

Peer Review Ethics in Iranian Scientific Journals: Evidence-Based Case Study of the Journal of Information Processing and Management (JIPM)

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Received: 11, Jun. 2023 | Accepted: 26, Aug. 2023

Abstract: The present study investigates Peer Review Ethics (PRE) in scientific journals in Iran, with a specific focus on compiling the PRE statement for the Journal of Information Processing and Management (JIPM). Moreover, qualitative analysis was conducted on the PRE statements of the journals published by the Ministry of Science, Research, and Technology (MSRT). The review process and documents of the JIPM were then analyzed. This evidence-based case study was conducted using a mixed-method approach, which included three research methods: researcher-based, data-based, and research-based. A focus group discussion (FGD) was also conducted to validate the research findings. The findings showed that PRE elements were classified such as “timeliness,” “confidentiality,” “bias,” “conflict of interest,” “research misconduct,” “respectful and fair expressions,” “constructive and objective feedback,” and “accountability and responsibility.” The analysis of ethical statements in MSRT journals found that only half of the journals published PRE statements. In

**Iranian Journal of
Information
Processing and
Management**

**Iranian Research Institute
for Information Science and Technology
(IranDoc)**

ISSN 2251-8223

eISSN 2251-8231

Indexed by SCOPUS, ISC, & LISTA

Special Issue | Spring 2024 | pp. 205-230

<https://doi.org/10.22034/jipm.2024.711530>



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addition, 102 instances of violations of PRE, accounting for 15% of each review, were identified in documents submitted for review in JIPM.

Keywords: Peer Review Ethics (PRE), Peer reviewers, Scientific Journals, Journal of Information Processing and Management (JIPM), Iran

1. Introduction

Peer review of research is a crucial scientific practice that plays a significant role in ensuring the accuracy, integrity, and fairness of scientific activity and research manuscripts. This subjective process involves examining the originality, value, impact, innovation, and overall importance of a manuscript or research activity. In addition, this scientific activity is an integral part of the ethics of scientific publishing. Reviewers, along with authors and chief editors, are considered the most important elements of scientific publishing, especially the publication of scientific articles. Given the role of the evaluation and peer review system in the quality of the content of articles and the scientific life of these journals, it is essential to pay attention to the ethical principles of publication and guidelines prepared for reviewers and peer reviewers, editors, and authors. There are several types of reviews in the peer review system's pattern. In the open review, the identity of the authors and the reviewers are disclosed to each other. However, in a single-blind review, the author's identity is disclosed to the reviewer, but the author does not have access to the reviewer's identity. In a double-blind review, the author and reviewer do not have any information about the identity of each other. Nevertheless, another case is known as a review with a specific signature. In this case, the reviewer's identity is known to the author. By all means, there are other types of reviews, such as participatory, triple-blind, transferable, and third-party.

Regardless of the types of reviews and how they are performed, it is a time-consuming and difficult responsibility, and the reviewer's role is sometimes extremely complicated. Since the role and necessity of reviewing scientific works are important and effective in improving research outputs, the reviewers must perform this scientific behavior so that it helps authors improve the works, whether for publication in a specific journal or other journals. One of the general

recommendations or advice for review is that reviewers are expected to behave the same way other reviewers treat their articles. Accordingly, some ethical considerations emerged called "Peer Review Ethics (PRE)." These principles and ethical guidelines help scientific journals move toward scientific excellence and avoid subjective and personal judgments. One of the important approaches that scientific journals pay attention to is formulating and presenting ethical statements for review articles in journals. The provision of ethical guidelines for review in scientific journals is one of the most important methods to achieve PRE, which found its place among reputable journals. For instance, Wiley Publications, in its ethical statement, believes that ethical publication of articles helps a better scientific community so that everyone will be responsible for the work they publish. Some researchers, such as Bosetti & Toscano (2008), believe that all scientific journals should adopt the standards or codes of ethics that are useful to all stakeholders in the review process and should not be limited to authors.

The Committee on Publication Ethics (COPE) distinguished the important role of peer reviewers in ensuring the authenticity of the scientific literature. The COPE also believes that the process of peer review significantly depends on the trust and willingness of the scientific community to participate, and everyone involved needs to act responsibly and ethically. In COPE's guidelines, peer reviewers play an important role in the peer review process; however, they may not have guidance and be aware of the ethical considerations of review. Therefore, in order to facilitate an integrated, fair, and timely review, communication between journals and reviewers must be transparent. On the other hand, COPE received some cases related to review issues from its members and prepared guidelines, some of which were collected based on the experience and collective wisdom of the participants in the COPE association. A general and comprehensive look at the guidelines provided by COPE demonstrates that these ethical guidelines are essential for publishing a manuscript in a more appropriate, scientific, and especially more ethical way. Furthermore, emphasizing that COPE adheres to journals' ethical considerations, it considers scientific journals to provide clear rules for peer review and, of course, commits judges to conduct judgments in an

ethical and accountable manner (COPE, 2017).

Accordingly, it seems necessary for scientific journals to move within the framework of these ethical guidelines to increase the quality of articles. Moreover, it is important to have an analytical look at the ethical guidelines presented in scientific journals as the governing context of these journals. On the other hand, many scientific journals in Iran have ethical statements; however, some investigations (Abooyee Ardakan & Mirzaei 2010; Alidousti et al., 2008) considered the length of review time as the most important problem of Iranian scientific journals and pointed out this issue as one of the problems considered by chief editors. Delays in submitting a review report are inconsistent with some of the review propositions in a predefined time frame for compliance with the COPE PRE guidelines (COPE, 2017). Furthermore, Rajabali Beglou, Haji Azizi, and Karimi (2017) indicated that a small share of scientific journals in Iran had paid attention to the issue of PRE in their ethical statements. Journal of Information Processing and Management (JIPM), as one of the journals in the field of information science and technology, has two systems of initial evaluation and review. Moreover, this journal conforms to the COPE criteria¹ but, it does not provide a statement or charter of ethics for review in the journal. Although, among the executive standards of journals in the evaluation system of the Ministry of Science Research and Technology (MSRT) journals, it is emphasized to include the duties of reviewers along with the review guidelines on the journal's website for the publication according to competent international authorities such as COPE. Therefore, although COPE has established ethical guidelines for peer reviewers and statements related to the PRE presented in the executive standards of the JIPM, no special mention has been made to PRE in this journal. Therefore, while examining and analyzing the review situation, the present study seeks to edit the PRE statement for this journal. Furthermore, there may be a mismatch between PRE elements and the behavior of reviewers in the ecological context of scientific journals. Therefore, in the present study, an important and influential part of the context of the JIPM is considered. On the other hand, the distinction between PRE

