Academic Dishonesty: The Question of Authorship

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Abstract

The practices of guest and ghost authorships are academically dishonest and raise concerns about the potential harm that could result if this practice continues. It is necessary to examine scholarly research to determine what is happening in the area of academic publications. The purpose of this article was to review the literature on the subject of authorship in research. Those involved in research have the responsibility of preserving the integrity of all research.

Key words: Authorship, authorship in research, ghost author, guest author, gift author, honorary author

The number of refereed academic publications more than doubles every 20 years. Ulrich, a database of more than 300,000 journals (academic and scholarly journals, e-journals, peer-reviewed titles, popular magazines, newspapers, newsletters, etc.), 90,000 publishers, 950 subject areas, and written in 200 languages (SerialsSolution, n.d.a) was first published in 1932. Originally it contained 6,000 titles with 183 subject headings. It was 323 pages in length (SerialsSolution, n.d.b). The basis for this growth in journals is the escalation in the number of researchers and authors of published research. Compounding the problem is the fact that university professors, asked to review articles submitted for publication, either invest less time and attention in the review process or pass the chore of reviewing along to junior professors or doctoral students. This transfer of responsibility results in “questionable work” (Bauerlein, Gadel-Hak, Grody, McKelvey, & Trimble, 2010, para. 10) accepted for publication. This transfer of responsibility also results in aspiring authors of research “cutting corners” (Bauerlein et al., 2010, para. 10) to get to get their research published expeditiously.

Authorship of these refereed academic publications identifies who should be recognized for contributing to the body of knowledge through research publications. This addition to knowledge can be in the form of new knowledge, new solutions, or new insights. Authorship establishes the relationship between the new knowledge, solution, or insight and its originator(s). This relationship leads to recognition from colleagues resulting in tangible and intangible benefits for the authors listed in the publications (Bavdeka, 2012). Those contributing to the body of knowledge in the form of publications may expect to receive improved performance evaluations and promotions. They may also be offered better employment opportunities elsewhere. Moreover, the pressure to publish or subsequently perish forces faculty to hunt for
Research authorships generate numerous rewards including job security through tenure, recognition, and career advancement opportunities (Bavdeka, 2012; Johnston & Metcalf, 2012; Kalichman, 2011; Mitcheson, Collings, & Siebers, 2011; Resnik & Master, 2011; Smith & Williams-Jones, 2012; Sukhlecha, 2012).

Stern and Lemmens (2011) maintained that the practices of guest and ghost authorships are academically dishonest and raise questions of authorship. Concerns about the potential harm that could result in the future if this practice continues have been raised. In order to resolve these ethical concerns regarding authorship, it is necessary to first examine scholarly research to determine what is happening in the area of refereed academic publications. The purpose of this article was to review the literature on the subject of authorship in research. This investigation is valuable to higher education in order to preserve the integrity of all research and to "ensure the Responsible Conduct of Research" (Smith & Boulanger, 2011, p. 25).

A review of the literature presents a compilation of research, peer-reviewed journals, non-peer reviewed journals, and online sources on authorship. The academic databases used were from the online library of Texas A&M University-Commerce and included, but were not limited to, Academic Search Premier, EBSCO, Education Research Complete, Eric, ProQuest, and Sage Publications. The key descriptive terms used for this research were authorship, authorship in research, plagiarism, authorship fraud, and intellectual property.

**A Review of the Literature**

An author, one who originates a thought or design, is recognized as making an intellectually significant contribution to a published research study. There are two serious ethical concerns with authorship. The first concern is recognizing somebody who has not contributed to the research study or paper by listing him or her as an author, often referred to as a "guest," "gift," or "honorary" author and based on, at best, a tenuous relationship with the manuscript. The second concern is denying recognition to somebody who has contributed to the research study or writing of the paper by not listing him or her as an author. This practice is referred to as "ghost" authorship. Ghost authors are those who participate in the research study or writing of the paper but are not included in the list of authors (Bavdeka, 2012).

Numerous authors have bestowed guest, gift, or honorary authorship on individuals who have not contributed to the research study or the writing of the paper. One reason for this practice is that listing an individual as an author on the paper could potentially increase the value of the research study or paper; thereby, improving its chances of acceptance for publication. Articles listing more than five authors are more likely to have guest, gift, or honorary authors than articles listing three or fewer (Bavdeka, 2012).

