

# Assessing Knowledge of Legal and Ethical Issue Access and Use Information Agricultural Graduate Students in Zanjan University in Iran

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**Abstract**—the purpose of this study was measuring Knowledge of legal and ethical issue access and use information agricultural graduate students in Zanjan University. Survey Methodology was implemented in this applied research. The statistical population consisted of graduate students in the College of Agriculture, University of Zanjan in 2015-2016 (N= 250). The sample size was estimated by using Cochran's formula (n=80). Samples were selected by stratified random method. The research tool was a questionnaire. The validity of questionnaire was confirmed by feedback of related faculty members. Using pilot test and estimating Cronbach's alpha (0.78) the reliability of questionnaire was confirmed. Knowledge of legal and ethical issue access and use information score of 90.1% of respondents was assessed as moderate to very poor. Knowledge of legal and ethical issue access and use information score of students PHD participated, was significantly higher than The M.S. students. Also, the results showed that students who participated in the library attending tour were significantly more aware of the legal and ethical issues of access and use of information than other students.

**Index Terms**—Students, Higher Education, Plagiarism, Ethical Issues in Research, Legal Issues and Ethical Use of Information.

## I. INTRODUCTION

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EAP reserves the right to do the final formatting of your paper. Scientific theft is one of the most important pests in the scientific and research community. Scientific theft, in addition to material damage, entails a huge moral damage to the scientific community in such a way that keeps the scientific community out of motion and reduce the researchers' willingness to produce and supply science, due to the lack of confidence in the research area, and causes to slow down the speed of the production of science in research space [1].

Scientific misconducts are on the rise [2]. The effects of this act will cause scientists and authors to be unwilling to produce

science due to distrust and being unmotivated. Increasing educational centers, the need for academic teachers to scientific promotion and graduate students to boost their research background, the high rate of science production, and the high dissemination and high access to research results through the communications technology in the world are all factors that have a significant impact on the worsening of this situation. [1]. Various reasons such as lack of awareness, attitudes, and Internet facilities, psychological pressures and ... leads to theft of science among the scientific community [3].

Familiarity with the correct use of scientific resources is one of the most important cultural pillars in the scientific community to deal with the massive volume and easy access to information [4]. Awareness of the correct principles of protecting the proper conduct of research, the recording and maintenance of data, the rules for conducting research and responsible writing are all among the factors that prevent the conduct of scientific moral mischief [5].

Awareness of many legal and judicial cases of access and use of information, in accordance with the association of college and research libraries (ACRL) Fourth Information Literacy Standard has several functional indicators that include:

- 1) Familiarity with many of the ethical, legal, and socio-economic issues related to information and information technology
- 2) Follow and familiarize yourself with the rules, organizational policies, and practices related to access to information
- 3) Acknowledgment of Origin in the propagation of Product or Performance [5].

In the field of research pathology, there are cases such as counterfeiting of results, scientific theft, lack of ethical standards in relation to humans, and so on. These cases make it necessary to address the ethics of research. Ethics in research is an area of debate and research. Research in this area of science is essential and important [6].

The situation of behaviors and attitudes in the field of scientific theft and its other examples in the postgraduate education area worse. The reason for this is the importance of the field of research among this scientific community [7]. The only factor that can effectively prevent this is attention to ethics fundamental. One of the requirements for science production is conducting proper and efficient research. Therefore, identifying

research pests is essential.

Studies at various parts of the world have shown that the rate of scientific theft is increasing among students. There is also insufficient information and reporting in Iran, but scattered studies in this area indicate the spread of abusive behaviors [7].

The results of Ahrambafian and et al [8]. Research on the professional ethics of high school counselors showed that there was no significant effect between demographic variables such as age, gender, work experience and number of clients regarding the observance of professional ethics by school counselors, but consultants with higher education, Had a better performance in maintaining professional ethics. Kookchi and et al [9] in studying the status of research ethics among agricultural researchers showed that, in general, some types of research misconducts were detected in 16% of the articles published in the last three decades in agriculture.

It was also concluded that the researchers' lack of knowledge of the rules is considered to be the main causative factor of the research immoralities. Feli and et al [7]. State the level of attitude of Tarbiat Modarres University students towards scientific theft at a relatively low to moderate level. In assessing the information literacy of the National Library of Iran Documents Organization users, Mohammadi and et al. [10] found that the information literacy of users is high. In separating the level of information literacy according to the five standards, students are at a low level in terms of familiarity with legal and economic access.

Research results have shown that the lack of knowledge and awareness in the field of access rules to the use of information leads to scientific theft [11]. Other study results from the University of Alberta indicate that students are not able to identify texts that have theft of other texts [12]. Researchers including Scanlon, neuman, Dawson and Overfield believe that the lack of knowledge, the necessary qualifications for scientific works, and enough information in the field of writing articles leads to theft of science[13], [14].