1. <https://jipm.irandoc.ac.ir/journal/process?ethics>

norms and existing compliance or non-compliance examples in the JIPM, as well as the distinction between used or possible PRE norms in international journals, could not necessarily be consistent, matched, or aligned with the PRE guidelines such as COPE. Therefore, the present study highlights the need for attention and alignment with existing norms, customs, and examples.

The main objective of the present study was to compile a statement of PRE in the JIPM based on the guidelines provided by the competent scientific authorities, such as COPE. The other purpose of this study was to explore the basic and underlying elements of PRE and evaluate the status of MSRT scientific journals in terms of paying attention to PRE in journals' guidelines and statements.

2. Research Questions

RQ1. What are the most important elements (main, sub, and examples) in ethical guidelines and research pieces?

RQ2. What is the status of the MSRT scientific journals in terms of paying attention to the existing ethical guidelines and statements?

RQ3. How should be the JIPM ethical code based on existing international guidelines?

As mentioned earlier, the research phases were as mentioned in the following. First, the fundamentals, theoretical framework, and research literature related to PRE were studied. Then, PRE guidelines, such as COPE, Springer, STM, etc., and ethical statements of the MSRT scientific journals were analyzed. Then, a panel of experts in this field was formed, and the validation of PRE elements was checked out. In the next phase, the review process and documents of the JIPM were investigated. In this phase, the documents submitted for review in this journal were analyzed with deductive or directed qualitative analysis, considering the anonymity of the documents and the data. Furthermore, the evidence obtained from the documents submitted for review was assessed using a Focused Group Design (FGD) method. The JIPM peer reviewers' perspectives were studied simultaneously in two areas of importance and sensitivity as well as adherence to the PRE elements. Finally, the PRE statement of the JIPM was compiled (Figure 1).

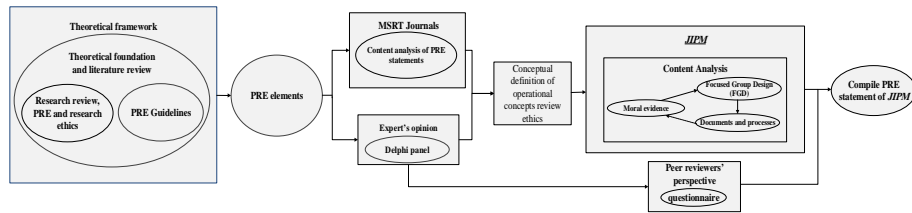


Figure 1. Conceptual model of research phases

3. Literature Review

Due to the governing and ecological context of scientific journals mentioned, research in the field of review ethics can be divided into two broad categories: those conducted “inside” and “outside” of Iran. A review of the related studies conducted in Iran indicates that researchers have paid less attention to the concept and function of PRE. Most of these investigations have not primarily focused on the PRE issue. Instead, more emphasis has been placed on the review process and the impact it has on the acceptance or rejection of scientific journals. For instance, Mirzaei et al. (2008), Abooyee Ardakan & Mirzaei (2010), and Alidousti et al. (2008) considered the length of review time as the most important problem in Iranian scientific journals. Mirzaei et al. (2008) also investigated the PRE status of the Iranian Journal of Sociology. They found significant relationships among demographic variables of reviewers, such as field of study, domestic or foreign status, university rank, and their decision to accept or reject manuscripts. Other variables did not have an impact on the results. Rezaian et al. (2012) researched to determine the fate of rejected articles during the preliminary check phase of the scientific Journal of Rafsanjan University of Medical Sciences. The study indicated that over 30% of these manuscripts were eventually published in other journals. Alidousti et al. (2008) introduced the review process and emphasized its importance in monitoring the quality of published scientific works. They discussed the presence or absence of a review process, different types of reviews, decision-making methods, criteria for accepting articles, key decision-makers, editors’ challenges, and common norms in the review process of reputable scientific journals in Iran. They concluded that double-blind reviews were common in these journals. Among the five main pillars involved in the review process in Iranian journals, the editorial board played a more fundamental role. Moreover, Abooyee Ardakan and

Mirzaei (2010) demonstrated that younger reviewers outperformed older ones in terms of discipline and timeliness. They also exhibited careful consideration of the review process and provided constructive suggestions for paper amendments. A review of the research conducted in Iran in this field reveals that some researchers focused on the review process, while others focused on peer review ethics (PRE) in general. However, no study addressing both the review process and the ethical aspects of peer review was found. Outside of Iran, studies on Persian rug exports (PRE) have attracted the attention of researchers and scholars. The most important points of ethical considerations for peer reviewers (PREs) include the "Identification of identity" (Relman & Angell, 1989; D'Angelo, 2012; Jagsi et al., 2014) and "confidentiality" (Rooyen et al., 1998; Resnik et al., 2008; Jagsi et al., 2014). Another important aspect is "the role of editors in observing the ethics of review" (Resnik & Elmore, 2016). Reviewers should also pay attention to "the violation of research ethics" (Mulligan, 2005; Souder, 2011; Bohannon, 2013), "conflict of interests (Cols)" (Lipworth & Kerridge, 2011; Gasparyan et al., 2013), "quality of review report" (Resnik & Elmore, 2015), "review bias" (Resnik & Elmore, 2015), and "responsibility" (Wendler & Miller, 2014).

