

Perceptions of Ethical and Unethical Behavior in Recreation Research

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Abstract

This research explored selected ethical issues related to research and publication within the Recreation and Leisure Service profession as perceived by journal editors and reviewers. A convenience sample of 40 journal editors and reviewers completed a 31-item survey assessing 21 scenarios addressing ethical issues in research and publishing. Respondents were requested to indicate if the scenario represented: (a) ethical practice, (b) questionable practice, (c) unethical practice, or (d) whether a scenario was not an ethical issue. Of the 21 scenarios analyzed, two were considered ethical, six unethical, and one not an ethical issue by a majority of respondents. Analysis of the ethical status of the remaining 13 scenarios indicated slight to considerable perceptual differences among the sample. Demographic data indicated that a majority of respondents held a professional position as an academician, and that a plethora served in an editorial capacity for a professional journal for a minimum of 10 years, been forced to question unethical research or publication practice, and sought advice on whether an action/issue was ethical or unethical.

KEYWORDS: Research, ethics, recreation, leisure, scholarly activity, professional practice.

Introduction

Research is an integral component to the advancement of any profession. Through directed research efforts, professions establish unique bodies of knowledge that serve to further understanding of phenomenon and provide direction for decision making. As such, research should be conducted and disseminated based on established principles that guide its execution.

At minimum, research should be executed in accordance with the principles of honesty and competence (Riddick & Russell, 2008). In the event that human subjects are involved in a research project, ethical principles guiding research should be expanded to address participant protection (National Institutes of Health [NIH], 2002).

Literature addressing research ethics commonly focuses on principles such as honesty, justice, beneficence, respect, justice, nonmaleficence (Riddick & Russell, 2008), and other areas related to action and decision-making common to the research process, including but not limited to: authorship; fraud; plagiarism; fragmentation; duplication; external sponsorship/conflict of interest; collegiality, the use of Institutional Review Boards (Price, Dake, & Islam, 2001); and the collection, integrity, ownership, and storage of data (Mitra & Lankford, 1999; Riddick & Russell, 2008).

Honesty

The principle of *honesty* is associated with trust. Research should be free of deception or the misrepresentation of information (Riddick & Russell, 2008). In addressing issues relevant to the principle of trust, Riddick and Russell (2008) highlight that deceptive practices can commonly include plagiarism; not being forthright with study participants about the purpose of a research project; inadvertent or intentional errors in data collection, analysis, or reporting; and fraud.

Competence

The principle of *competence* is related to the skills and abilities of a researcher. Generally speaking, "competence means that an individual is qualified by training and experience to conduct the research study. Researchers should know their limitations, engage in continuous education activities, and seek assistance when necessary" (Riddick & Russell, 2008, p. 238).

Participant Protection

Participant protection includes the principles of *respect for persons*, *beneficence*, *justice*, and *nonmaleficence* (McCrone, 2002; NIH, 2002). According to the NIH (2002) the principle of respect for persons is associated with study participants being treated as autonomous agents and the protection of persons with diminished autonomy, beneficence refers to an obligation researchers have to maximizing participant benefits and minimizing participant harm, while justice refers to the equitable distribution of participant benefit and risk. Finally, nonmaleficence speaks to the obligation a researcher has to prevent any unnecessary harm to participants (McCrone, 2002).

Authorship

Ethical issues related to authorship most commonly arise when multiple individuals consider writing a manuscript (Erlen, 2002). While single authorship is still prevalent, collaborative research publications have steadily increased (Price, Dake, & Oden, 2000). Often in collaborative research situations questions arise related to who should be considered as an author of a manuscript and how authorship should be ordered (Erlen, 2002). According to the International Committee of Medical Journal Editors (2008), the following three criteria should be met to receive authorship on a research manuscript: 1) a substantial contribution to a significant part of the study, such as its conception or design, data acquisition, data analysis, or data interpretation; 2) involvement in the drafting, revising, or critical review of the manuscript; and 3) approval of the final manuscript version to be published.