The general purpose of this study is to explain the state of knowledge of agricultural graduate students about the legal and ethical issues of access and use of information at the University of Zanjan. In order to achieve the above general purpose, the following specific objectives are studied:

- 1) Describing individual and educational characteristics of students;
- 2) Explaining students' awareness of the legal and ethical issues of access and use of information Andy
- 3) Comparison of student's knowledge of legal and ethical issues of access and use of information based on independent variables of gender, education level, employment status, undergraduate university, field of study, and participation in a library familiarization workshop.

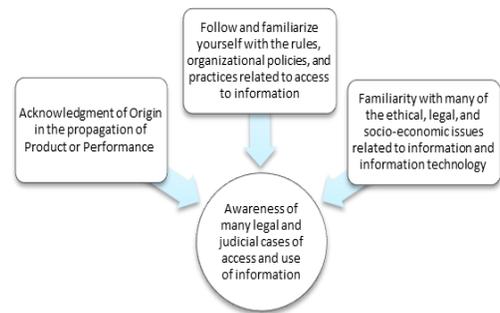


Fig. 1: Research theoretical framework [5]

## II. RESEARCH METHODOLOGY

In this research, quantitative methods are used. This research is quantitative, applied and in terms of data analysis method, descriptive correlations. The purpose of this study was to Assessing Knowledge of legal and ethical issue access and use information agricultural graduate students in Zanjan University in Iran. The statistical population consisted of graduate students in the College of Agriculture, University of Zanjan in 2015-2016 (N= 250). The sample size was estimated by using Cochran's formula (n=80). Samples were selected by stratified random method. The research tool was a questionnaire. The validity of questionnaire was confirmed by feedback of related faculty members. Using pilot test and estimating Cronbach's alpha (0.78) the reliability of questionnaire was confirmed.

The questionnaire consisted of two parts. In the first part, 10 questionnaires (from Davarpanah and Siamak Information Literacy Questionnaire [15] were used to measure students' awareness about the legal and ethical issues of access and use of information. Some questions have a correct answer, and others have more than one correct answer, which was mentioned in the questionnaire. Each score is assigned to each correct answer for each question. Failure to answer or false answers scored "zero". In the second section, the independent variables of the research were measured.

Data were analyzed using SPSS software version 20. To analyze the data, descriptive statistics, frequency, percentage, mean, facial and standard deviation, and inferential test, t test were used.

Medium dividing method is used to determine the level of awareness of students about the legal and ethical issues of access and use of the information examined. At the beginning, in this way, the variables defined are scaled differences and the variables' measurement scales are the same. Then, according to the following formula, the standard deviation of the mean of the levels of the mechanism (ISDM) of awareness was determined [16]:

- A = :very week  $A \leq \text{Mean} - \text{Sd}$
- B = week:  $\text{Mean} - \text{Sd} \leq B \leq \text{Mean}$
- C = medium:  $\text{Mean} \leq C \leq \text{Mean} + \text{Sd}$
- D = good:  $\text{Mean} + \text{Sd} \leq D$

### III. RESEARCH FINDINGS

#### A. Description of Individual and professional characteristics of respondents

The results of the review of the individual characteristics of respondents are summarized in Table 1. The average age of respondents was about 26.14 years. About half of the respondents were female (53.8%) and half were male. Respondents were studying in seven agricultural trends. The GPA record of respondents in the undergraduate degree was 16/68 and the mean of the average of the units that passed so far was 17.55 (out of 20). The average duration of working with computers and working with the Internet was 3.6 and 5 hours per day, respectively.

TABLE I: INDIVIDUAL AND PROFESSIONAL CHARACTERISTICS OF RESPONDENTS (N = 80)

variable	Condition	Frequen cy (percent)
Field of Study	Agricultural Extension and Education	18.8
	water engineering	15.0
	Agronomy and Plant Breeding	12.5
	Animal Science	13.8
	Soil science	15.0
	Plant protection	15.0
	Gardening	10.0
Grade	PhD	91.3
	Masters	8.8
Employment status	part time	21..8
	Unemployed	78.2
Previous University Campus	Governmental	92.5
Participate in the library workshop	Free	7.6
	Yes	76.9
	no	23.1

#### B. Explanation the status of students' awareness of the legal and ethical issues of access and use of information

The results showed that more than 90% of respondents were aware of the legal and ethical issues of access and use of respondents' information at a moderate level and less than that. Less than one-tenth of students are at the right level of awareness of the legal and ethical issues of access and use of information. Respondents were classified according to the level of awareness of the legal and ethical issues of access and use of respondents' information in four levels (Table 2). The average score of awareness of the legal and ethical issues of access and use of information from 10 scores was 4.76 with a standard deviation of 1.77.