Outside of Iran, studies on PRE attracted the attention of researchers and scholars. The most important PREs were "Identification of identity (Relman & Angell 1989; D'Angelo 2012; Jagsi et al. 2014) and confidentiality (Rooyen et al. 1998; Resnik et al. 2008; Jagsi et al. 2014)," "the role of editors in observing the ethics of review (Resnik & Elmore 2016)," "attention to the violation of research ethics (Mulligan 2005; Souder 2011; Bohannon 2013)," "conflict of interests (Cols) (Lipworth & Kerridge 2011; Gasparyan et al. 2013)," "quality of review report (Resnik & Elmore 2015)," "review bias (Resnik & Elmore 2015)," and "responsibility (Wendler & Miller 2014)."

A part of the research was on the importance and necessity of review, including review role in the improvement of the quality of manuscripts (Relman & Angell 1989; Wagner, Boninger, Levy, Chan, Gater & Kirby 2003; D'Angelo 2012, 48) and its' performance (Relman & Angell 1989; Resnik 2010). Despite the differences in the researchers' opinions regarding the value, importance, and necessity of review, most researchers emphasized being more ethical in peer reviews.

Furthermore, most researchers agree that peer review is fraught with issues

and challenges. It is noteworthy that the current status of the peer review process is mostly web-based and online. This approach is likely to be more efficient and reduces the potential cost of increasing the number of requests received by the reviewers. Furthermore, peer review is a part of the process of scientific quality control so that the published manuscripts match with appropriate standards (Triggle & Triggle 2007). Although many reviewers consider the reviews an integral part of the scientific community's responsibility, when we precisely evaluate the review process, we find some signs that the fundamental principles of research ethics are not considered, which mostly happens in Hope & Munro's (2019) viewpoints because of the lack of scientific humility as well as bias in some part of the reviews. By all means, many believe that the review has its shortcomings but has not provided a better alternative) Ahmed & Gasparyan 2013. (Some scientists, such as Thomas (2018), claimed that the phrase 'review tampering' refers to the existence of a circle of people who review or cite each other's papers. Therefore, there are different views on studying the moral dimension of review. For instance, Souder (2011) was skeptical about the efficiency of review and believed that if researchers remain loyal to this review system, they "may" behave more carefully.

One of the most important challenges and issues is the anonymity of authors and reviews, especially in the double-blind approach. Jagsi et al. (2014) examined author and reviewer anonymity and attitudes toward review ethics. They showed that some reviewers could identify the identity and organizational affiliation of authors, which may affect their review processes. There are different views on this issue; for example, Hope & Munro (2019) believe that anonymity has a minor effect on the quality of the review, and some researchers such as Smith consider the review as a "faulty process" that there is no clear evidence for its effectiveness (Ahmed & Gasparyan 2013), do not prevent a blind review from preventing subconscious bias (Adler and Strayer, in Thomas 2018). There is not much empirical evidence to support the quality of biomedical research despite the scope of application and cost of reviews (Ware 2008). Cawley (2011) is one of the leading critics of review who considers it a problematic process and full of moral challenges. He has analyzed the unethical nature of the review and claimed that it is both intrinsically and structurally unethical. By all means, he has also offered some notable examples to prove the point. For instance, in review, decision-making

power gives reviewers the benefit of rejecting manuscripts similar to their own and empowers them to improve their professional position to stop the progress of their competitors. He believes that considering some factors, such as stealing ideas and research results, delays in the review process, as well as incorrect and vague reviews about the manuscript, the review itself, falls into a moral dilemma that can be inherently unethical.

Criticizing the review is not limited to Cawley (2011); Souder (2011) and Smith (2006) are among the known critics. The costly and long-time reviews, subjectivity, bias, and the possibility of more abuses are among his critiques. He believes that instead of eliminating review, the focus should be on its' improvement through standard procedures, the openness of processes, anonymity of authors' identities for reviewers, development of review protocols, training of reviewers, the more careful selection and elimination of reviewers, use of electronic review, reward to eligible reviewers, provide accurate feedback to reviewers, employing more checklists, or setting up professional review agencies. Armstrong (1997) also seriously jeopardized the impact of the review on innovation, and the quality of manuscripts, and fairness in research, and Rothwell and Martyn (in Wagner et al. 2003) warn about the possibility of repetition of review results due to the personal bias of the reviewer and lack of standard and objectivity in them (Wagner et al. 2003).

Some of these criticisms originate from inherent weaknesses of reviews, such as the review's inability to identify data fabrication, falsification, or other forms of misconduct in research. However, Lee et al. (in Resnik & Elmore 2016) believes that blaming the reviewers for their failure to identify research misconduct is not fair because resources such as basic research data are usually needed to detect data fabrication or forgery that are not routinely accessible to reviewers, and it can be challenging to detect intelligent data manipulation. Inconsistency and contradiction in reviews (Resnik & Elmore 2016), unfair evaluation of works (Ware 2008; Resnik & Elmore 2016; Hope & Munro 2019), theoretical and methodological bias (Lee et al. [in Resnik & Elmore 2016]), positive or negative findings, gender of author and reviewer, affiliation, nationality, controversial or innovative research, authors' suggested reviewers, Cols, as well as editor and author's reputations (Resnik & Elmore 2016) are among the most important issues related to bias. For

instance, the temptation to find faults in the works of competing authors in Israel and Hay (2006,119), the bias to publish positive findings compared to negative ones (Easterbrook et al. in Resnik & Elmore 2016; Stern and Simes in Resnik & Elmore 2016; Dwan et al. in Resnik & Elmore 2016) are among these cases. However, Dickersin et al. and Olson et al. (in Resnik & Elmore 2016) believe that the review system is not responsible for these types of bias, and to publish positive findings, it is necessary to do more research on the causes of bias.