Based on the above criteria for authorship, two possible situations could occur in which ethical research behavior could be called into question. These situations include “ghost authorship” and “guest authorship”. According to Price, Dake and Oden (2000) these two actions of research misconduct involve the omission of a collaborator from authorship that has made a significant contribution to a manuscript (ghost) or the recognition of authorship of an individual that made no substantial contribution to a manuscript (guest). Often ghost authorship includes the omission of paid writers or graduate students who have met authorship criteria (Johnson, 2005). Typical situations of guest authorship commonly include extending authorship to well established peers to increase the possibility of manuscript acceptance or extending authorship to others to accommodate political favors (Johnson, 2005). Issues of ghost authorship and guest authorship are particularly important in regard to student and academician collaboration on scholarly work worthy of publication, such as projects, theses or dissertations (Fine & Kurdek, 1993).

Fraud

Fraud can encompass a variety of deceptive practices typically related to the principle of honesty. Fraud primarily results from deception or the misrepresentation of information (Riddick & Russell, 2008). Fraud includes the omission or fabrication of data, plagiarism, minor changes to data, and reporting only selective results (King, 2003; Monette, Sullivan, & DeJong, 2005). In addition, when federal funding is involved the fabrication or falsification of data is a federal crime subject to prosecution, carrying possible sanctions such as court ordered restitution, fines, and incarceration (ORI, 2007).

Plagiarism

Plagiarism is the unauthorized reproduction of work without proper permission of, or credit to, the original work's author (Council of Writing Program Administrators, 2003). Plagiarism is essentially theft of intellectual property (ORI, 2007). Recently the issue of self-plagiarism has been addressed. Self-plagiarism

encompasses aspects of fragmentation, duplication, and copyright infringement (Roig, 2006).

Fragmentation

Fragmentation is generating a series of studies from one original piece of research and typically viewed to be an ethical compromise (Roig, 2006). American Psychological Association (APA) publishing guidelines discourage the fragmentation of research (APA, 2001).

Duplication

Duplication becomes an ethical concern when a researcher publishes the same manuscript, or a slight variation of a manuscript, in more than one scholarly publication (King et al., 1997). Duplicating the same manuscript in more than one journal is likely to compromise any copyright agreement between an author and a publisher (Roig, 2006). A second form of duplication relates to the practice of simultaneously submitting manuscripts for editorial review (International Committee of Medical Journal Editors, 2008). Multiple submissions of manuscripts have been argued to violate the trust between editor and author (Erlen, 2002), and is considered an ethical compromise (International Committee of Medical Journal Editors, 2008; Roig, 2006). The issue of duplication is also relevant to the scholarly presentation of research.

External Sponsorship/Conflict of Interest

Conflict of interest has the potential to become an ethical issue when a researcher, their institution, or an editor or reviewer has personal or financial relationships that may inappropriately influence, intentionally or not, his or her actions (International Committee of Medical Journal Editors, 2008). Specifically, conflict of interest becomes an ethical issue when a researcher does not disclose potential conflicts that could influence the researcher's ability to be impartial in reporting findings (Oermann, 2002) or when research results could influence positively or negatively the financial interest of a researcher (ORI, 2007).

Collegiality

Collegiality refers to sharing research findings with other colleagues who wish to reanalyze or verify research findings (Parker & Szymanski, 1996). If warranted, the sharing of data could include fair compensation as deemed appropriate by the individual who produced the original research (Price, Dake & Islam, 2001). While the sharing of data is encouraged, issues such as confidentiality, perceived questionable use of the information by the requesting individual, or other legal issues may justify a researcher's decision to decline sharing research findings (Parker & Szymanski, 1996). Collegiality can also extend to the sharing of data collection instruments such as surveys.

Data Collection, Integrity, Ownership, and Storage

Data collection can become an ethical issue when appropriate data collection methods are not utilized. Data collection methodologies should collect data appro-

priate for answering research questions, should be appropriate for the type of data being collected, and should assure that data collected is reliable, valid, and useful (Mitra & Lankford, 1999; Riddick & Russell, 2008). Further, data integrity should be maintained through appropriate data handling techniques, proper record keeping, and appropriate data analysis (ORI, 2007). In addition, any restrictions on the ownership of data should be understood by the researcher, and data should be appropriately stored for a minimum of seven years following the conclusion of a research project (ORI, 2007).