Guest, gift, or honorary authorships are also frequently bestowed on friends or colleagues with lower academic rankings or fewer publications, departmental heads, or reviewers. It is thought by some that “passive contributions” (Bavdeka, 2012 p. 77), individuals performing non-author tasks, are providing authors with opportunities to carry out research and writing. These individuals are contributing to the research and therefore should be rewarded with authorship. However, a majority of journals do not accept this viewpoint thereby discouraging the practice of guest, gift, or honorary authorships. Moreover, guest, gift, or honorary authorships are thought to
be primarily responsible for the over inflation in the number of authors per article in various journals.

Credit for publications is the “currency system” (Marusic, Bosnjak, & Jeroncic, 2011, p. 1) in academe. The publish or perish dictum puts significant pressure on faculty to publish because high performance evaluations are dependent on quantity as opposed to quality of research (Bavdeka, 2012). Consequently, faculty seek authorships. Junior faculty often give authorships to senior faculty. Bestowing these gifts are for the purposes of receiving higher performance evaluations, assuring the publication of a paper, or establishing a reciprocal relationship with a payback understanding. Some feel that gifting authorships enhances teamwork and motivates faculty. In some instances there may be unwritten policies that department heads must be included in all papers. This may occur for the purpose of reciprocating favors. In some cases there may also be unwritten policies that junior faculty be listed as authors to enhance their career opportunities.

"Ghost" authors, on the other hand, contribute to the research and/or writing of the paper but are not listed as authors. Examples of ghost writers include a graduate student or junior faculty member who conducted the research or wrote a draft of the study or someone performing the functions of a personal editor, thus saving time for a professor needing a publication (Bavdeka, 2012). There are ethical concerns regarding ghost authorship. The readers of the article believe that the research was conducted and written by someone who was neutral. Ghost writing does not provide readers the information necessary to evaluate knowledgeably the possibility of bias in published research in the event papers are prepared by sponsors. Along with the recognition of works published comes responsibility for the work. This presents ethical concerns. Journals publish research papers believing that all authors listed have actually conducted the research, written the paper, and take responsibility for the research (Bavdeka, 2012; Smith & Williams-Jones, 2012). Ghost authorships could result in a loss of credibility for all research (Bavdeka).

Ethical issues concerning who should and should not be listed as an author have become more complicated because of the growing practice of multiple-author research as opposed to single-author research. There is a limited amount of effort possible when conducting a single research study and writing the research paper. Consequently, the more authors involved in the research project results in smaller individual contributions. As authors are added to the list, contributions of the individual diminish. Including authors with minimal or no contribution, referred to as “loose” (Brand, 2012, p. 2926), guest, gift, or honorary authors, is misleading. It is equally misleading and unethical to omit someone from the list of authors who made a significant contribution as it is to include someone who did not make a significant contribution.

**Multiple Authorships**

Multiple authorships are widespread in empirical sciences because research projects may require that a number of individuals make significant contributions by conducting experiments and analyzing data. For example, as maintained by Resnik and Master (2011), five conceptual papers (debates on ethical positions by analyzing and discussing concepts, etc.) from 2003 to 2009 author lists included as many as 18 to 32 authors. While there is nothing improper about such large author lists, it does present some possible questions of ethics as asserted by Resnik and Master. Large numbers of authors on a single paper can raise ethical questions. They may
raise questions of undeserving individuals being granted authorship when they do not deserve it, or they may raise questions of individuals being denied authorship when they deserve credit. To preserve the integrity of research, a number of journals have established, accepted, and publicized authorship standards. It is important to sustain "fairness and accountability" (Resnik & Master, 2011, p. 18).

Carrying out a research study is generally a group endeavor while publication is the acknowledgement of the research study according to Sukhlecha (2012). Authorship bestows recognition to the researchers and boosts careers. Authorship results in "name and fame" and is synonymous with "scientific currency" (Sukhlecha, 2012, p. 272). Along with recognition, authorship also means accountability for the research study and the published paper. Researchers have their own ideas of what it means to be an author and the associated requirements of authorship. These ideas vary from researcher to researcher and from research study to research study. As a result, conflicts surface during studies causing dissension and authorship arguments. Having common authorship standards can ameliorate these conflicts. Having authorship standards can also assist in sustaining the integrity of scholarly research and publication (Resnik & Master, 2011).