Some criticisms relate to the conservatism of review; and reviewers are biased against contradictory, innovative, and interdisciplinary research some of which have other theoretical, methodological, or hypothetical framework challenges. Some researchers, such as D'Angelo (2012), believe that review is also incapable of identifying CoIs and disclosing confidentiality, and reviewers sometimes have personal attacks on authors (Resnik & Elmore, 2016). Moreover, reviewers may have personal, commercial, political, scientific, financial, geographical, and gender CoIs with authors (Gasparyan, Ayvazyan, Akazhanov & Kitaz 2013).

An overview of the literature indicates that some of the research was based on checking review processes and documents submitted for review in a particular scientific journal. Furthermore, many researchers noted the negative and positive aspects and some of them emphasized the theoretical dimensions of PRE. However, there was no case study in both the process and PRE aspects to compile the PRE statement. Many of the principles, standards, and guidelines in PRE are influenced by the actions and activities of COPE to develop PRE guidelines. Therefore, these PRE guidelines are compiled regardless of the contextual elements that govern a journal (organizational, executive, humanistic, scientific, etc.), and they have a general and comprehensive scope. However, a review of the literature revealed that the compilation of PRE statements was not found in either domestic or foreign studies. Since many of these ethical guidelines have not been developed or translated into the Persian language, it seems that the efforts and results of the present research can be useful in two dimensions: promoting and disseminating PRE in scientific journals in Iran. First, the PRE statement of JIPM can introduce a contextual model based on characteristics, conditions, and requirements related to interdisciplinary journals, such as JIPM, and present it to the decision-makers of MSRT journals. Furthermore, it is constructive and

valuable for other scientific journals to enhance the conditions and requirements necessary for addressing ethical issues, similar to JIPM.

4. Research Method

The present investigation was conducted as a case study using a mixed method approach, specifically the exploratory sequential design, which incorporates both qualitative and quantitative methods with equal weight given to each. The content of documents submitted for review and JIPM reviewers' viewpoints were analyzed to compile the PRE statement of the JIPM. The present research was a single case study because several units of analysis (documents submitted for review, reviewers' viewpoints, and executive manager's interactions with reviewers) were considered. The JIPM ecosystem consists of six elements and members, including reviewers, system, executive manager, authors, editor-in-chief, and editorial board; the first three elements are considered in the present study due to time limitations.

In the present research, the contextual situation of scientific journals in Iran was verified. Hence, the PRE statement of 297 journals out of 1296 in the MSRT scientific journals ranking was analyzed using Cochran's formula for sample selection. The emphasis of scientific journals on PRE elements provided evidence for researchers to focus on the context of scientific journals in Iran, similar to the JIPM. This research was conducted with the mixed method and exploratory sequence because a heterogeneous combination of qualitative and quantitative methods was used to compile the PRE statement of the JIPM. In addition, the qualitative method was performed in four parts. In the first and second parts, the content of the PRE guidelines and PRE statements of Iranian scientific journals were analyzed qualitatively with the content analysis method. In the third and fourth parts, the documents submitted for review in two sections were analyzed by qualitative content analysis and FGD. The first and second qualitative parts were non-basic, while the third and fourth parts were basic. Basic and non-basic refer to the primary and secondary focus on research, specifically in terms of drawing conclusions and conducting analysis. The non-basic part of the research involved two steps. In the first step, FGD was conducted to validate the PRE elements. In the second step, the JIPM reviewers' viewpoints were checked (Figure 2).

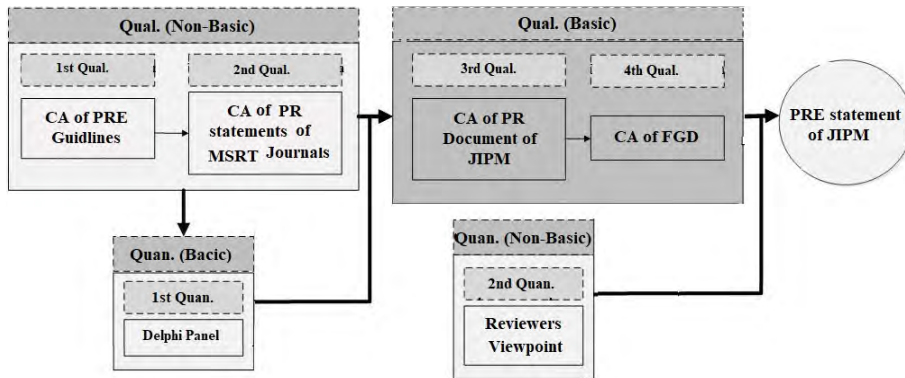


Figure 2. Model of research phases based on a mixed method

Qualitative content analysis of the PRE guidelines, ethical statements of MSRT scientific journals, and documents submitted for review of the JIPM and FGD were performed by qualitative content analysis software named MaxQDA (version 12) with a directed content analysis approach. In addition, the panel of experts' viewpoints on the elements extracted from the second and third phases were validated. It should be noted that the survey range was from "very important (5)" to "unimportant (1)," and because no major and sub-elements added to the elements provided to the experts' panel, the cut point of the panel was equal to 3.1 (average importance) held in the presence of eight experts in the field of research ethics as well as chief editors of scientific journals. The documents submitted for review in JIPM are stored on the web in electronic format, including the analysis of review reports and the files uploaded by the reviewers. These documents and review files were extracted from October 2017 to December 2019 and included 340 documents. The survey of JIPM reviewers' viewpoints was performed in two aspects importance and sensitivity as well as adherence to the PRE elements. The FGD was used as confirmatory and to analyze the samples obtained from the qualitative content analysis of the documents submitted for review. Three types of researcher-based, data-based, and research-based methods were used to validate the findings. The researcher's triangulation with more than two researchers, more than two types of data (PRE statements of Iranian scientific journals and documents submitted for review), and more than two research methods from qualitative (four phases) and quantitative (two phases) methods were employed

in this investigation. For observing the confidentiality and anonymity of documents submitted for review and the reviewers' viewpoints, the name deletion protocol (for reviewers, authors, and other elements disclosing the identities) was used in two phases of the content analysis and FGD.