Institutional Review Boards

Linked to the issue of participant protection is the use of Institutional Review Boards (IRBs). The use of IRBs is less an issue of ethics as it is an issue of law. Based on the National Research Act of 1974 universities and agencies conducting research with human subjects must have in place an IRB responsible for reviewing research proposals and monitoring that research is conducted in accordance to the law (Wiersma, 1995).

While there is an abundance of scholarly literature available that explores research ethics, little has been stated by the field of recreation in regard to the ethical principles that should be followed when conducting, presenting, and publishing research. For example, codes of ethics published by the National Recreation and Parks Association (NRPA) and the American Therapeutic Recreation Association (ATRA) are directed toward professional practice, and do not address research and publishing issues (NRPA, 2007; ATRA, 2001). Currently, selected ethical issues related to the publication of research in the field can be identified in submission guidelines of the field's professional journals. These guidelines are extremely limited however, primarily only addressing issues related to manuscript content and style, simultaneous publication, and plagiarism. One of the best recreation-related resources found in conducting the literature review for this research was the Codes of the Ethics of the American Association of Health, Physical Education, Recreation, and Dance (AAHPERD) Research Consortium, which addressed a few of the foundational principles related to scholarly activity previously discussed (AAHPERD, 2009). Beyond guidelines established by the AAHPERD Research Consortium, however, the comprehensive review of literature identified only limited research articles in recreation, park resources, and leisure services journals identifying selected ethical issues related to research publication (Crane & Rosato, 1992; Fain & Gillespie, 1990; Sawyer, 1995). Further, the articles were limited in the scope of ethical issues examined, focusing primarily on authorship, intellectual property, and copyright concerns.

Purpose:

The purpose of the current study was to measure the perceptions of recreation journal editorial staff regarding selective ethical issues specific to research and publishing to provide the field a better understanding of what its editorial staff perceives to be appropriate or inappropriate scholarly decisions or actions. Specifically, the study addressed perceptions of ethical/unethical behavior related to: (a) academician publication of student thesis/dissertations, (b) conflict of interest based on external research funding, (c) omission or fabrication of data, (d) sub-

missions of presentation proposals, (e) multiple publications from one original research study, (f) submission of similar, but varying, manuscripts from an original research study to more than one professional journal in the same or different fields, (g) multiple presentations of same study at different conferences, (h) presentation of a study after publication, (i) declining to share research instruments when requested by colleagues, (j) anonymity and confidentiality, (k) the use of Institutional Review Boards (IRBs), and (l) deliberate misrepresentation of study purposes.

Given the apparent dearth in information related to conducting, presenting, and publishing research in the field of recreation, this research has implications to all stakeholders within our profession who engage in scholarly activity.

Methods

Subjects

Journal editorial staff including editors, associate editors, and reviewers were identified using contact information provided in current additions of professional journals and online journal web pages of the *Journal of Leisure Research*, *SCHOLE*, *American Journal of Recreation Therapy*, and *Therapeutic Recreation Journal*. Out of the convenience sample of 73 journal editorial staff solicited to participate in the study, 41 completed measurement instruments were received, yielding a 56% response rate. One returned measurement instrument was removed from the study due to incomplete data, yielding a 55% useable response rate ($n=40$). Demographic information indicated that a majority of respondents were female (58%, $n=23$), age 44 to 54 (58%, $n=23$), held a professional position as an academician (98%, $n=39$), presented original research at conferences (98%, $n=39$), were published in professional journals (98%, $n=39$), and taken a formal course or Continuing Education Units (CEU's) addressing ethical research practice (50%, $n=20$). Further, a plethora (48%, $n=19$) had served in an editorial capacity for a professional journal for a minimum of 10 years, been forced to question unethical research or publication practice (43%, $n=17$), and sought advice on whether an action/issue was ethical or unethical (43%, $n=17$).