There are generally two schools of thought regarding the listing of authors as indicated by Johnston and Metcalf (2012). One school of thought is to list everyone who contributed to the study project, and the other is to list only those who made a significant contribution. The ethical debate is largely over whether to list authors who made little or no contribution to the manuscript. On the one hand, awarding authorships to individuals who have not made a significant contribution to a paper and do not deserve the recognition can unduly exaggerate their publication records leading to undeserved rewards and benefits. On the other hand, because authorship bestows intellectual property rights such as copyrights to authors and their organizations, denying authorship to individuals who have made significant contributions to papers can negatively impact careers (Resnik & Master, 2011).

The number of universities participating in federal research competition increased from 502 to 658 institutions from 1990 to 2009 (The Center for Measuring University Performance, n.d.). Due to this competition, universities and research institutions take into account publication records when hiring; determining tenure and promotion; and when bestowing scholarships, grants, awards, and prizes. Authorship is tied to career enhancement, rank, and other benefits. Therefore, these researchers who have made significant contributions deserve credit for their efforts in contributing to the body of knowledge and must not be omitted from the listed (Resnik & Master, 2011).

If someone makes a contribution to an article (either of thought, information, writing, or final responsibility of the article) as suggested by Kennedy, Roush, and Barnsteiner (2012), that individual must be listed as an author. However, a professor whose contribution is only grading, encouraging students, or proving input as to where to submit a paper for possible publication is not making a sufficient contribution to the article and should not be listed as an author (International Committee of Medical Journal Editors, n.d.). "Collection of data, acquisition of funding or general supervision of the research group alone does not qualify authorship but may qualify him or her for acknowledgement" (Mitcheson et al., 2011, p. 166). Researchers have ethical responsibility to ensure the integrity of all research and related conduct in research. Faculty names listed as authors imply authenticity of authorship lists (Bavdeka, 2013; Kennedy et al., 2012; Smith & Williams-Jones, 2012).
Seasoned researchers have either experienced or heard controversial tales about authorship. There is for example the tale of a scholar whose work was published by an advisor or mentor without credit to the scholar’s contribution. This problem of authorship seems to be ubiquitous according to Bebeau and Monson (2011). The authors pointed out in a survey of 604 respondents that two out of three experienced conflicts in authorship credit. Authors receiving too much recognition represented over half (56%) while insufficient recognition was less common (28%). Responsible conduct in research (RCR) authorship concerns apply to all disciplines and consequently establishing common standards for RCR are further complicated due to the various practices between disciplines.

Authorship allocation should be fair and guarantee that all authors are properly recognized for their part in a paper (Smith & Williams-Jones, 2012). Determining author lists results in conflict between authors and may lead to guest, gift, or honorary authorship or ghost authorship practices that compromise the integrity of scientific research and publications. There are accepted standards for authors to refer to for determining authorship in multi-author papers.

Introducing the order of authors is also an important consideration.Knowing the order of the authors is essential in determining how much of a contribution each author has made. Presuming that the first author listed on a paper made the most significant contribution may be incorrect. The last author may have also made a significant contribution to the paper. When publications have two or more authors, the authors must make a decision regarding the order of the authors listed. One option has been to list the names alphabetically. Another option is to list the authors in order of contribution made to the paper (Riesenberg, 1990; Waltman, 2012).

Waltman (2012) analyzed the practice of alphabetical authorship in scientific publications in Thomson Reuters' Web Science database for the years 1981 through 2011. Findings suggested that single-author publications are becoming less common. For example, of 1.3 million publications indexed in the Web of Science database in 2011, 89% had two or more authors. Waltman also found that alphabetical authorship has declined from 8.9% in 1981 to 3.7% in 2011. The use of alphabetical authorship is most common in the social sciences, humanities, mathematics, and in fields that have either a small or a large average number of authors per publication. Partial alphabetical authorship (some of the authors of a publication are listed alphabetically) is most common in natural science fields.

Johnston and Metcalf (2012) asserted that the order of authorship varies from discipline to discipline. For example, medical and allied health journals list the authors according to contributions. The first author listed contributed the most, and the other authors are listed by level of contribution. Mathematics might list authors alphabetically; other disciplines might list the most senior researcher first or might list the most senior researcher last to indicate the most prestigious position within a discipline.

**Authorship Standards**

Editors in social studies journals tended to concentrate on the "procedures and mechanics" (Bebeau & Monson, 2011, p. 382) of publishing without much thought given to authorship responsibilities during the early 1980s. The peer review processes and standards were generally not conveyed to authors. However, a number of association guidelines have become more clear by (a) listing the names of the editorial boards, (b) permitting authors to suggest or omit reviewers, (c) expecting reviewers to apply for reviewing positions, (d) developing
procedures to contest reviewer decisions, (e) offering assistance regarding reviewer criticisms, (f) publicizing rejection rates, (g) summarizing reviewer timelines for acceptance or rejection, and (h) communicating reviewers’ criteria for reviewing papers (Bebeau & Monson, 2011).