5. Research Findings

The findings in the content analysis phase of PRE guidelines and extraction of the PRE elements, and content analysis of the PRE statements of the MSRT journals to answer the questions of the present study are presented as follows.

RQ1: What are the most important elements (main, sub, and examples) in ethical guidelines for the research?

The research findings indicated that the most important PRE elements included eight elements: 1) timeliness, 2) confidentiality, 3) bias, 4) CoIs, 5) attention to research misconduct, 6) respectful and fair expression, 7) constructive and objective suggestion, 8) responsibility and accountability. These elements included the 35 sub-elements, as shown in Table 1.

Table 1. Main elements, sub-elements, and examples of PRE

Main elements	Sub-elements	Examples
Timeliness	Timely response to the journal's request for article review. Reviewing timely/accepted/suggested time frame. Requesting more time when the reviewer's circumstances changed. Offering an alternative reviewer in case of not to review on time. Not prolonging the review process/delay in sending the review intentionally.	Long time of review, requesting more time in unpredictable circumstances, speed in response to journal requests.

Main elements	Sub-elements	Examples
Confidentiality	<p>Avoiding to harm or discredit others by disclosure of confidential information.</p> <p>Not involving others in the review process without the permission of the journal.</p> <p>Announcing the names of the assistants in the review.</p> <p>Not disclosure of the process and details of review.</p>	<p>Not copying the literature of the review, not sharing the manuscript, not using information for personal or professional gain or harming and discrediting others, registration of assistants, hiding comments and notes, consulting with editor for CoIs.</p>
Bias	<p>Neutrality in relation to nationality/religious beliefs/political/gender/personality/close associates.</p> <p>Notifying the journal if authors are disclosed to reviewer in double-blind approach.</p>	<p>Violation of neutrality, systematic prejudice (gender, organizational affiliation, nationality, language, specialization, religious or political beliefs), declaration of conflict of interest to the journal (author's identity).</p>
CoIs	<p>Disclosure of any conflicts of interest and notifying the journal and getting advice/permission from the journal.</p> <p>Avoiding the use of information of the reviewed work for personal/other benefits.</p> <p>Not acceptance review for works that are very similar to the sent/ready to send papers.</p> <p>Avoiding to find or exploit information, findings, or subject matter without review.</p>	<p>Personal, scientific, financial, intellectual, professional, political, religious, disciplinary, gender, and geographical location.</p>
Attention to research misconduct	<p>Paying attention to misconduct of research/ethics and announce to the journal.</p> <p>Ensuring that research misconduct does not occur and notify the editor (if occurred).</p>	<p>Data fabrication, forgery, plagiarism, manipulation, unethical research, biased reporting, misuse of authorship, redundancy or repetition, and conflict of interest.</p>

Main elements	Sub-elements	Examples
Respectful and fair feedback	<p>Not rewriting the written style of work based on the review's writing style.</p> <p>Being aware of language sensitivities.</p> <p>Being respectful and make fair expressions in feedback and avoiding inappropriate expression and accusation.</p> <p>Not expressing unfair viewpoints/ unprovable criticism.</p>	<p>Antagonistic and hostile expressions, personal statements (destructive, deviant), baseless accusations, linguistic sensitivity, unproven criticism.</p>
Constructive and objective suggestions	<p>Expressing idea about the quality of work and the accuracy of the authors' opinions.</p> <p>Providing useful and constructive feedback to increase the clarity of work.</p> <p>Proposing objective feedback to improve further analysis of work.</p> <p>Requesting authors to support evidence for claims made in their work.</p> <p>Providing suggestions based on valid scientific and technical reasons.</p>	<p>Increased enthusiasm for improvement, objective (neutral), constructive, clear, with supporting evidence and based on scientific and technical reasons.</p>
Responsibility and accountability	<p>Not asking authors for unnecessary citations to reviewer's or his/her colleagues' works.</p> <p>Notifying any new issues or ambiguities and contacting the journal.</p> <p>Reviewing the second round as seriously as the first round of review.</p> <p>Understanding the scope of review (all review duties) before its process begins.</p>	<p>Failure to take the responsibility of review seriously (inappropriate mental condition, dislike of the subject matter or author), permission from the journal to engage another person, requesting citation of one's work or those of colleagues, unnecessary request for additional information.</p>

Main elements	Sub-elements	Examples
	Informing the journal not to have expertise in review work.	
	Avoiding to communicate directly with authors to request more information.	
	Avoiding to request unnecessary information from the journal or authors.	
	Avoiding the development of the scope and main scope of the research activity of the work by the reviewer.	
	Obtaining permission from the first journal to transfer review reports to other journals.	
	Paying attention to the change of work in transferable reviews with the permission of the first journal	
	Informing and obtaining permission from the journal to delegate review to novices and colleagues.	
	Preparation of the report by the reviewer himself/herself; otherwise, announcing it to the journal.	
	Preparing a report based on the journal's review guidelines.	
	Providing the support of evidence for review to change or improve work.	

RQ2: What is the situation of the MSRT scientific journals in terms of paying attention to the existing guidelines and ethical statements?

As mentioned earlier, approximately half of the journals (129 journals) had PRE statements. The content analysis of the PRE statements in these journals indicated that these journals were in a different situation than COPE in terms of addressing the PRE elements. The status of scientific journals' attention to the PRE elements compared to COPE was obtained (Figure 3).