Instrumentation

The survey questionnaire was developed based on a survey designed by Price et al. (2001) that was used to examine research ethics in health education. Since many of the objectives of this study were similar to the Price et al. study, the researchers' requested, and were granted, permission to duplicate and modify the original Price et al. survey instrument. The only modification made to the survey was the replacement of recreation, park resources, and leisure service terminology in place of health education terminology. The final survey questionnaire consisted of 10 demographic items and 21 research ethics items. For each of the 21 research ethics items, respondents were asked to provide their perception of whether the action taken in each research scenario was ethical, questionable, unethical, or not an ethical issue. The four-page instrument required 15 to 20 minutes to complete. Internal reliability of the survey questionnaire for use with academicians was tested

in the original Price et al. study using Chronbach's alpha. The survey was found to have acceptable reliability within an academician population (.70).

Procedure

The researcher's Human Subjects Review Committee granted approval of the measurement instrument and permission to engage in the study. Journal editorial staff were solicited to participate in the study in winter 2006. Initial and follow-up mailings were instituted to maximize response rate (Dillman, 1978). Both solicitations included: a personalized cover letter indicating participant identification procedures, confidentiality procedures, and information pertaining to the study's purpose; a copy of the survey questionnaire; and a coded self-addressed, pre-stamped, envelope for survey questionnaire return.

Statistical Analysis

Measurement instruments were analyzed using SPSS. All datum reported in this article were analyzed and reported as group data. Not all academicians responded to all applicable measurement instrument items, resulting in some points of missing data. As such, the total number of respondents per item is noted within each result category reported. Data analysis was done using standard descriptive statistical methods. All datum received was included in data analysis.

Results

Reported Engagement in Perceived Unethical Research Practice

Seventeen study respondents (43%) indicated that within their editorial duties they had been forced to question what they perceived to be unethical research activity. Twenty-one issues or actions were reported. Perceived ethical infractions included: multiple submission of same or similar manuscripts (7), plagiarism (4), authorship (3), falsification/misrepresentation of facts or data (2), fragmentation (1), submission of manuscript unrelated to journal's publication area (1), informed consent (1), amending inadequate literature review after study completion to strengthen for publication (1) and, withholding treatment issues (1).

Advice Sought in the Execution of Personal Research

Seventeen study respondents (43%) indicated they had sought advice on whether a decision, issue, or action would be ethical or unethical in the execution of a personal research project. In total, 19 areas of question were qualitatively reported. Inquiries qualitatively reported included: authorship (7), student assistance in research (3), use of student research as an advisor (2), informed consent (1), survey research procedures (1), collaboration with the private sector (1), authorization by Institutional Review Boards (1), reporting observation of criminal activity (1), fragmentation (1) and, copyright law (1).

Scenario Perceptions

Respondent's perceptions to ethical scenarios are reported based on whether a scenario was perceived to be ethical, unethical, questionable, or not an ethical

issue by either a majority (50%-100%) of respondents or a plethora (40%-49%) of respondents. The number of respondents (n) and the distribution of responses reported (i.e. ethical, unethical, questionable, or not an ethical issue) are presented in table format.

Of the 21 ethical scenarios provided, two scenarios were indicated as being ethical research practice by a majority of respondents, while three were indicated as being ethical research practice by a plethora (40%-49%).