Also during the early 1980s expectations of authors were seldom communicated regarding (a) work originality, (b) authorship criteria, (c) data sharing, (d) human subjects participants’ protection, and (e) conflict of interest disclosures (Bebeau & Monson, 2011). These expectations were increasingly dealt with over time in association codes. Bebeau and Monson (2011) suggested that it was not likely that authors reviewed these expectations as they submitted papers for publication. Association journals often refer to the journals’ respective expectations even though they differ on how this information is communicated to potential contributors.

The explosion of authorship standards in scholarly journals may be too burdensome for inexperienced authors to impact significantly authorship integrity. However, expectations of authors are clear in the author certification forms that authors sign during submission of papers or prior to publication. With this explosion of information available, inexperienced authors have opportunities to review websites for journal expectations across disciplines. Additionally, information exists for experienced authors to mentor future authors on accepted standards for ethical authorship (Bebeau & Monson, 2011).

Professional associations and scientific societies play an important role in the establishment, communication, and maintenance of ethical authorship (Bebeau & Monson, 2011). Also, Smith and Williams-Jones (2012) have suggested that journals and publishers have an opportunity to take a leading role in establishing standards for authorship practices. Communicating to authors the standards will enhance the likelihood that certain practices may be discontinued. Requiring authors to submit authorship lists prior to submission of papers clarifies and demonstrates the importance of processes and procedures regarding authorship integrity.

Authorship standards can ensure that those who made significant contributions to the research project are included in the list of authors, and those who did not make a significant contribution are not included in the list of authors. Resnik and Master (2011) asserted that the International Committee of Medical Journal Editors’ (ICMJE) criteria for authorship in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals could be applied to empirical bioethics research. A number of bioethics journals have established authorship standards as the ICMJE, such as outlining significant contribution requirements and guidelines.

Brand (2012) encouraged researchers to consider discussing the list of authors prior to beginning a research project. Authorship lists should also be discussed as the project progresses, prior to writing the research paper, while finalizing the paper, and before submitting the paper to a journal for publication consideration. The paper’s authorship should be well understood by all contributors at the point of submission to the journal and prior to any final revisions requested from the editor. In order to preserve the integrity of research, the current practices of ghost, guest, gift, or honorary authorship must discontinue. It is equally unethical to deny authorship to someone who made a significant contribution to a project as it is to grant someone authorship who did not make a significant contribution. Brand pointed out that the issue is clarifying what will be considered as a significant contribution to a multiple-author research project and to consider acknowledging contributors who made minor contributions as an alternative.

Accountability is an important consideration to authorship listing. Authors should be able to address error, bias, or potential misconduct concerns related to their work. While accountability is not generally a concern in one-author papers, it can become a concern in multi-
author works. In the event a future study designed to replicate a multi-author study reanalyzes
the findings and determines that there is a problem, it is necessary for the researchers to identify
who is responsible for the problem (Resnik & Master, 2011). Brand (2012) cautioned authors
against permitting their names to being included in the list of authors on a research project that
they cannot publicly represent to avoid this problem upfront.

Authors are encouraged to have a journal in mind for submitting papers and to study the
journal standards prior to beginning the research project. Through this process, authors should
have understood and satisfied the requirements for authorship. Furthermore, if the members of
the research project are relatively diverse, parallel publications may also be reviewed prior to
beginning the project. The goal is to work to resolve potential authorship conflicts in advance of
conducting the research project (Johnston & Metcalf, 2012).

There is no issue of RCR as prevalent and controversial than the concerns of authorship. It
is important for all to receive recognition for contributions made to any form of scholarly
endeavor in spite of the specific discipline. This recognition in academia is most often earned
through publications. Because of the significance of this type of recognition to career
opportunities, grants, and reputation, conflicts regarding authorship are widespread in science
and engineering disciplines. These conflicts are more than just about what determines a
significant contribution to warrant inclusion in the list of authors. Long-term conflicts over the
order of listing authors can develop. These issues are outlined in author standards to some
degree, but these outlines often leave room for debate. Kalichman (2011) posed the question of
whether the standards for authors should be similar within or even across academic disciplines.

