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A Study of Mazandaran University's Advanced Studies students' Familiarity with, and the Usage Amount of Gray Literature

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ABSTRACT

This study, and identify different groups of gray sources, including theses, scientific publications, conferences and so on leads, which aims to investigate the rate of use of graduate students at Mazandaran University of gray. The methodology used in this survey and description. The study population included 3328 students of Mazandaran University graduate (master's and PhD degree in) formation and for data analysis, in order to describe and evaluate the general characteristics of respondents charts, descriptive statistics, use was made of data collection A questionnaire was used. To analyze the data and determine the relationship between variables, inferential statistics tests Kolmogorov-Smirnov test single factor t, Pearson correlation and partial correlation spss16 was used in the software. The results obtained from this study showed that the rate of use of graduate students at Mazandaran University of gray is desirable. Request help from students of librarians in the field of search, and access to gray, indicating a lack of awareness of students of search methods and access to gray, as well as a lack of required software search. The results indicate that students achieve less access to government documents and technical research reports are gray. Trading of resources between the gray and the access and usage, there is a significant relationship, with a confidence level of 0.95 was approved. In other words, by increasing the availability of resources, increase the use of 0.372.

Keywords : Graduate Students, gray resources, knowledge and use

INTRODUCTION

Since ancient times, men and women, with differences of race, knowledge, expertise, skills, interests, thoughts and experiences, discoveries and have their skin, paper, and other tools were confiscated. Most of these documents from ordinary publishing channels are found, but do not reach the public. However, this large complex containing persistent fundamental part of human knowledge and daily use of new media communication is dramatically expanded. However, many people know the sideshow. (DeCarvalho, 2004)

Scientist years ago candlelight results of his experiments was a note, or researchers in recent centuries, using a computer and word processor Word to publish the results of his research focuses

on the personal web pages, however, are intended to spread knowledge, truth and the written findings for the benefit of future generations were. The documents prepared by both of them were among the sources of gray, though perhaps both of them unaware of the term gray literature, because these so-called scientists and researchers have been introduced years later because generally this It results in the field of library and information science word is unfamiliar with it. (DeCarvalho, 2004)

It certainly is strange, but the habits of Europeans use gray colors to designate various types professor, taken in the late 19th century. This modification in the late 19th century selected (Aguar 1992) and from 1970 onwards in America and Europe. (DeCarvalho, 2004)

Contrary to the impression, that most people were at first, and still some believe it, not the sideshow of gray in any way. In fact, these resources are of vital importance in the process of economic and social development of a country or region and every day to acknowledge the importance of the matter. Gray resources from 1970 so far studied and discussed. But it is rarely used widely in the public interest and in the world. (DeCarvalho, 2004)

Sources gray, print and publishing that letter, by governmental agencies, universities, industrial enterprises and commercial organizations has published, but do not follow the trends prevailing in the publishing business and the general public are not usually available (Karami, 2011). Gray scientific resources, including newsletters, reports, working papers, theses, government documents, bulletins, conference proceedings, and so it is for free, or fee, available and used. Published gray and easy access to their resources plays an important role in informing the researchers. (Asnafi, 2013)

In the eighth International Conference on Gray Literature (New Orleans, 2006) two researchers in a pilot study were conducted roundtable gray literature curriculum development and the appropriate structure for creating a valid course of remote training workshops with the participation of students, researchers and especially educational institutions and academia, to create. Who finally decided to create a course beyond the pilot phase and in the form of a college education, undergraduate - graduate level degree in library and information science led? (Farace, 2008)

Printed works such as reports, internal documents, doctoral dissertations, master's theses, and conferences, which are usually because never in the form of commercial printing, inventory, or pricing are not the usual market channels cannot be used in response to the need of libraries in providing access to these materials, alternative methods for logistics and bibliographic control of these materials have been developed. (Asnafi, 2014)

This study aims to examine knowledge of the graduate students at Mazandaran University of gray resources as well as to discuss, review and how usable and easy access for different people.

Gray resources Entry " of gray " in continuous culture of Library and Information Science (Avdelys) is as follows: It is said to be a valuable science at the university level, governmental, commercial and industrial organizations in print or electronic production, but by publishers or booksellers and bibliographic references are not available but because to date and valuable initiative. Such as technical reports or government work reports and thesis university research teams and so on. (Reitz, 2014)

The importance of gray literature

Perry Evans in 1996 at the second conference in Washington, his belief in the gray literature sources such statement is gray: "If the libraries, see that people are nervous, excited and anxious to seek information that can be searched not for them, at this time we feel the need to gray resources, that

the hungry and to provide information seekers share information useful and necessary, kept happy.