TABLE 1
Perceived Ethical

	Ethical		Questionable		Unethical		Not An Ethical Issue	
	f	%	f	%	f	%	f	%
Scenarios: Ethical By Majority (50% - 100%)								
A recreation faculty member conducts a large study on two different groups of professionals, clinical recreational therapy practitioners and community special population practitioners. The data set is sufficiently large enough to result in two separate publications. One article is published on clinical therapy. The second manuscript (on community special population recreation) contains the exact same verbiage as the original manuscript for the methods section of the paper. The two studies are going to be published in two different fields (a recreational therapy journal and a city government journal). (n=39)	22	56	7	18	3	8	7	18
A recreation educator is conducting research on insurance payments for recreational therapy in psychiatric facilities. As he/she designs the study on the impact of length of stay on therapeutic programming, he/she is approached by a national HMO and offered \$10,000 to fund the study. The HMO places no contractual restrictions on the publishing of the data. No one else is interested in currently funding the study so the recreation educator accepts the offer. (n=40)	31	77	2	5	1	3	6	15
Scenarios: Ethical By Plethora (40% - 49%)								
A recreation faculty member conducts what he/she considers to be an important piece of research on behavior change in regard to creativity and recreation. The study is published in the Journal of Creative Behavior. Before the study is published, the author presents the same study at two different national recreation conferences. (n=40)	17	43	7	17	8	20	8	20
A recreation faculty member conducts what he/she considers to be an important piece of research on behavior change in regard to creativity and recreation. The study is published in the Journal of Creative Behavior. Before the study is published, the author presents the same study at a national recreation conference and at a regional and a state conference. (n=40)	17	43	7	17	8	20	8	20
A recreation faculty member conducts a national study of perceived barriers to recreation participation. Since the faculty member lacks sufficient skill to do the data analysis and is not sure exactly what statistical tests should be conducted, he/she hires (\$1,000) a graduate student to do the data analysis. Furthermore, the recreation educator is not certain exactly how to present some of the data in the manuscript. The recreation educator writes the manuscript with the graduate student helping to write the results and create some of the tables. The recreation educator then publishes the paper under his/her name which includes an acknowledgment of the graduate student for his/her assistance. (n=40)	19	47	11	28	7	17	3	8

Overall, 10 scenarios were perceived to be unethical research practice, six by a majority (50%-100%) of respondents and four by a by a plethora (40%-49%).

TABLE 2
Perceived Unethical

	Ethical		Questionable		Unethical		Not An Ethical Issue	
	f	%	f	%	f	%	f	%
Scenarios: Unethical By Majority (50% – 100%)								
A graduate student completes a thesis/dissertation in which the advisor has had significant input. The student leaves for a job shortly after completing the degree. The student has no interest in helping to write a manuscript from the study. Subsequently, the advisor loses contact with the student and no further communication attempts are made. Six months after the student graduated, the advisor writes and submits a manuscript from the thesis/ dissertation for publication with the advisor's name first and the student as a second author even though the student was not contacted. (n=39)	2	5	13	33	23	59	1	3
A recreation faculty member has been funded by a playground equipment company to conduct a national study of equipment safety. After the study, the author must submit the final manuscript for review to the company. The company requires the author to drop two lines of results because it indicates something which could affect the company's sales of playground equipment. The author complies before submitting the manuscript to a national recreation journal. (n=40)	2	5	4	10	33	82	1	3
An author publishes a manuscript in a recreation journal that contains instances in which he/she deliberately falsifies or fabricates data or information. (n=40)	0	0	0	0	40	100	0	0
A department has a job candidate in for an interview. He/She answers a question before the faculty on future research. The candidate identifies an interesting study he/she is going to do next fall. A faculty member finds the topic of interest and decides to do the study immediately. (n=39)	1	3	7	18	26	67	5	12
A recreation educator sends out a questionnaire with a cover letter. The cover letter informs potential respondents that individual responses will be kept anonymous and confidential. To reduce the costs of follow-up mailings, the recreation educator secretly codes the questionnaire, which eliminates anonymity but maintains confidentiality. (n=40)	3	8	3	8	34	84	0	0
A recreation educator is in a hurry to conduct a survey before the holidays. Because of the slowness of the local Institutional Review Board (IRB) he/she does not send the questionnaire to the IRB before doing the study, even though it is the policy of that institution that all surveys be reviewed. (n=40)	0	0	4	10	33	82	3	8

– Table 2 continued on next page.

