

Promoting virtue or punishing fraud?

Contrasting discourses on scientific integrity and ways to obtain it

Serge Horbach

Willem Halffman



Radboud Universiteit



One discourse?

Article

Perceptions That Influence the Maintenance of Scientific Integrity in Community-Based Participatory Research

Anne E. Kraemer Diaz, MA¹, Chaya R. Spears Johnson, PhD^{1,3}, and Thomas A. Arcury, PhD^{1,2,3}

Abstract

Scientific integrity is necessary for strong science; yet many variables can influence scientific integrity. In traditional research, some common threats are the pressure to publish, competition for funds, and career advancement. Community-based participatory research (CBPR) provides a different context for scientific integrity with additional and unique concerns. Understanding the perceptions that promote or discourage scientific integrity in CBPR as identified by professional and community investigators is essential to promoting the value of CBPR. This analysis explores the perceptions that facilitate scientific integrity in CBPR as well as the barriers among a sample of 74 professional and community CBPR investigators from 25 CBPR projects in nine states in the southeastern United States in 2012. There were variations in perceptions associated with team member identity as professional or community investigators. Perceptions identified to promote and discourage scientific integrity in CBPR by professional and community investigators were external resources: community participation, fundin quality control and supervision, communication, training, and character and trust, perceptions such as communication and training promoted scientific integrity whereas other perceptions, such as a lack of funds and communication and training promoted scientific integrity of the most important perceptions maintaining scientific integrity for scientific integrity. Credible CBPR science is crucial to empower the vulnerable communities to be heard by those in positions of power and policy making.

Keywords

community-based participatory research, conflict of interest, research integrity, scientific integrity

Scientific integrity is absolutely essential for the good practice of all scientific endeavors (Drenth, 2010). Although no simple definition captures the complexity of scientific integrity, the Panel on Scientific Responsibility and the Conduct of Research (1992) defines it as the "adherence by scientists and their institutions to honest and verifiable methods in proposing, performing, evaluating, and reporting research activities" (p. 4). Scientific integrity also reflects the ethical obligation for scientists and institutions:

... integrity embodies above all the individual's commitment to intellectual honesty and personal responsibility ... moral character and experience. For an institution, it is a commitment to creating an environment that promotes responsible conduct by embracing standards of excellence, trustworthiness, and lawfulness. (Institute of Medicine National Research Council of the National Academies, 2002, p. 4)

The European Science Foundation (2011) identified specific principles as the underpinning for scientific integrity, including honesty, reliability, objectivity, impartiality, open

communication, duty of care, fairness, and responsibility for future science generations.

However, every investigator confronts threats to scientific integrity. Some threats are competition for funds, pressure to publish, commercialization, and career advancement (Drenth, 2010). The frequency of scientific misconduct, such as data falsification, fabrication, and plagiarism occurs from 0.1% to 1.0% in the literature (Steneck, 2006, 2007), and is suggested to be increasing (Drenth, 2010, 2007). In the

¹Department of Family and Community Medicine, Wake Forest School of Medicine, Winston-Salem, NC

²Wake Forest University Translational Science Institute, Wake Forest School of Medicine, Winston-Salem, NC

³Center for Worker Health, Wake Forest School of Medicine, Winston-Salem, NC

Corresponding Author:

Anne E. Kraemer Diaz, Department of Family and Community Medicine, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157, USA.
Email: anne.e.kraemer@gmail.com



Health Education & Behavior
2015, Vol. 42(1) 393–401
© 2015 Society for Public Health Education
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1098188814560016
heb.sagepub.com
SAGE

RESEARCH for a creative, innovative and productive Australia



Australian Government
Australian Research Council

Research Integrity and Research Misconduct Policy

Version: 1.0
Issued: April, 2015
Date for review: April, 2016
Owner: Strategy Branch

ARC Research Integrity and Misconduct Policy | Version 1.0



Dimensions of definitions

Definitions of integrity and misconduct differ in various dimensions:

Narrow vs. Broad

Value-based vs. Norm-based

Components of research

Dimensions of definition

Methods

Results

What about us?

