

Received: March 1, 2016

Revision received: April 29, 2016

Accepted: June 20, 2016

OnlineFirst: June 30, 2016

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[www.isahlakidergisi.com/en](http://www.isahlakidergisi.com/en)

DOI 10.12711/tjbe.2016.9.0006 • May 2016 • 9(1) • 103–111

Extended Abstract

## Academics' Views on Research and the Ethics of Publication

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### Abstract

This research intends to identify the inappropriate ethical behaviors of academic personnel mostly on research and the ethics of publication as determined by the Turkish Academy of Sciences (Türkiye Bilimler Akademisi [TÜBA]) and to learn about the views and practices related to ethics committees. Academics working in the Social, Applied, and Health Sciences Department of a university that was established in 1992 formed the universe of the study. A total of 275 academics participated in the study, 136 from Social Sciences, 91 from Applied Sciences, and 48 from Health Sciences. The participants were 156 women and 119 men with an average age of 37.9. Of the participants, 70.4% reported facing ethical problems while doing research; nearly half also reported that previously they could have unintentionally made an ethical mistake due to lack of knowledge and training. According to academics' views related to the situation of applying inappropriate ethical behaviors, more than half of the respondents thought that more violations of ethical issues had been done such as copying, crediting authors, plagiarism, repetitive writing, author's rights, publishing good results, and falsifying, respectively. The majority of academics were seen to be aware of the task of ethics committees to examine complaints; half of the academics were seen to be aware of the laws and regulations on the ethics of research and of the function of ethics committees. More than half of academics were determined to be against not receiving any ethics training throughout one's educational life, and 93.8% of them were determined to believe that ethics training needs to be given to academics. The situation of academics behaving ethically inappropriate was found to have a meaningful statistical relationship through the topics of ethics committees and the need of ethics training among independent variables such as gender, age, area of expertise, and academic title.

### Keywords

Research • Ethics • Publishing • Academician • Ethics violation

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Citation: Özcan, M., & Balcı, Y. (2016). Academics' views on research and the ethics of publication. *Turkish Journal of Business Ethics*, 9, 103–111.

There are ethical values that a person of science absolutely needs to have, because when a scientist devoid of ethical values creates scientific knowledge through research and publishing, all of the actions this person performs can cause great harm to one's profession and to society (E. Aydın, 2007; İ. Aydın, 2006; Erdem, 2012; Ertekin, Berker, Tolun, & Ülkü 2002;). For this reason, a great many international and national ethical codes have been created (COPE, 2003; Dünya Tıpçılar Birliği [World Medical Association, DHB], 2013; Graf et al., 2007; Gürkan, 2014; Klinik Araştırmalar Hakkında Yönetmelik [Clinical Research Regulations, KHKY], 2014; Sismondo & Doucet, 2010; Türkiye Bilimsel Araştırmalar Kurumu [Turkish Association of Scientific Research, TÜBİTAK], 2010; Wager et al., 2009). In spite of researchers generally being honest, their ethical principles could be violated because of reasons like carelessness, inexperience, and negligence (Akşit & Arda, 2003; Gerçek, Güven, Özdamar, Yelken, & Korkmaz, 2011).

The most important things regulating this are the ethics committees and local ethics associations that have been established. Through this new arrangement, legal checks have been brought to studies, especially those carried out on people. Ethics committees have increased ethical awareness in the context of research ethics, taught fundamental ethical principles, and assumed a major role in terms of playing the part of a central supervisor (Büken, 2006; Demir & Büken, 2010; Ersoy, 2015).

Violations of the principles of research and publication ethics are often observed to be due to ignorance (Demircioğlu, 2014; Gerçek et al., 2011; Karluk, 2011; Kıraç, 2011; Maya, 2013). In a report issued in 2002, the Turkish Academy of Sciences explained inappropriate ethical behaviors for research and ethical publication (TÜBA, 2002). TÜBA defined situations of inappropriate ethical practices such as scientific misconduct, sloppy and undisciplined research, scientific fraudulence and deceit, plagiarism of a publication, gratuitous writing, and failure to observe rights and sequence of authorship (TÜBA, 2002).

The study's aim is to evaluate the views and practices of academic personnel mainly on research and publication ethics related to ethical committees and inappropriate ethical behavior as defined by TÜBA. Additionally, the results of the study will provide contributions to appeasing the needs that have been identified, to developing proposals for creating resolution policies related to the process, and to researchers' application of the code of ethics that needs to be followed in every area of university life while also internalizing it.

## Method

### Study Group

The scanning model was used in this study that investigated opinions about the ethics of research. The research population was formed of a total of 1,247 academici-

ans who at the time of the survey were working at a state university founded in 1992; 798 were from the Social Sciences, 279 were from Applied Sciences (Science and Technology), and 170 were from the Health Sciences.

### **Survey Form**

The questionnaire form, which the researchers developed based on the literature, consisted of four sections. Four socio-demographic questions were in Section 1. In Section 2, a total of 18 questions asked about ideas on situations performed by academicians where the behaviors were not found to be ethical according to TÜBA. In Section 3 were 10 questions that included ideas on issues related to ethics committees and their functions; four questions related to ethics training took place in the last section. The questionnaire form consisted of 36 questions in total.

