

ETHICAL ISSUES IN RECREATION RESEARCH AS PERCEIVED BY RECREATION, PARK RESOURCES, AND LEISURE SERVICES FACULTY

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Abstract

This survey explored selected ethical issues related to research and publication within the recreation, park resources, and leisure services profession. A national random sample of recreation, park resources, and leisure services academicians at graduate degree-granting programs completed a 32-item survey, assessing 21 scenarios addressing ethical issues in research and publishing. Selected ethical issues examined included (a) authorship, (b) conflict of interest, (c) plagiarism, (d) fraud, (e) duplication, (f) fragmentation, (g) collegiality, (h) participant protection, and (i) the use of Institutional Review Boards. Standard descriptive statistical analysis indicated that considerable variance exists among recreation, park resources, and leisure services academicians in relation to the ethical status of scenarios addressing the aforementioned areas of research conduct/misconduct. Of the 21 scenarios analyzed, only three were considered ethical and seven unethical by a majority of respondents.

1.0 Introduction

Ethics is defined as conforming to the standards of conduct of a given profession (Leach 1998). Applied to research, ethics serve as guidelines that define acceptable decisions and actions taken in the execution of research (Riddick & Russell 1999). While the application of a profession's ethical principals are important when providing services to individuals, their application to research and publishing efforts are equally important (Parker & Szymanski 1996). This is because research and publication are central to the advancement of a profession, as well as the careers of academicians and practitioners (Luey 1996; Rumrill & Bellini 1999).

For many professionals, the pressure to present and publish may lead researchers to make errors in judgment (Sawyer 1995). Often such error is inadvertent, and in many cases the result of misunderstanding, misinformation, or miscommunication (Pigg 1994). Further, errors of judgment can commonly be categorized within a narrow realm of misconduct (Price, Dake, & Islam 2001), including but not limited to: authorship, conflict of interest, plagiarism, fraud, duplication, fragmentation, collegiality, participant protection, and the use of Institutional Review Boards (Erlen 2002; Fain & Gillespie 1990; Leach 1998; King, McGuire, Longman, & Carroll-Johnson 1997; Luey 1996; Pigg 1994; Rumrill & Bellini 1999).

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 over the last two decades (Crase & Rosato 1992; Iammarino, O'Rourke, Pigg, & Weinberg 1989; 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). Two common ethical issues that may arise during the publication of collaborative research are "ghost authorship" and "guest authorship". According to Price et al. (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 honorary or ghost authorship is extended to well established peers to increase the possibility of manuscript acceptance (Goodyear, Crego, & Johnston 1992). A second type of collaborative research that deserves attention is the issue of student and academician collaboration on scholarly work worthy of publication (e.g., thesis or dissertation). One ethical issue that can occur in this type of collaborative research is an academician taking credit for authorship earned by a student (Fine & Kurdek 1993).

Conflict of interest has the potential to become an ethical issue when a researcher receives external support, usually financial, to conduct a research study (Pigg 1994). 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). Plagiarism is the unauthorized reproduction of work without proper permission of, or credit to, the original work's author (Iammarino et al. 1989). Recently the issue of self-plagiarism has been addressed. Self-plagiarism occurs when an author has assigned copyright to a manuscript's publisher, and subsequently uses the same, or slightly modified, verbiage from the copyrighted work in a subsequent publication (Sawyer 1995). For a better understanding of copyright law, consider reading "Ethics of Multiple Submissions and Copyright Concerns" by Sawyer (1995). Fraud encompasses not only plagiarism but also the fabrication or falsification of results (King 2001). 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). Like self-plagiarism, duplicating the same manuscript in more than one journal is likely to compromise any copyright agreement between an author and a publisher. A second form of duplication relates to the practice of simultaneously submitting manuscripts for editorial review (Leach 1998). Multiple submissions of manuscripts have been argued to violate the trust between editor and author (Erlen 2002), and are considered an ethical compromise by journal editors (Leach 1998) and professional organizations (American Psychological Association [APA] 2001).