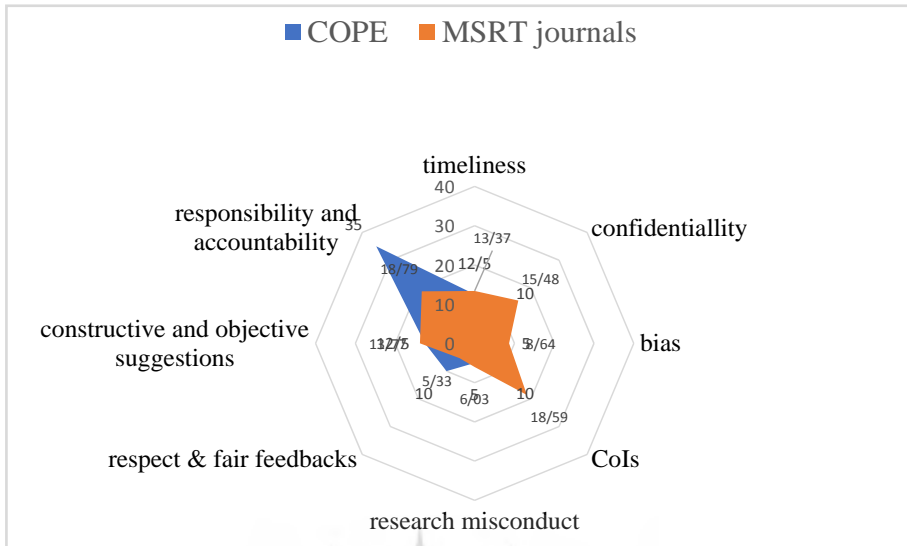


Figure 3. Gap analysis of attention of MSRT journals to the PRE against COPE

According to Figure 3, the emphasis of the COPE was on the responsibility and accountability of reviews, while conflicts of interest (CoIs) were deemed more important than other key elements for MSRT journals. The gap analysis indicates that the MSRT journals considered intellectual horizons, scientific and professional concerns, as well as different conditions for the COPE to address the PRE elements. These circumstances experience the characteristics and requirements of scientific journals in scientific, research, and publishing contexts, and consequently, different ethical circumstances, characteristics, and requirements. Therefore, it is necessary to consider them in studying the JIPM. It is crucial because apart from similarities and differences among ecosystems, stakeholders, and the possibilities of the journal compared to other MSRT journals, the general scientific atmosphere and ecosystem in which the scientific journals exist affect the JIPM.

RQ3: How should be the ethical statement of the JIPM based on existing international guidelines?

It is necessary to mention the findings obtained from three parts: the JIPM reviewers' viewpoints, the content analysis of documents submitted for review, and the FGD. The findings of the JIPM reviewers' viewpoints on the elements of PRE are described in Figure (4).

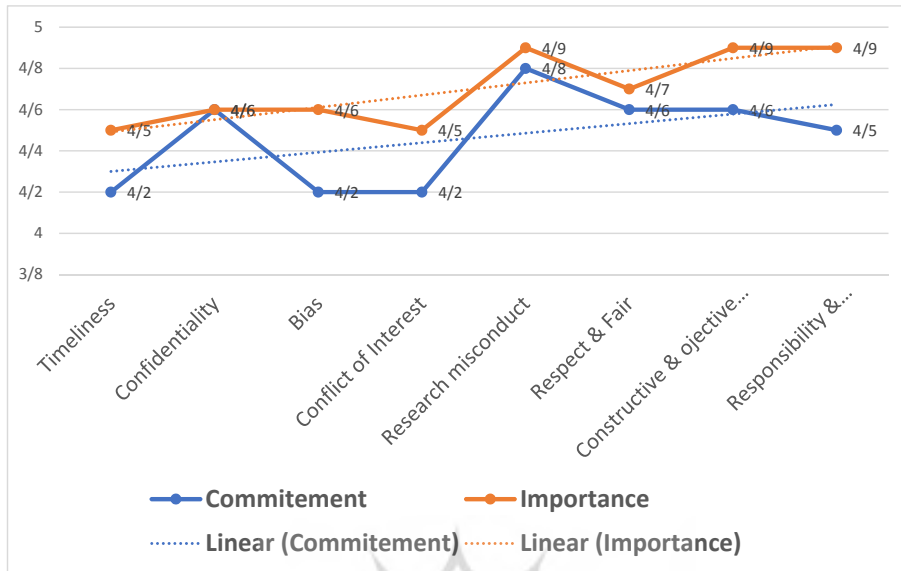


Figure 4. Importance and adherence to PRE from the JIPM reviewers' viewpoints

As shown in Figure (4), the PRE elements were moderately significant from the reviewers' point of view, and adherence to them occurred. Moreover, there is high convergence among adhering to the PRE elements and their importance. However, the extent to which the documents submitted for review in JIPM support this data will be discussed in the following. It is important to note that for the "timeliness" component, reports or review files that were sent to the system two months after being introduced to the reviewer were considered "not adherence to timeliness" (Table 2).

Table 2. Results of content analysis of documents sent to the review in terms of violating PRE in the JIPM

No.	Main elements	Items
1	Timeliness	22
2	Confidentiality	1
3	Bias	0
4	Cols	0
5	Attention to research misconduct	0
6	Respectful and fair feedback	47

No.	Main elements	Items
7	Constructive and objective suggestions	29
8	Responsibility and accountability	4
Total		102

According to Table (2), a total of 102 violations of PRE evidence were extracted from 340 documents submitted for review. The findings indicated that among the eight main elements, respectful and fair feedback, constructive and objective suggestions, timeliness, responsibility and accountability, and confidentiality were the most common evidence of PRE violation. In addition, there were no PRE violations in “bias,” “attention to research misconduct,” and “Cols.” This might have happened because there was no possibility of investigating documents submitted for review in these elements. The findings for this section were employed for the FGD. Therefore, due to the limited opportunity, 23 examples of PRE violations were discussed in the FGD (Table 3).