TABLE 2 (CONTINUED)
Perceived Unethical (Continued)

Scenarios: Unethical By Plethora (40% – 49%)	f	%	f	%	f	%	f	%
A graduate student completes a thesis/dissertation in which the advisor has had significant input. The student leaves for a job shortly after completing the degree. The student has no interest in helping to write a manuscript from the study. Subsequently, the advisor loses contact with the student and no further communication attempts are made. The chairperson of the department supports the advisor going ahead and publishing a study from the thesis/ dissertation and offers editorial assistance on the final manuscript. The advisor identifies the authors as the student, then him/herself, then decides to put the chairperson on the manuscript as third author. (n=39)	8	20	11	28	19	49	1	3
A recreation faculty member conducts a national study of perceived barriers to recreation participation. The faculty member lacks sufficient skill to conduct the data analysis and is not sure exactly what statistical tests should be performed. Furthermore, the recreation educator is not certain exactly how to present some of the data in the manuscript. The recreation educator writes the manuscript and has a colleague conduct the data analysis and help write the results. No discussion occurs regarding authorship. The recreation educator publishes the paper under his/her name which includes an acknowledgment of his/her colleague. (n=40)	8	20	13	33	17	42	2	5
The author (recreation educator) of a study published in a professional recreation journal did not acknowledge the source of funding for his/her study. (n=40)	0	0	13	33	16	41	10	26
A recreation educator obtains written consent from a group of college students who each agree to participate in a study on knowledge of recreation risk factors. The college students are not informed that the data gathered on risk factors is not going to be used. In reality, the study is examining cheating behaviors on college tests. (n=38)	5	13	11	30	18	47	4	10

Overall, one scenario was perceived as being not an ethical issue by a majority (50%-100%) of respondents.

TABLE 3
Perceived Not An Ethical Issue

	Ethical		Questionable		Unethical		Not An Ethical Issue	
Scenario: Not An Ethical Issue By Majority (50% – 100%)	f	%	f	%	f	%	f	%
A recreation educator publishes a study on a topic of widespread interest in recreation. Several researchers contact the author after they see the study to request copies of the instrument. The author declines to share his/her instrument with others. (n=39)	6	15	6	15	6	15	21	55

While no respondents reported majority agreement as to whether a research scenario was questionable, four scenarios were found to be questionable by a plethora (40%-49%).

TABLE 4
Perceived Questionable

	Ethical		Questionable		Unethical		Not An Ethical Issue	
Scenarios: Questionable By Plethora (40% - 49%)	f	%	f	%	f	%	f	%
A graduate student completes a thesis/dissertation in which the advisor has had significant input. The student leaves for a job shortly after completing the degree. The student has no interest in helping to write a manuscript from the study. Subsequently, the advisor loses contact with the student and no further communication attempts are made. Six months after the student graduated, the advisor writes and submits a manuscript from the thesis/dissertation for publication even though the student was not contacted. The student's name appears first and the advisor's name appears second. (n=39)	6	15	19	49	12	31	2	5
A recreation faculty member submits an abstract for presentation at a national conference. The abstract is accepted, but the faculty member had no intention of attending the conference to present the study. The faculty member has a colleague, not a co-author, present the study since the colleague was already planning on attending the conference. (n=40)	4	10	16	40	15	38	5	12
A recreation educator has conducted a study and is going to attempt to write three or four publications from it. The majority of the data from the study has already been published by the author in a recreation journal. The subsequent manuscripts used parts of the original data not published in the original article. Furthermore, it could have strengthened the original article had the author chose to include all of the data. (n=39)	14	36	16	41	0	0	9	23
A recreation faculty member conducts what he/she considers to be an important piece of research on behavior change in regard to creativity and recreation. The study is published in the Journal of Creative Behavior. The faculty member is concerned that many recreation educators may not see the article. Thus, the faculty member submits a slight variation of the same article to a recreation journal for publication. (n=40)	3	7	17	43	16	40	4	10

In regard to the final scenario yet to be reported, respondents were relatively balanced in their perceptions across all response categories. No majority (50%-100%) or plethora (40%-49%) agreement was indicated.