### **Data Analysis**

A total of 275 people filled out the survey. For each survey question, between two (0.7%) and 10 (3.6%) people were determined to have not answered the question; evaluations were made over the number of people who had responded. Descriptive statistics (i.e., frequency and percentage) of the responses given to each survey question have been provided. In addition, whether or not there was a significant dependent relationship between the answers given to the questionnaire and the participants' socio-demographic attributes (age, gender, field of study, and title) was investigated using the chi-square test.

## **Findings**

### **Encountering Inappropriate Ethical Behaviors**

Of the study group, 70.4% of academicians reported having encountered ethical problems while performing research. Almost half (48.7%) reported being of the opinion that they could have previously made an ethical mistake unintentionally due to lack of knowledge and training.

### **Types of Inappropriate Ethical Behaviors**

When evaluating academicians' opinions related to the situation of applying inappropriate ethical behaviors, ; more than half of the respondents had the opinions respectively that ethical violations had been done in the form of *slicing* (65.9%), *plagiarism* (60.8%), *repetitious writing* (58.3%), *rights of authorship* (56.4%), *only publishing good results* (53.9%), *falsifying* (50.4%), and *improper citations* (50.4%). Other views on inappropriate ethical practices were identified at various percentages.

### **Ethics Committees and Their Functions**

When evaluating academicians' views on ethics committees and their functions, half of the participants were informed of the laws and regulations of research ethics (52%) and the function of ethical committees; in addition, a majority of them (84.3%) were found to know that ethical committees' task is to review complaints. However, 76% of academicians had not made any application to any ethics committee. One in five academicians (20.9%) was seen to believe there was no need for the approval of an ethics committee in order to conduct research or publish.

### **Ethics Training**

More than half (59.9%) of academicians were seen to not have received any ethics training during their entire educational life. Compare this to 93.8% of academicians believing that ethics training needs to be provided. While they had done research, 70.4% of participants reported having encountered various ethical issues.

### **The Effect of Personal Attributes**

A meaningful relationship was found between the independent variables like gender, age, area of expertise, and academic title with the situation of practicing inappropriate ethical behaviors. As an example, male academicians reported their opinion that references provided by institutions had been used in a manner contrary to procedure and purpose at a much higher rate (50.0%) than female academicians ( $p = .009$ ). Also, male academicians stated more than female academicians that they were aware of the laws and regulations related to research ethics (57.6%) and of the contents and international declarations (43.1%;  $p = .007$ ; see Table 2). Nevertheless, more male academicians were of the belief that ethics committee approval for performing research and publication was not necessary ( $p = .003$ ).

The age factor was seen to create a significant statistical difference on some topics. As an example, academicians 50 and older showed a difference from the younger academicians through their views related to some inappropriate ethical behaviors, such as giving false information about research methods ( $p = .053$ ), the claim of ethical violations as inauthentic or unfounded ( $p = .008$ ), and identifying institutional or organizational support from those who provided presentational or publishing support that included the results of researches that had been carried out with their support ( $p = .27$ ), as well as the duties of ethics committees ( $p = .025$ ).

When the views of academicians were investigated in terms of field of science, statistical differences were also determined on various issues. For example, academicians from the fields of applied, social, and health sciences had different thoughts on the topic of the practice of inappropriate ethical behavior. Academicians from

Applied Sciences expressed more often the views of topics that were often performed in their own field, in particular things like *confidentiality*, *misconduct*, and *unjust authorship*. Academicians from the Health Sciences were informed of more violations on the topics of *authorship rights* and *superfluous writing*. However, the claims of academicians from the Health Sciences of being informed were seen to create a significant difference compared to academicians from the other two fields on the subject of being informed about ethical committees and their functions.

## Discussion

The academicians who participated in the study believed that, while performing an important part of research and raising their voice to the ethical issues they faced, ethical violations of various types existed. In this belief, more than half of them thought that ethical violations, such as *slicing*, *superfluous writing*, *plagiarism*, *repetitious writing*, and *only publishing the best results* (falsifying), had been made, in that order. This result is similar to the results of studies previously carried out in Turkey and in various countries (Alkan, 2014; Dağ, 2007; Foo & Wilson 2012; Köklü, 2003; Maya 2013; Özden & Ergin, 2013; Ranstam et al., 2000; Swazey, Anderson, & Levick 1993; Tortumluoğlu & Özyazıcıoğlu, 2006; Töreci, 2005). Additionally, the increase in the number of complaints of ethical breaches reflected in the judicial process and the Inter-university Committee on Research and Policy Studies (ICR) in recent years is another quantitative indicator that explains this result (Aydın 2006; Demircioğlu, 2014; İnci, 2009; Karluk, 2011; Ruacan, 2009; Töreci, 2010). The increase in the number of files evaluated by the ICR due to ethical breaches in the associate professor application process over the last decade is often mentioned (Demircioğlu, 2014; İnci, 2009; Karluk, 2011; Ruacan, 2009; Töreci, 2010; Ünal, Toprak, & Başpınar 2012). Emphasis on this topic has been given in an article penned by İnci (2009). Also, the inappropriate ethical behavior that exists from the beginning to end of a research explains that it can be noticed only when converting it for publication. Many inappropriate ethical behaviors that emerge as a result of publication have been identified as *plagiarism*, *falsification*, *distortion*, *repetitive writing*, and *slicing* (Demircioğlu, 2014; İnci, 2009; Karluk, 2011; Ruacan, 2009; Töreci, 2005). As is recently known, Turkish physicists' bad reputation on the topic of ethical publishing has remained on the agenda at a level that has led to the stigmatization of Turkish scientists in the international community (İnci 2009). As concrete examples experienced in Turkey, the president of Higher Education Institutions brought allegations to the agenda directed towards ethical breaches contrary to research and publication ethics as related to senior scientists such as university presidents and ministers. These kinds of claims, is beyond being a topic related just to Turkey; it is something that can be brought to the agenda with regard to a variety of individuals in many countries of the world. As one of the interesting examples that has been placed on record, German Federal