Fragmentation is generating a series of studies from one original piece of research (Iammarino 1989; Pigg 1994). While fragmentation is a question of editorial judgment (Rumrill & Bellini 1999), most editors and scholars perceive fragmentation to be an ethical compromise (Luey 1996). APA publishing guidelines also discourage the fragmentation of research (APA 2001). 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 et al. 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). Participant protection deals with participant privacy or the responsibility of a researcher to assure anonymity or confidentiality of study participants. This includes both the identity of participants and participant information (Henderson & Baileschki 2002). Also 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).

The presentation and publication of research is an important endeavor for recreation, park resources, and leisure services practitioners and academicians. For most academicians, research is required for the attainment of tenure and promotion (Crane & Rosato 1992; Sawyer 1995). Likewise, for many practitioners, involvement at professional conferences and the publication of research can also increase opportunities for career advancement (Rumrill & Bellini 1999). While the presentation and publication of research is highly regarded within the field of recreation, park resources, and leisure services, little has been stated by the field 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 2004a; ATRA 2004). 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 and the Code of Ethics for the American Association of Health, Physical Education, Recreation, and Dance (AAHPERD) Research Consortium. These guidelines are extremely limited however, primarily only addressing issues

related to manuscript content and style, simultaneous publication, and plagiarism (NRPA 2004b; American Academy for Park and Recreation Administration 2004; Society of Park and Recreation Educators [SPRE] 2004; AAHPERD 2003, 2004). Further, research related to the ethical standards that should be followed when conducting, presenting, and publishing research is limited within the field's professional journals. A comprehensive review of literature identified only two research articles in recreation, park resources, and leisure services journals identifying selected ethical issues related to research publication (Fain & Gillespie 1990; Sawyer 1995). Both articles were limited in the scope of ethical issues examined, focusing primarily on intellectual property and copyright concerns.

Given the apparent dearth in information related to conducting, presenting, and publishing research in the field of recreation, park resources and leisure services, the purpose of this study was to measure the perceptions of recreation, park resources, and leisure service academicians regarding ethical issues specific to research and publishing. Specifically, the study addressed perceptions of ethical/unethical behavior related to (a) authorship, (b) conflict of interest, (c) plagiarism, (d) fraud, (e) duplication, (f) fragmentation, (g) collegiality, (h) participant protection, and (i) the use of Institutional Review Boards.

2.0 Methods

2.1 Subjects

Sixty-nine institutions purporting to have graduate programs in recreation, park resources, and leisure services were identified through NRPA online institutional directories to be included in the study. To facilitate mailing of the measurement instrument, two full-time academicians instructing within recreation, park resources, and leisure service programs at each identified institution were randomly selected to participate in the study. Identification of academicians was done using NRPA online institutional directories and individual institution/department web pages. Out of the 138 academicians randomly solicited to participate in the study, 94 completed measurement instruments were received, yielding a 68 percent response rate. Demographic information indicated that a majority

of respondents were male (67%), age 41 to 60 (76%), Associate or full professors (75%), tenured (74%), had graduate faculty status (97%), chaired a thesis or dissertation (80%), presented original research at conferences (88%), were published (88%) in recreation, park resources, and leisure service journals, and had instructed between 11 and 30 years (66%). Table 1 presents subject demographics.

2.2 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's 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 11 demographic items and 21 research ethic items. For each of the 21 research ethic items, respondents were asked to provide their perception of whether the action taken in each research ethic item 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).

2.3 Procedure

The researcher's Human Subjects Review Committee granted approval of the measurement instrument and permission to engage in the study. Academicians were solicited to participate in the study winter of 2000. 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.