There is another point and that is the background of gray resources in the most important databases Index and there is a special strategy to search for and find these resources must be considered. Questions like this are important resources for whom? What kind of research most of these resources virgin? Is intended for a particular organization, or a private company or government agency? So identify those who want to use these resources, can be a strategy. (Asnafi, 2011)

Gray literature in recent years due to the emergence of new channels can easily organize and spread to manufacturing and distribution. These sources include important information and application forms are used by researchers and authors of the research summary, summary statistics, data, and the like are released. According to Saul and Ryan, (1999), gray literature as an important source of information for many people in the world because most of the information will not be printed in the form of conventional publishing. In particular, technical reports and other official state documents, which have rich and fresh and unique information and are appropriate. (DeCarvalho, 2004)

In general, the main source of information gray indigenous resources, so teachers, researchers and students at universities heavily rely on the drug, such as literature, dissertations, projects and conferences, in order to obtain first-hand information subjects studied. Another benefit is that gray literature is more likely to report studies that have been stopped or have been in the form of innovative pilot projects. (Avsayand, 2012)

Schopfel in an article entitled "Towards a resource definition gray" Grey's definition sources and different definitions of gray, gray resources features in different conferences have been expressed in this article (Schopfel, 2011)

Smith explains in 2009. In addition to the sources of information and how they act, gray literature is still a diseased organ that could not be identified properly introduced and publication of information in the Internet age with permanent health problems duplicate the deal. (Quoted from Amanda Lawrence, 2012)

Therefore, the role and importance of gray resources in science, technology, information, and professional is crucial because research in this area and the extent of the lack of access to information and important root, may lower the quality of the all these areas are. Also, this type of information directly by researchers in a particular field is generated and often more accurate than other sources and a more arise.

New and sustainable sources of gray at the prospect of future publications the term "gray sources" always had a role in scientific communication. Sources gray for low circulation printed and published by scientific institutions, but if the content is trusted, is reviewed by an institution known for its open-access electronic publication of the Institute published by the infrastructure, then gray resources, the role of new and stable outlook on the future publications (Huffine, 2010). In this case, the library can be a major player. An issue that is important for the future of free access to gray resources, a complete and robust infrastructure that quality, durability, and ability of the systems to guarantee. New modes of scholarly communication visible can be placed in such infrastructure. Published scientific literature and publishing data (or information) cannot be separated in the future. In addition to free access to texts, working closely with relevant data should also be part of the public understanding of science. Text and data should be considered as an integral component that represents the record of a researcher. As Brembs (2011) says, "Because a" universal library science "does not exist to contain all academic records and initial data is?"

All that and understand the different definitions of gray literature would perhaps which has provided the resources for the development of Vashah should be operational by librarians and opportunity to be provided. It is important that librarians have to know how to use a variety of traffic information, the identification, definition, use and quick access is not a problem. But librarians are not only engaged in the acquisition, production, etc. The sources are, but producers take full advantage of these resources. So there is actually a problem fast and easy access are now producing these resources are growing fast and find it like finding a needle in a haystack. Also passing through channels approved by the publishers is also another problem. (Safazadeh, 2014)

A review of studies

Lawrence (2012) in an article entitled "Sources of gray" to describe the content of the web 2 and platform grayed out. The study states that we can tend to see an increase in official communication has always scientists, government and business levels that position in the distribution of resources cycle gray. Examples of sources apart from gray, gray and society about the problems of increasing resources through social media sources gray discussed.

Lawrence in 2012 in a study entitled "Electronic documents in the world of print: gray literature and the Internet" with the history of gray in America, England, Australia, before the Internet and then writes. According to government documents and various organizations-and there centuries after the world wars and the advent of computers and the Internet and new tools for recording, there was a change in how to save and protect the information. This change in the gray literature revolutionized the electronics can be made available as a resource, and using modern technologies easier way to access useful information to have. However, access to resources and make full use of gray is still a challenge.

Osayande^{and} Ukpebor (2012) in a study titled "gray acquisition and resource management: challenges in academic libraries Africa" to define resources and their gray as gray with a precision that is difficult to define resources. Gray resources are being published for semi-hard to locate them; the researchers prefer to call them ephemeral literature. In this regard, several experts about resources as well as the features and importance of this resource are gray. In this article it was stated that, Gray resources in Africa is mainly produced in limited numbers, and a limited circulation, even among institutions that produce them and the resources improperly documented, and that the local or national bibliographic databases which may be gray sources make accessible there and historically, many academic libraries in Africa to little or no desire to use gray sources, for various reasons, do not. The article also provides resources to identify and gray, gray collection development policies, the procurement process gray sources, acquisition methods and resource acquisition problems were gray.