TABLE 5
No Perceived Majority or Plethora Agreement

	Ethical		Questionable		Unethical		Not An Ethical Issue	
Scenario: No Majority (50%-100%) or Plethora (40%-49%) Agreement	f	%	f	%	f	%	f	%
A recreation faculty member conducts what he/she considers to be an important piece of research on behavior change in regard to creativity and recreation. The study is published in the Journal of Creative Behavior. Three months after publishing the article in a recreation journal, the author submits the study for presentation at a national recreation conference. (n=39)	14	36	9	23	7	18	9	23

Discussion and Conclusions

The presentation and publication of research is an important endeavor for recreation academicians, practitioners, and increasingly graduate students. For most academicians, research is required for the attainment of tenure and promotion (Silverman, 1999). Likewise, for many practitioners, involvement at professional conferences and the publication of research can also increase opportunities for career advancement (Rumrill & Bellini, 1999). For graduate students, research publications can most certainly demonstrate competency in research and expertise to prospective employers.

While the presentation and publication of research is highly regarded within the field of recreation, the present research determined that considerable variation exists among recreation journal editorial staff regarding what are ethical or unethical research practices. Results of the current study also indicate that considerable variation exists in regard to what editorial staff even constitutes an ethical issue in research. Considering the results further, of particular concern is the high number of “questionable” responses indicated for many of the scenarios. This appears to indicate that currently the field of recreation may have little consensus as to what actually constitutes ethical or unethical research behavior.

Further, results from this study indicate that the field of recreation lacks a comprehensive formalized code of ethics with regard to research practice. Two sets of codes that the researchers conducting the current study can recommend to guide recreation researchers are the “Code of Ethics” of the AAHPERD Research Consortium (AAHPERD, 2009) which address issues related to authorship, plagiarism, and the submission of scholarly work for presentation and publication

and the Uniform Requirements for Manuscripts Submitted to Biomedical Journals which comprehensively addresses authorship, editorship, peer review, conflict of interest, privacy and confidentiality, human subject protection, duplicate submission, redundant publication, electronic publication, and manuscript preparation (International Committee of Medical Journal Editors, 2008).

It is not the intention of the researchers conducting the current study to utilize these results to criticize our field's journal editorial staff. It is through their efforts that the integrity of our field's research is addressed. However, the results of this study do support the need for the recreation field to move towards becoming more actively engaged in supporting its researchers and the editorial staff of its journals by establishing a more encompassing code of research ethics that clarifies what the field, as a whole, perceives to be ethical and unethical research practice. More precise guidelines governing ethical research behavior such as the guidelines published for biomedical journal publication would certainly assist recreation researchers in making appropriate decisions in the execution of their research. In addition, the establishment of a comprehensive code of ethics by the field of recreation, reflective of its core research values, would certainly be relevant in defining how the field of recreation would train its future academicians and journal editors (i.e., graduate students) in research and peer review. Finally, the establishment of a comprehensive code of research ethics would allow the field of recreation to define what it perceives as research misconduct, and allow it move forward in developing possible sanctions for such misconduct.

While the results of this study are pertinent to all stakeholders involved in research and peer review in recreation, the majority of research conducted in the field of recreation, as well as those that serve as the field's journal editorial staff come from academe. As such, one organization that the current research has specific relevance to is the Society of Park and Recreation Educators (SPRE) whose efforts focus on enhancing the quality and scope of research in the field of recreation (SPRE, 2006).

While the current research has established a need for a comprehensive code of research ethics unique to the field of recreation, future research should be conducted, which could include studies identifying: the prevalence of unethical research behavior by recreation academicians and practitioners; the ethical issues that are most commonly encountered by recreation researchers; and the extent to which recreation academicians and practitioners confront ethical research issues and the sources they rely on to answer any questions related to those issues.

Although the implications and relevance of this research to the field of recreation has been previously discussed, limitations to the current study do exist. One limitation is the useable response rate (55%) for the study. As a result, threats to external validity may exist due to a nonresponse bias or the possibility that datum reported would have yielded different results if a higher response rate was received. A second limitation is that the questionnaire was self-administered, thus potential threats to internal validity may exist if respondents provided information they perceived to be desirable to the researchers of the current study rather than data

reflecting their true personal perceptions. A third limitation was that editorial staff solicited to participate in the study came from a relatively small sample of the professional journals published within the field of recreation, possibly limiting the external validity of the study in regard to generalizing reported perceptions to all editorial staff working within the field.

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