

Research collaboration in Zimbabwe: Types, drivers and effects

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Contribution of this PhD to body of knowledge

- Research
 collaboration is
 not necessarily
 the same as
 research article
 co-authorship
- Dynamics of research collaboration in the African context
 - ✓ Types
 - ✓ Drivers
 - ✓ Effects



Science and Technology

Objectives of the study

- To examine the patterns (types) of research collaboration in Zimbabwe by means of a comprehensive bibliometric analysis of co-authored articles in journals that are indexed in Scopus and/or the Web of Science (WoS), for the period 1980-2016
- To supplement the bibliometric study with a web survey of Zimbabwean researchers to investigate the types, drivers and perceived effects of research collaboration
- To investigate in more detail the drivers, effects and overall dynamics of research collaboration through six case studies of research collaboration.

Study design

- Mixed-method design
 - Bibliometric analysis
 - Web survey
 - Case studies
- Three study approaches aligned with publication trajectories of collaborative research (next slide)



Three publication trajectories of research collaboration

Research collaboration occurred

	Methods to study
Publication trajectories	the dynamics of each
	trajectory
Trajectory I: Co-authored articles	Bibliometric analysis
published in journals that are indexed	Web survey
in WoS, Scopus or a national database	Two case studies
Trajectory 2: Single-authored articles	Bibliometric analysis
published in journals that are indexed	Web survey
in WoS, Scopus or a national database	Two case studies
Tueigetowy 2. Nie autieles zubliebed	Web survey
Trajectory 3: No articles published	Two case studies



Framework guiding the study (Bozeman et al. 2016)

External Factors	Team Characteristics	Individual Team Members	Team <u>Management</u>
Field/Discipline Characteristics Commerce	Communication Quality Team Members' Trust Personality Mesh Work/Style Fit	Individual Team Player/ Selfish S&T Human Capital	Collaboration Management Structures Research Collaboration Effectiveness
Organizational or Institutional Relations	Gender Issues Complementary Expertise Career Stage and Motives Investment Symmetry	Individual Fair/ Exploitative Personality pathology (present-absent)	Crediting Procedures and Consensus

on Evaluation, Science and Technology

Where am I know?

Web survey

- Developed questionnaire for web survey
- > Submitted ethics clearance application for survey

Bibliometrics

- Extracted WoS (CREST; online) and Scopus data (online)
- > ONLY articles; 1980-2016; Zimbabwe in author address
- > 11033 articles



Bibliometrics: WoS and Scopus (1980 – 2016)

	Count	Percentage
WoS only	2215	20%
Scopus only	2881	26%
Both Wos & Scopus	5937	54%
Total	11033	100%



Bibliometrics: NRDZ (2012 – 2016: originally 1354)

	Count	Percentage
Not journal (other doc type)	54	5%
No record; only in NRDZ	220	21%
Journal publication	777	74%
Total	1051	100%

	Count
In WoS or Scopus	167
In predatory journal	???
In 'true' journal	???



Way forward...

- Complete literature reviews (2018)
- Run the web survey and analyse results (2018)
- Bibliometrics compile integrated database and analyse (2018)
 - ➤ Need assistance with Scopus data
 - ➤ Spin-off article: The nature and contents of a national research repository (NRDZ)
- Select case studies before end of 2018
- Conduct case studies in 2019 and finalise dissertation





Thank you