Defense Minister, Karl Theodorzu Guttenberg, after being charged with plagiarism due to doctoral thesis, was also ordered to withdraw his academic title of minister (*Almanya Savunma Bakanı istifa etti*, 2011). In Turkey, meanwhile, the agenda has been occupied with criticisms about some faculty members who had been accused of ethical breaches having been rewarded instead of punished.

Internationally, especially in the United States, regulations and legal sanctions that were brought in relation to research ethics, and punishments related to ethical publishing are of a characteristic that distances scientists from obvious ethical violations. Yet academicians, in their effort to increase the number of digital magazines and publications, have caused the birth of a separate sector because of the demand placed by promoters and the magazines that guarantee rapid evaluation and paid publishing. Some journals that are also within the flow of prestigious publishing houses bring to the agenda their demands for their publication fee. Due to these new sectors in recent years, international criticisms concerning publishing ethics have begun to draw out other ethics violations more often, such as too many journal groups and editors, journal that are published that provide for raised costs, and academicians who own publications that cannot be reasonably counted (*Akşit & Arda*, 2003; *Gökçe* 2003; *Töreci*, 2005, 2010; *Yılmaz*, 2012).

One of the most striking subjects of the study has been how half of the academicians who participated had not been informed about the laws and regulations of research ethics or the function of ethics committees. Despite these alarming results, it is also interesting that quite a significant majority of academicians were aware of ethics committees' task to investigate complaints. Also, three out of four academicians had had no contact with any ethics committee. Even one in five academicians didn't believe there was a need for ethics committees to approve research and publishing. This situation has a hint of the nature of the reasons for the growing number of publication ethics violations that came out in the process of applying for associate professorship (*Demircioğlu*, 2014; *İnce*, 2009; *Ünal, Toprak, & Başpınar*, 2012). Academicians' scientific field was a variable that created a difference in the findings on ethics committees. As an example, the percentage of academicians from the Health Sciences who claimed to have knowledge on the topic of ethics committees and their functions was seen to create a significant difference from academicians from the other two fields. Meanwhile, it wasn't just the health sciences who mandated organizations' (in particular TÜBİTAK) ethical approval in applying support for projects; applied sciences and social sciences' interest in research ethics also increased.

In this study, more than half of the academicians were seen to have received no ethics training throughout their educational life. In contrast, almost all academicians were seen to believe it necessary to provide ethics training. This result is similar to

the results of other studies. For example, in the results of a study conducted with academicians in the medical field, the importance of ethics training and the medical ethics training the teaching staff received was reported to have a significantly positive effect on their views related to ethics (Çobanoğlu, Tunçay, & Aydoğdu, 2009). Also in another study conducted with academicians in the field of education, the result was shared that absolutely all teacher candidates should undergo ethics training in order to be an academicians and to be able to be placed in academic culture (Köklü, 2003).

As a result, the number of researches and publications has been observed to seriously have increased in Turkey. This exponential increase in national and international projects has sped up the concern for being able to meet the criteria of upgrading the appointment. This result, which laughs in the face of the numerical index, can push the scientist to elaborate on less with speed and generate scientific knowledge with less information. These undesired results settle like a dark stain on the institutions and the country. TÜBA's "Call of Scientific Ethics" to academicians and various guidelines prepared by the Higher Education Council can be assessed as well-intentioned efforts. Applying criminal sanctions to those who violate or ignore the principles that must be respected in all academic life regardless, while yet keeping in mind the truth of these principles, would be an important step in creating a culture of ethics. Otherwise like the snow that remains, the perceptions that form from what is done is reason to carry the topic to another environment; also, this can negatively affect scientific debate and the reliability of institutions. Actually, ethical breaches of research and publishing, which in truth should not be forgotten, should not be viewed as just an individual moral problem of attitudes. This attitude away from morals that scientists make may lead to much more important consequences like deception (such as could undermine the confidence that is scientific knowledge), causing others to make mistakes, and bringing harm to humanity. The scientist, who cannot be defended by saying it wasn't intentional or that they didn't know, must know, learn, show thought, and take responsibility.

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