TABLE II: FREQUENCY DISTRIBUTION OF AWARENESS OF LEGAL AND ETHICAL ISSUES ACCESS AND USE OF INFORMATION FROM RESPONDENTS (N = 80)

Status	Frequency	Frequency percentage	Cumulative Frequency
Very weak	6	7.5	7.5
Weak	32	40	47.5
medium	34	42.5	90.10
Good	4	9	100

#### C. Comparison of the mean

Independent t-test was used to compare the level of awareness of respondents with legal and ethical issues of access and use of information in different groups (based on participation in the library familiarization tour, educational level, and gender and employment status). The results in Table 3 showed no significant difference in any of the other groups, except for the educational level. PhD students are significantly more aware of the legal and ethical issues of access and use of information than master level students. Also, the results showed that students who participated in the library attending tour were significantly more aware of the legal and ethical issues of access and use of information than other students.

TABLE III: COMPARISON OF THE AVERAGE RESPONDENTS' AWARENESS OF THE LEGAL AND ETHICAL ISSUES OF ACCESS AND USE OF INFORMATION ACCORDING TO THE INDIVIDUAL AND PROFESSIONAL CHARACTERISTICS OF RESPONDENTS (N = 80)

Variable	surface s	mean	Standard deviation	DF	t	sig
Participate in the Library Tour	Yes	4.98	1.73	76	**2.49	0.01
	No	3.83	1.65			
Grade	P.H.D	6.00	2.00	78	**1.69	0.05
	MSc	4.64	1.71			
Sex	Female	4.44	1.63	78	1.76	0.08
	Man	5.13	1.87			
Employment status	Employ ed	4.64	1.16	76	-0.18	0.85
	Unempl oyed	4.73	1.91			

P ≤ 0.01: \* P ≤ 0.05: \*\*

### IV. CONCLUSIONS AND SUGGESTIONS

Research is important and valuable for the production of science, among scientific communities. Various studies indicate that the current state of non-ethical behavior in research is expanding. In this study, the results show that nearly half of respondents are in a weak and very weak state of knowledge about the legal and ethical issues of access and use of information, and more than 90% of respondents are in the middle and lower than average which is consistent with the results of Feli and et al [7] and Kukchi and et al. [9], Scannon and Neumann [13], Dawson and Urfield [14], and Rosneau and Rosneau [11]. This can be caused by the lack of concentration of university educators in this regard.

There is no significant difference between the knowledge of legal and ethical issues of access and use of information in

different groups based on their undergraduate university. In fact, it can be concluded that this weakness is observed in all universities of the country, and national universities, PayamNoor and Azad universities in this field are at the same level of performance.

Ph.D. students are significantly more aware of the legal and ethical issues of access and use of information than master level students. This conclusion is consistent with the results of the research by Ahrambafian and et al. [8] and is disagreed with the Feli et al research findings [7]. In fact, it can be said that at the PhD level, students are more sensitive to ethics in the research and they are more aware of rules. The reason for this is the high importance of research at this stage.

The average legal and moral awareness of access and use of information is not significantly different among male and female students, which was inconsistent with Feli and et al [7] and Ahrambafian and et al. [8] In other words, female and male students have the same level of knowledge in this regard, and no group has superiority over others. Also, the results of the comparison of the average legal and moral awareness regarding access and use of employed and unemployed students showed that there was no significant difference between the two groups. This result was consistent with the results of Ahrambafian and et al. [8].

The results of the comparison of the mean scores of legal and moral awareness regarding access and use of information among students who participated and did not participate in the library tour showed that the mean scores between the two groups did not differ significantly, which is inconsistent with the results of Feli and et al research [7].

There is no significant difference between the students of different trends in terms of respondents' awareness of the legal and ethical issues of access and use of information, which is inconsistent with the results of the researches of Zamani and et al [3] It can be concluded that all students of different agricultural trends have the same level of awareness of the legal and ethical issues of access and use of information. In fact, there is a general disadvantage among all the different groups in agriculture in terms of awareness of the legal and ethical issues of access and use of information. So it is suggested:

Considering the low level of legal and ethical awareness regarding access and use of information, the necessity of developing a research ethics guideline in agricultural sciences should be considered as planning priorities for agricultural students.

In order to improve the awareness of students about the legal and ethical issues regarding the access and use of information, academic course planners need to approve the textbooks of essay writing, include subjects in the field of ethics in research, scientific theft and related content in this field. Also, holding workshops familiar with the research methodology, and developing guidelines for research are the necessary plans in academic environments.

Norms and values in the society have a significant role in the behavior of individuals in every field. Culture of honesty in

research, awareness of punishment against scientific misconduct, and create beliefs in the ugliness and sinfulness of fraud in research can increase awareness of individuals and motivate them to acquire knowledge in the field of research ethics.

The creation of intellectual property bases and the approval of intellectual property laws (copyright law), informing on ethical rules and ethics in research, access to and use of information in information bases, and allocating short sections in scientific and research journals for these issues are among the suggestions.

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