"Empirical studies show that unethical authorship practices—including ghost authorship
and gift authorship—are commonplace in academia" (Smith & Boulanger, 2011, p. 25). It is
likely that unethical authorship conduct is underreported due to the discomfort associated with
honest admission of such behavior. Furthermore, if unethical authorship disclosure is
communicated in empirical research, it is also likely that this unethical behavior occurs in other
disciplines (Smith & Boulanger, 2011). Smith and Boulanger (2011) proposed authorship
standards be established. They suggested these standards address two specific areas. The first is
the order of authors by degree of contribution. The second is the appropriate use of author
recognition, specifically contributions that may not be significant but deserving of authorship
credit. By addressing the order of authors and the proper acknowledgment of authors, authorship
fairness and accountability according to level of contribution will be realized. Smith and
Boulanger also recommended that further discussion is needed to establish implementation
procedures to guarantee fair and responsible conduct in research.

Stern and Lemmens (2011) maintained there is ongoing anxiety regarding the
pharmaceutical and device industries' influence in medical research. This is especially
troublesome with clinical trials that misrepresent or overstate the findings such as the benefits of
drugs. Research studies written by employed medical writers (ghost authors), signed by
academic researchers (guest authors), and published in academic journals without disclosing all
contributions is an example of this influence and some have "condemned the practice as
unethical and unacceptable" (p. 1).

Ghost authorship is not acceptable in medical scholarly journals (Kennedy et al., 2012).
Authors are advised to list all individuals in the list of authors who made a contribution whether
paid or not. Writing contributions paid by companies that have a stake in the research introduces
prejudice. Clearly indicating these individuals notifies editors, reviewers, and readers that prejudice might be present in the research.

There have been conversations about the potential harm that could occur as a result of this conduct in research. Potential regulatory efforts could be enforced on authors and potential penalties could be assessed by journals, academic institutions, and regulatory agencies. However, to date academic institutions, medical journals, and medical licensing organizations have not responded to these concerns because they have the most to lose. Stern and Lemmons (2011) suggested that the legal system must intercede in view of the fact that journals, academic institutions, and regulatory agencies fail to take appropriate action. The authors declared that guest authorship "constitutes legal fraud," misrepresenting authorship is fraudulent, and "soliciting and facilitating fraud may amount to conspiracy" (Stern & Lemmons, 2011, p. 2).

A review of the literature has revealed the following points:

- Problems of authorship are ubiquitous (Bebeau & Monson, 2011; Kalichman, 2011; Smith & Boulanger, 2011).
- Ghost, guest, gift, and honorary authorships are misleading and unethical (Brand, 2012).
- Large numbers of authors on a paper raise questions of authorship (Resnik & Master, 2011).
- Authorship is tied to career improvement, rank, and other benefits (Bavdeka, 2012; Kalichman, 2011; Resnik & Master, 2011).
- Researchers have ethical responsibility to ensure the integrity of all research and related conduct in research. Being listed as an author implies authenticity of authorship lists (Bavdeka, 2012; Kennedy et al., 2012; Smith & Williams-Jones, 2012).
- Misrepresenting authorship lists could represent fraud (Stern & Lemmons, 2011).
- Having common authorship lists can ameliorate questions of authorship (Sukhlecha, 2012).

In summary, the practices of guest and ghost authorships have raised questions of authorship and concerns about potential harm that could result if they continue. Those involved in research have the ethical responsibility of preserving the integrity of all research. Accepted standards across industries and disciplines can facilitate responsible conduct in research.

**Discussion and Conclusion**

The research community must begin to put its house in order. This is important to higher education if the integrity of research is to be preserved. It is also important to higher education to assure responsible conduct of research. A goal of all researchers and those involved with research must be to restore and protect the integrity of research.

**Implications**

The implications from the findings of this research are numerous. With the past growth of scholarly publications and research, the problems of authorship are not going away. The practice
of questionable authorships is ingrained into the system through recognition and monetary awards. Unfortunately, the potential for harm is a real threat to the future of research. Therefore, those involved in research are answerable for its future. Because the problems of authorship are ubiquitous, all involved in scholarship activities are accountable for maintaining its integrity.

**Recommendations**

It is recommended that additional studies be conducted on authorship to verify the results of this study. It is also recommended that future research be conducted to determine that these questions of authorship are being addressed. It is further recommended that future research be conducted periodically to assure that authorship standards are designed, communicated, and observed.

**References**