Table 1.—Subject demographics

Item	N	%
Sex (n=92)		
Male	62	67
Female	30	33
Age (n=92)		
30-40	13	14
41-50	43	47
51-60	27	29
61-70	7	10
Over 70	2	2
Academic rank (n=93)		
Instructor	2	2
Assistant professor	21	23
Associate professor	38	41
Professor	32	34
Have Tenure (n=92)	68	74
Number of years teaching college level (n=94)		
1-10	28	30
11-20	32	34
21-30	30	32
Over 30	4	4
Have graduate faculty status (n=93)	90	97
Have chaired thesis/dissertation (n=93)	74	80
Have presented research at conferences (n=93)	82	88
Number of Presentations (n=65)		
0-20	50	77
21-40	9	14
41-60	2	3
Over 60	4	6
Published in recreation journals (n=91)	80	88
Number of recreation publications (n=71)		
0-10	43	61
11-20	15	21
21-30	9	12
Over 30	4	6
Program has course on research ethics (n=93)	48	52

2.4 Statistical Analysis

Measurement instruments were analyzed using the Statistical Package for Social Sciences (SPSS). All datum reported in this article were analyzed and reported as grouped 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 results scenario. Data analysis was done using standard descriptive statistical methods.

3.0 Results

The survey questionnaire included 21 scenarios, presented in a paragraph format, addressing ethical issues in research and publishing. Of the 21 scenarios analyzed, only three were considered ethical and seven unethical by a majority of respondents. Scenarios perceived as ethical publication/research practice by a majority of respondents included: (1) 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); (2) 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. Before the study is published, the author presents the study at a national recreation conference and at a regional and a state conference; and (3) 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.

In contrast, Scenarios perceived as unethical publication/research practice by a majority of respondents included: (1) 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; (2) 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; (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; (4) an author publishes a manuscript in a recreation journal that contains instances in which he/she deliberately falsifies or fabricates data or information; (5) 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; (6) 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; and (7) 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. Of the remaining 11 scenarios, academicians' opinions varied considerably. Scenarios that were not found to be ethical, questionable, unethical, or not an ethical issue, by a majority of respondents included various issues related to: authorship, presentation submissions, fragmentation, duplication, collegiality, disclosure of funding, and participant protection. Table 2 presents the comprehensive results for each research ethic item.

4.0 Discussion and Conclusion

The present research determined that considerable variation exists among recreation, park resources, and leisure service academicians regarding what are ethical or unethical research practices. Results of the present study also indicate that considerable variation exists among academicians in regard to what even constitutes an ethical issue in research. Of particular concern is the high number of "questionable" responses indicated for many of the scenarios. This appears to indicate that currently a fair amount of confusion exists within the profession regarding what is acceptable research practice. Variations in the perceptions of respondents should not be surprising however, given that the present research found that only 52 percent of respondent's graduate programs included a unit or course on research ethics. This suggests that the confusion that currently exists with regard to ethical research practice could stem from inconsistent graduate training in research. Further, results from this study indicate that the recreation, park resources, and leisure service field lacks a comprehensive formalized code of ethics with regard to research practice. Currently it appears that the only recreation, park resources, and leisure services-related professional organization to formally address selected issues related to ethical research practice is the Research Consortium of AAHPERD (AAHPERD 2003). While this code of ethics is helpful in reminding professionals about issues related to professional practice and issues related to authorship, plagiarism, and the submission of scholarly

Table 2.—Respondents’ perceptions of ethical issues related to research and publishing

<u>Ethical Scenarios</u>	Ethical	Question	Unethical	No Issue
1. 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.	N (%)	N (%)	N (%)	N (%)
1a. 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 second even though the student was not contacted. (N=94)	10 (11)	22 (23)	62 (66)	0 (0)
1b. Six months after the student graduated, the advisor writes and submits a manuscript from the thesis/dissertation even though the student was not contacted. The student’s name appears first and the advisor’s name second. (N=94)	18 (19)	39 (42)	33 (35)	4 (4)
1c. 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=93)	15 (16)	26 (28)	48 (52)	4 (4)
2. 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=93)	6 (7)	17 (19)	64 (72)	2 (2)
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=94)	0 (0)	1 (1)	93 (99)	0 (0)
4. 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. (N=93)	5 (5)	34 (37)	38 (41)	16 (17)
5. 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=94)	27 (29)	36 (38)	7 (7)	24 (26)

