: Submission of book/chapter to publishers

The challenge	Actions/interventions
<p>The process of deciding to award subsidy to a book or book chapter submission is currently conducted through convening panels that inspect individual submissions visually and then arrive at a positive or negative decision. This is lengthy and ultimately inefficient process – especially as the number of book and book chapter submissions have increased at a high rate especially in recent years. In addition to concerns about the time it takes to conclude this process and its cost-efficiency, there are also concerns about the quality, integrity and transparency of such a process. Given the very short time during which a decision needs to be made to award or not award a subsidy, it is debatable whether the overall decision-making can be consistent and reliable.</p>	<p>We propose the following decision framework for awarding book and book chapters. This decision framework consists of establishing two lists of accredited publishers (List A and B) and three decision rules that describe how the lists should be implemented. The two lists are:</p> <ul style="list-style-type: none">• List A of internationally recognised book publishers• List B of reputable international and local book publishers <p>The three decision rules are:</p> <p>Rule 1: All submissions from publishers from List A be automatically awarded the appropriate subsidy amount</p> <p>Rule 2: All submissions from publishers from List B be awarded after certain conditions have been met.</p> <p>Rule 3: All other submissions (publishers not on either List A or List B) continue to be scrutinised individually by the DHET panel for books and book chapters.</p>

Step 5: University checks and submits publications for subsidy on ROSS

The challenge	Actions/interventions
<p>The evidence suggests that (some) universities do not meet the criteria related to internal checks as required under the Policy.</p> <ul style="list-style-type: none">• Universities continue to allow submission of articles in journals that do not appear on the lists of approved journals including journals that are still identified as predatory journals.• Universities do not screen the affiliations of authors adequately and allowing documents to be submitted by authors not affiliated with the institution.• Universities do not exercising sufficient quality control on the submission, especially of conference proceedings where there is clear evidence of gaming of the subsidy system.	<p>Universities are required under the policy to have established a proper functioning research quality assurance committee. This requirement needs to be checked and regularly externally reviewed.</p> <p>Research Committees have to generate reports on quality evaluation activities which they will have to submit and to include approval of publications as having not been plagiarised, duplicated and ethically cleared.</p> <p>Universities need to assume full responsibility and taking necessary steps where steps need to be taken to sanction continuous questionable and unacceptable publication practices by individual staff members. In order to exercise this responsibility, it may be necessary to assist (some) universities through capacity-building and external technical support interventions.</p>



higher education
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A collaborative programme (CM)

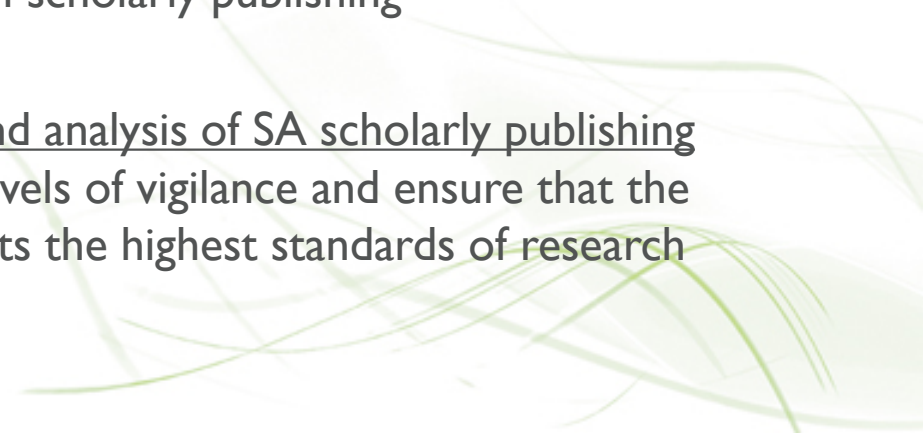
Organisation of the collaborative programme into four main work streams or activities

ACTIVITY 1: The establishment of a more timely alert and support system to assist universities (and their research offices) to identify cases of questionable publishing behaviour before submitting for publication subsidies.

ACTIVITY 2: Ongoing monitoring and evaluation of the quality and integrity of all submissions to the DHET through rigorous and regular monitoring of all SA journals, the development and monitoring of a list of accredited book publishers and the monitoring of a list of accredited conference proceedings.

ACTIVITY 3: The development and implementation of educational and capacity-building interventions around good practice in scholarly publishing

ACTIVITY 4: Support for ongoing research and analysis of SA scholarly publishing practices in order to maintain the requisite levels of vigilance and ensure that the public investment in the subsidy systems meets the highest standards of research quality and integrity.



ACTIVITY 1: The establishment of a more timely alert and support system to assist universities to identify cases of questionable publishing behaviour before submitting for publication subsidies (NRF lead)

I.1 Develop and establish an open access website that provides a comprehensive portal of information and documents in areas such as lists of predatory journals, questionable publishers, integrated accredited journal lists, FAQs about ethical publishing, etc. (CREST)

I.2 Establish routines to improve the efficiency of the publication and creative outputs submissions process and procedures including the capturing of information by institutions to the capturing of evaluation process by the Department (NRF)

I.3 Establish routines to ensure more efficiency of the research outputs evaluation process by the evaluation panels including the peer review process in book and conference proceedings publications as well as creative outputs (NRF)

ACTIVITY 2: Ongoing monitoring and evaluation of the quality and integrity of all submissions to the DHET (CREST/ASSAf)

2.1 Implementing and monitoring of a journal quality and integrity index (JQII) of all accredited SA journals on an annual basis (CREST,ASSAf and DHET)
2.2 Implementing a revised annual journal cluster review process conducted by ASSAf panels (ASSAf)
2.3 Development and ongoing monitoring of a list of accredited publishers (CREST and DHET)
2.4 Development and ongoing monitoring of a list of accredited conference proceeding titles. (CREST and DHET)
2.5 Monitoring of the quality assurance policies, systems and procedures of the individual universities (CREST and DHET)
2.6 Production of an annual M&E report combining the results of activities 1 – 5 (CREST and ASSAf)

ACTIVITY 3: The development and implementation of capacity-building interventions around good practice in scholarly publishing (SARIMA)

3.1 Provision of support to staff at University research offices (and related institutions) to enroll for academic courses in the fields of research management and related fields (research integrity, bibliometrics, research evaluation).