Table 3. Number of cases of elements verified and approved in the FGD

No.	Main elements	Number of cases	Number of approved cases
1	Respectful and fair feedback	12	10
2	Constructive and objective suggestions	6	6
3	Responsibility and accountability	4	4
4	Confidentiality	1	1
Total		23	21

According to the findings of the FGD conducted to investigate cases of ethical violations, it was found that the majority of these cases were approved by the FGD members. This finding indicates that there was convergence among FGD researchers and members on the PRE violations. However, some possible examples of PRE elements were suggested by FGD members and added to the research findings. Notably, the findings of these phases were used to compile the PRE statement of the JIPM. In addition, in compiling the PRE statement, adherence to the PRE by the reviewer was related to special conditions and requirements, which can be investigated by considering the influence of each actor

and stakeholder. In other words, the contextual elements associated with PRE were closely related to or influenced by each other, and their improvement can affect the others. For instance, if the JIPM's editorial board or editor were doing their job correctly, they would provide a more favorable environment for the role of reviewers, and consequently, one can expect a suitable environment for ethical reviews. It should be considered that a journal lives in a scientific ecosystem, and that ecosystem will directly or indirectly affect the activity of the journal. On the other hand, the relationship between the reviewer and author, as the essential actors, is of great significance.

6. Conclusion

The results of the present study indicated that no significant finding was found regarding the violation of PRE in the JIPM for "CoIs" as a more subjective element. Moreover, due to the lack of sufficient evidence, there were no specific findings regarding the violation of PRE for the "bias" element. There were few cases for the "responsibility & accountability" element, especially for the "suggest alternative reviewer" sub-element, which was proposed to replace other reviewers. By analyzing the content of documents submitted for review for "timeliness," "respectful and fair feedback," "constructive and objective suggestions," and "responsibility and accountability" elements, there were 102 cases that showed PRE violations. The cases related to "respectful and fair feedback" and "constructive and objective suggestions" were repeated more than any other elements. For instance, for every 6.6 reviews, there was a PRE violation in the "timeliness" element; therefore, this PRE violation accompanied 15% of the reviews. However, the most significant results of this section are considered for further investigation on FGD, in addition to explaining the contextual elements related to the occurrence of these ethical violations and the true/false selection of these cases. The findings of this section indicated some areas of emergence or PRE violation in reviewers with emphasis on the JIPM, which can be addressed in the context of review-related ecosystems and terms of the journal, reviewer, and article conditions.

It should be noted that these contextual elements are closely related to and are affected by each other, and their improvement and upgrade can affect each other. Despite the findings of the review ethics statements in scientific journals in

Iran, which focused on the importance of CoIs, confidentiality, and bias in reviews, there was no significant evidence of the PRE violations in the JIPM in these three main elements. The present study aimed to investigate Peer Review Ethics (PRE) in scientific journals in Iran, specifically to compile the PRE statement for the JIPM. Furthermore, some PRE elements such as “CoIs,” “bias,” “attention to research misconduct,” and “confidentiality” necessarily have no specific objective or evidenced-based contexts because of their subjective matter. The results of the PRE elements were used in compiling the PRE statement of JIPM, especially its detailed version. In other words, evidence confirmed by the FGD was used as objective evidence from the content analysis of documents submitted for review in JIPM to give reviewers a more objective aspect to review articles in this journal. Therefore, the first edition of the JIPM PRE statement was compiled based on an investigation of three out of six parts of the JIPM, including the main review actors’ viewpoint, documents submitted for review, and the journal’s review process. It is noteworthy that the main framework of this statement was based on the “ethical guidelines of the COPE for peer reviewers” (2nd edition) and formally formulated according to the “international ethical principles for scientific publication (STM).” It is hoped that the first edition of this “PRE statement” will provide useful guidance for key stakeholders in the review process, particularly reviewers. It should also be considered a reference for the editor-in-chief, editorial board, and authors of this journal, as well as other scientific journals, especially in Iran.

Best practice

This study used Evidence-Based Practices (EBP) or evidence-based ethical (EBE) to compile PRE statements. Therefore, the present study focused on ethical facts in the context of one or more cases. One of the advantages of dealing with EBE is that the relationship between moral values and facts is better considered. In other words, using the best empirical information obtained from cases reflects the phenomena in a context-based manner, which investigates the quality of external evidence and provides relatively better conditions for ethical issues. In other words, using the best empirical information available from the case/cases provides context-oriented reflection that examines the quality of external evidence (Strech, 2008) and provides a relatively suitable context for ethical consideration.

Research agenda

Have a look at the ethical statements of MSRT scientific journals in Iran, which showed that there were no compiled ethical statements, but rather translated ones. It seems that the efforts and results of the present research can be useful to promote PRE in scientific journals in Iran in two aspects; First, the PRE statement of the *JIPM* can be presented as a contextual instance based on the characteristics, conditions, and requirements related to an interdisciplinary journal. Second, it could be useful in the *JIPM* domain and subject area and the most of MSRT scientific journals in Iran. This research emphasized reviewers as the main actors of the PRE and it is important to pay attention to the influence of other actors such as the editor-in-chief and editorial board and the PRE statement can be revised accordingly.

Educational implications

The compiled ethical statement can be used to improve the conditions and characteristics needed to implement ethical issues in PRE, as findings of Rajabali Beglou, Rabiei & Rajabali Beglou (2022) revealed. Some efforts were made to compile a PRE statement for the *JIPM* by paying attention to the findings of the larger ecosystem of scientific journals in Iran. Considering the case study method, the theoretical generalization and transferability of the context of current research can be the subject matter of other studies.