Methods

Scientometric- and content analysis techniques to study large amounts of texts

- Word-counts
- Co-occurrence analysis
- Theme recognition and co-occurrence

Dimensions of definition

Methods

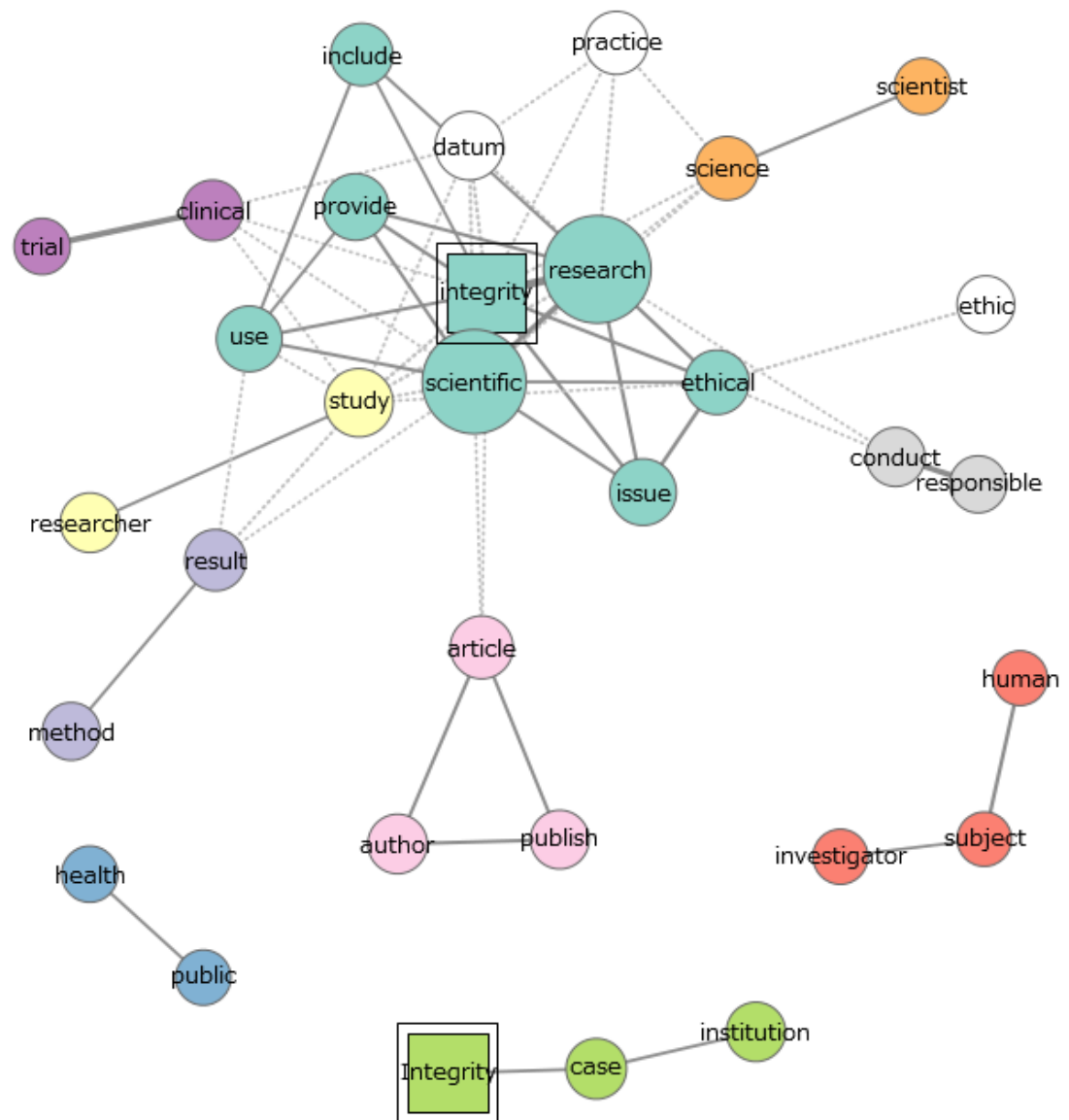
Results

What about us?

Radboud Universiteit



Co-occurrence network



Dimensions of definition

Methods

Results

What about us?

Radboud Universiteit



Results: usage and understanding

Documents	Narrow vs. Broad	Value-based vs. Norm-based	Components of research
Scientific publications	Broad	Value-based	Authorship Methodology Society
Old policy documents	Broad	Value-based	Society Methodology
Recent policy documents	Narrow	Norm-based	Finance
Newspaper articles	No clear indication for either	Minor shift from value- to norm-based	Shift from society towards finance

Dimensions of definition

Methods

Results

What about us?

Radboud Universiteit



Results: usage and understanding

Documents	Narrow vs. Broad	Value-based vs. Norm-based	Components of research
Scientific publications	Broad	Value-based	Authorship Methodology Society
Old policy documents	Broad	Value-based	Society Methodology
Recent policy documents	Narrow	Norm-based	Finance
Newspaper articles	No clear indication for either	Minor shift from value- to norm-based	Shift from society towards finance

For the details see: Horbach & Halfman (2016) Promoting Virtue or Punishing Fraud: Mapping Contrasts in the Language of 'Scientific Integrity'. *Science and Engineering Ethics*

Dimensions of definition

Methods

Results

What about us?

Radboud Universiteit





5th World Conference on Research Integrity



May 28 - 31, 2017
Amsterdam
The Netherlands

Abstract Book

What about us?

The discourse on scientific integrity is different in the scientific and the public domain

- Major differences between scientists' and policymakers' approach

Narrow ← → Broad

Value based ← → Norm based

Different components of research

Participants of WCRI strongly adhere to the scientific discourse on integrity.

Implications for implementing interventions?

Dimensions of definition

Methods

Results

What about us?

Radboud Universiteit



Thank you!



Horbach & Halfman (2016) Promoting Virtue or Punishing Fraud: Mapping Contrasts in the Language of 'Scientific Integrity'. *Science and Engineering Ethics*