3.2 Provision of funding for junior and middle-level research managers to attend short courses and conferences in areas such as publication ethics, predatory publishing, bibliometrics, etc.

3.3 Provision of funding to SARIMA to develop new seminars and workshops (in conjunction with universities) in these domains for attendance by all relevant target groups in the sector.

ACTIVITY 4: Support for ongoing research and analysis of SA scholarly publishing practices (CREST)

4.1 Provide ongoing support to CREST to maintain, update and expand its *SAKnowledgebase* for optimal use by the DHET, universities and other role-players (including the development of a web-interface functionality to run queries on the database).

4.2 Provide support for the establishment of a '**community of practice**' of SA scholars to pursue research on topics including scientific publishing, open access, research evaluation, journal business models and bibliometrics. This support should consist of a number of medium-sized grants that are allocated on a competitive basis to support both established but especially emerging black scholars to undertake research in these areas.

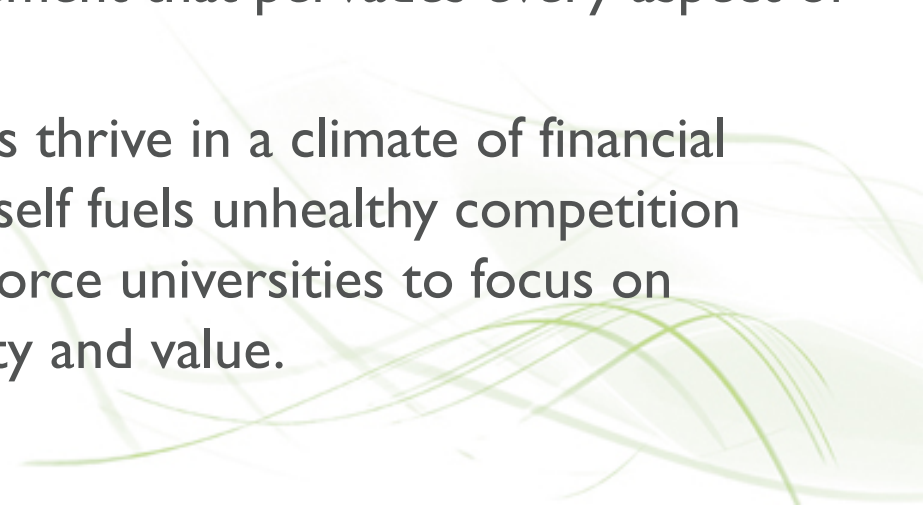
Concluding comments (JM)

How did we get here?

At least three, mutually reinforcing, drivers have contributed to the current state of affairs:

1. In the specific case of scholarly publishing – the opportunities for fraudulent and unethical practices that have been made possible through the digital and OA movements.
2. Incentive and reward systems that increasingly result in perverse, unintended consequences
3. A culture of performance management that pervades every aspect of our academic culture

One should also add that these factors thrive in a climate of financial austerity in higher education that in itself fuels unhealthy competition amongst academics and scholars and force universities to focus on quantity and volume rather than quality and value.

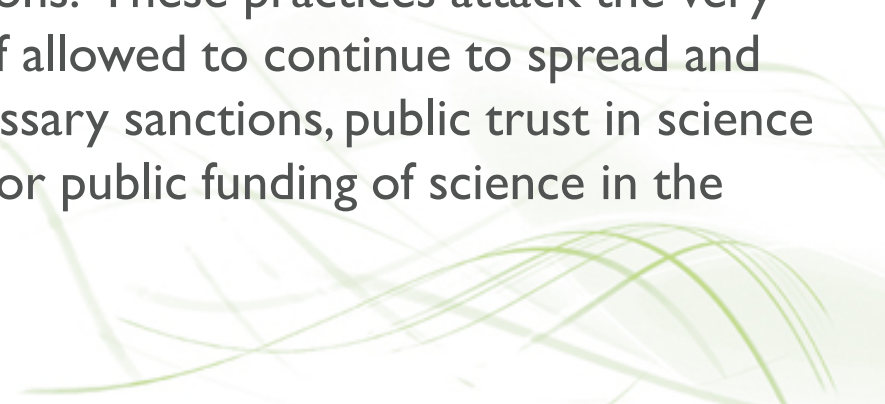


A final note

When you rely on incentives, you undermine virtues. Then when you discover that you actually need people who want to do the right thing, those people don't exist.—Barry Schwartz, Swarthmore College (Zetter, 2009)

In the final instance the solution to the challenges discussed in this presentation cannot be the sole responsibility of a government department or agency or even a university. Individual scholars (academics and students) must recognize that they have a responsibility to ensure that their own research and publication practices comply with the highest standards of quality and integrity in scientific research.

The initial appearance and subsequent proliferation of multiple forms of questionable and unethical practices in South Africa is not unlike the spread of the COVID-virus and its different mutations. These practices attack the very nature and fabric of the science system. If allowed to continue to spread and flourish unabatedly and without the necessary sanctions, public trust in science will inevitably decline. The consequence for public funding of science in the country could be devastating.





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Thank you