References

- Abooyee Ardakan, M., & Mirzaee, S. A. (2010). Reviewers and ethics of review in Iranian scientific journals. *Journal of Ethics in Science and Technology*. 5 (1&2), 47-36.
- Alidousti, S., Ardakan, M. A., Mirzaee, S. A. & Shojaee, F. SH. (2008). *Investigating the status of the review process of articles in prestigious Iranian scientific journals*. Iranian Research Institute for Information Science and Technology (Irandoc).
- Mirzaei, A., Abooyee Ardakan, M., Gharakhani, M., & Sheikh Shoaei, F. (2008). Peer review ethics in scientific journals: case study of Iranian Journal of Sociology. *Iranian Journal of Sociology*. 7 (4), 147-179
- Rajabali Beglou, R., Haji Azizi, N., Karimi, E. (2017). A Review of peer review ethics in research: A study of ethical guidelines in Iranian scientific journals. *International Congress of Ethics in Science and Technology*. Tehran, Dec. 7-10.

- Ahmed, H.S., & Gasparyan, A.Y. (2013). Criticism of peer review and ways to improve it. *European Science Editing*, 39 (1), 8-10 Available at: http://www.ease.org.uk/sites/default/files/esefeb13_essay_ahmed_gasparyan.pdf
- Bosetti, F., & Toscano, C. D. (2008). Is it time to standardize ethics guiding the peer review process? *Lipids*. 43 (2), 107-108
- Cawley, V. (2011). An analysis of the ethics of peer review and other traditional academic publishing practices. *International Journal of Social Science and Humanity*. 1(3): 205–213.
- Committee On Publication Ethics (COPE) (2017). Ethical guidelines for peer reviewers (English). <https://doi.org/10.24318/COPE.2019.1.9>
- D'Angelo, J. G. (2012). *Ethics in science: Ethical misconduct in scientific research*. Boca Raton: Taylor & Francis.
- Gasparyan, A. Y., Ayvazyan, L., Akazhanov, N. A., & Kitas, G. D. (2013). Conflicts of interest in biomedical publications: considerations for authors, peer reviewers, and editors. *Croatian Medical Journal*. 54, 600-8
- Hope, A. A., & Munro, C. L. (2019). Criticism and judgment: A critical look at scientific peer review. *American Journal of Critical Care*. 28 (4), 242-245. <https://doi.org/10.4037/ajcc2019152>
- Israel, M., & I. Hay. 2006. *Research ethics for social scientists: Between ethical conducts and regulatory compliance*. London: Sage.
- Jagsi, R., Bennett, K. E., Griffith, K. A., Decastro, R., Grace, G., Holliday, E., & Zietman, A. L. (2014). Attitudes towards Blinding of Peer Review and Perceptions of Efficacy within a Small Biomedical Specialty. *International Journal of Radiation Oncology Biophysics*. 89 (5), 940-946.
- Lipworth, W., & Kerridge, I. (2011). Shifting power relations and the ethics of journal peer review. *Social Epistemology*. 25 (1), 97–121.
- Mulligan, A. (2005). Is peer review in crisis? *Oral Oncology*. 41 (2), 135–41, <https://doi.org/10.1016/j.oraloncology.2004.11.001>
- Relman, A. S., & Marcia, A. (1989). How good is peer review? *The new England Journal of Medicine*. 321 (12), 827- 829.
- Rajabali Beglou, R., Rabiei, M., & Rajabali Beglou, Z. 2022. Timeliness and Objective & Constructive Suggestions in Review Ethics: a Case study of the Review Documents of *Journal of Information Processing and Management (JIPM)*. *Journal of Information Processing and Management (JIPM)*. 38 (1), 1-28.
- Resnik, D. B., Elmore, S. A. (2016). Ensuring the Quality, Fairness, and Integrity of Journal Peer Review: A Possible Role of Editors. *Science & Engineering Ethics*. 22(1), 169-188.

- Resnik, D. B., Elmore, S. A. (2015). Ensuring the Quality, Fairness, and Integrity of Journal Peer Review: A Possible Role of Editors. *Science and Engineering Ethics*. 22 (1). <https://doi.org/10.1007/s11948-015-9625-5>
- Resnik, D. B., Gutierrez-Ford, C., & Shyamal, P. (2008). Perceptions of Ethical Problems with Scientific Journal Peer Review: An Exploratory Study. *Science and Engineering Ethics*. 14, 305–310.
- Rooyen, S. V., Fiona, G., Stephen, E., Smith, R., & Black, N. (1998). Effect of blinding and unmasking on the quality of peer review: a randomized trial. *Journal of General Internal Medicine*. 280 (30), 234-237.
- Smith, R. (2006). Peer review: a flawed process at the heart of science and journals. *Journal of Royal Society of Medicine* 99: 178-182. <https://doi.org/10.1087/20110109>
- Souder, L. (2011). The ethics of scholarly peer review: a review of the literature. *Learned Publishing*. 24, 55–74.
- Strech, Daniel. (2008). Evidence-based ethics – What it should be and what it shouldn't. *BMC Medical Ethic*. 9 (16). Doi: 10.1186/1472-6939-9-16
- Thomas, S. P. (2018). Current Controversies Regarding Peer Review in Scholarly Journals. *Issues in Mental Health Nursing*, 39 (2), 99-101. <https://doi.org/10.1080/01612840.2018.1431443>
- Triggle, C. R., & Triggle, D. J. (2007). What is the future of peer review? Why is there fraud in science? Is plagiarism out of control? Why do scientists do bad things? Is it all a case of: "All that is necessary for the triumph of evil is that good men do nothing? *Vascular Health and Risk Management*. 3 (1), 39–53
- Wagner A.K., Boninger M.L., Levy, C., Chan, L., Gater, D., & Kirby, R.L. (2003). Peer review: Issues in physical medicine and rehabilitation. *American Journal of Physical Medicine & Rehabilitatio*. 82, 790–802.
- Ware, M. (2008). Peer review: benefits, perceptions and alternatives. *Publishing Research Consortium*. 4:4-20.
- Wendler, D., & Miller, F. (2014). The ethics of peer review in bioethics. *Journal of Medical Ethics*. 40 (10), 697–701.



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Iranian Journal of Information Processing and Management



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