6. A recreation faculty member conducts a large study on two different groups of professionals, clinical RT 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 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=94)	48 (51)	19 (20)	6 (7)	21 (22)
7. 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.				
7a. 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=89)	17 (19)	37 (42)	26 (29)	9 (10)
7b. Three months after publishing the article in a recreation journal, the author submits the study for presentation at a national recreation conference. (N=91)	40 (44)	17 (19)	13 (14)	21 (23)
7c. Before the study is published, the author presents the same study at two different national recreation conferences. (N=92)	42 (46)	18 (20)	12 (13)	20 (21)
7d. 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=92)	46 (50)	17 (18)	7 (8)	22 (24)
8. A recreation educator publishes a study on a topic of widespread interest in recreation. Several researchers contact the author to request copies of the instrument. The author declines to share his/her instrument with others. (N=91)	18 (20)	19 (21)	15 (16)	39 (43)
9. 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=93)	27 (29)	30 (32)	31 (33)	5 (6)
10. 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. The recreation educator then publishes the paper under his/her name which includes an acknowledgment of the graduate student for his/her assistance. (N=94)	40 (43)	18 (19)	30 (32)	6 (6)

11. 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=94)	4 (4)	17 (18)	69 (74)	4 (4)
12. 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=92)	1 (1)	31 (34)	29 (31)	31 (34)
13. 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 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=93)	48 (51)	19 (20)	6 (7)	21 (22)
14. 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=93)	15 (16)	25 (27)	47 (50)	6 (7)
15. 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=93)	1 (1)	12 (13)	65 (70)	15 (16)
16. 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.	21 (23)	27 (29)	38 (41)	6 (7)

work for presentation and publication, the codes do not specifically indicate what constitutes research misconduct. It is not the intention of the author's to criticize the work of the Research Consortium, only to point out that results from the current study indicate that while the field's professional organizations may agree on what is ethical research practice, academicians within the field may not agree or understand what may constitute unethical research conduct. For example, results from the current study indicated that only 7 percent of study respondents viewed self-plagiarism as an unethical practice, despite copyright law. While not an issue of criminal wrongdoing, results from the current study also indicated that a plurality of academicians perceived the practice of presenting the same research study at more

than one conference ethical. Typically such action serves not to disseminate important information but to increase personal credentials (e.g., increasing faculty vita). Given the variation in responses to a majority of the ethical scenarios presented in this study the author's make the following recommendations: (1) that action is taken within the recreation, park resources, and leisure services field to develop a comprehensive set of ethical standards with regard to research. This responsibility should be undertaken by branches of professional associations whose members are consistently involved in research-related activity; and (2) that recreation, park resources and leisure service education programs not providing courses or units on research ethics in their graduate curriculums establish research ethics related courses

or units and require these courses or units be taken by graduate students. Based on the findings of this research, future research could include studies identifying: the prevalence of unethical research behavior by recreation, park resources, and leisure services academicians and practitioners; the ethical issues that are most commonly encountered by recreation, park resources, and leisure services researchers; and the extent to which recreation, park resources, and leisure services academicians and practitioners confront ethical research issues.

While the results of the current study have implications to all stakeholders in the field of recreation, park resources, and leisure services involved in research or the editorial review of research, there are a number of limitations to this study. One limitation is the response rate (68%) for the study. As a result, threats to external validity may exist due to nonresponse bias. A second limitation is that the questionnaire was self-administered, thus potential threats to internal validity may exist if respondents provided desirable rather than accurate data. A third limitation was that academicians selected to participate in the study were from graduate degree-granting programs and may not be representative of all recreation, park resources, and leisure services academicians or all practitioner researchers. As a result, external validity may be limited.

5.0 Citations

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