Ukourma (2011) in their study "the effective management of gray literature for Education and Research and National Development" during a survey in Illinois, United States of America in 2010 using an online survey of 118 academic and non-academic library, finds, the resolution analyzes and accurately manage and collaborate on the gray literature of the main priorities in the understanding of gray literature in libraries. Another is that the government's role in providing national and international policy should not be ignored. The official sources for national and international official catalog and website, and even search engine accessible. What is important is that the rise in public awareness of and educate them on how to and how to use gray literature, yes. This would contribute to improving the quality and level of training, education and research are among the nations.

Rabina (2008) in an article entitled "scholarly communication in terms of gray in library and information science", as it has been discussed how education about resources in the United States is

gray LIS Students become familiar with these resources and discuss how the resources are gray and librarianship and LIS interfaces specified.

Anderson (2008) in an article entitled "gray and electronic publishing sources" as saying: There is a lot of information contained in traditional texts can be found in the gray literature. Many improvements have been made to facilitate access to these texts. Librarians and information managers play an important role in the preparation of gray literature and guidance in order to distribute them to users in these texts. This text is one of the richest sources of information for science, and technological and industrial information and is associated with many areas of the social sciences.

For example, geographic information system used by geographers includes a considerable number of gray literatures. In this paper, to mention a few of the resources were gray and definition of the resources mentioned above. The article notes that, as the author of fellow publishers gray literature will be presented which do not consider themselves in a situation where commercial publisher. Gray literature may lack the editing process, or is in the middle. Gray resources can be used as raw data and are not organized and texts traditionally considered white final product release Gray literature and primary sources that are free people because of lack of knowledge of the texts usually do not use them much and this happens due to lack of indexes and bibliographies theme. As for the distribution of these sources is that the distribution of these texts by sending a few of them target specific groups that lack distribution through other channels. In America deposit law is an example of these laws.

Saffarzadeh (2014) in research "Gray study of resource management in libraries affiliated with research, education and extension of the three aspects of the collection, organization and dissemination of information" with descriptive survey method and have concluded that none of the libraries, check-called "gray resources" were not used in the library and 4/40 percent gray source library with his name known source. Which was introduced from a variety of sources, gray, libraries investigate any number of sources, and who had no library all kinds of resources in your resource list. In most libraries subject to certain conditions access to the library and the facility was gray. The results of this study indicate a lack of attention to the importance of managing resources in libraries is gray to the research, education and agricultural extension. This is perhaps because of anonymous sources, gray and lack of attention to the importance of this resource in the library.

The study and its reliability

This research study used the familiarity and graduate students of Mazandaran University of gray. The research is described. Descriptive, because "explores and describes the objective, consistent and genuine characteristics of a situation or an issue". In other words, the researcher in this type of research tries to deduce what it is, without any interference or subjective reports and objective analysis of the situation (Nadery and Saif Naraghi, 2006); and survey because the assumption is that with the using precise scientific methods, the sample can be (relatively limited) of respondents selected from the group greater, the conclusion that has been reached in the case of large groups (Kumar, 2002).

In this research subject is explored using the descriptive survey method by using a sample selected from the population to examine the relationship between variables and distribute it. According to the research questions, the questionnaire was designed and Mazandaran University was an example of master's and PhD students. Then, with the help of collecting data and analyze them to provide answers to research questions were addressed.

The main elements that are navigated by the community survey questions answered. The first step

in the selection of respondents to the survey, determining the target population of the community is a group of people who have the knowledge and views of the ideal effective and relevant to the content of their research (Arabs, 2000).

The population and sampling

The study population in Mazandaran graduate students (MSc and PhD in two) in the country. Given that the number of students was over 334 people, (this data is taken from the Mazandaran University Graduate School). Using the Web Application sample was sampled and 344 samples were determined. This research was used as a community. The Cochran sampling formula was considered at a confidence level of 0.05.

Table 1: Number of samples by each educational level and gender

Educational level	Number MSc	Number Ph.D.	Sum
Female	155	36	191
Man	104	50	154

For sampling, stratified random sampling method is used for the population that population is not a homogeneous construction and consists of several components. The selection of these sampling of groups that are present in society to the extent that arrive in the research sample, the number of students to school segregation and gender were selected (Table 1), and between them Questionnaire was distributed.

MATERIALS AND METHODS

Methods and tools for data collection

The present is researcher-made questionnaire, which, according to the research framework of the five components that comprise the profile of respondents, including gender, field and level of education. Questions related to the familiarity of 9 questions, questions related to the use of 15 questions. A question relating to access contains 13 questions and the questions related to the 8 questions:

Table 2: Information related to the Questionnaire

Type of questions	Questions	Contains	Number of questions
Profile of respondents	1	Gender, discipline, and education levels	1

Trading in	2 , 3	Introducing a variety of sources familiar with the sources, gray gray identifies ways	9
Rate of usage	4-11	Different forms, loaning gray etc.	15
Access	12-17	Ways to achieve a variety of gray	13
Search	18-24	Search methods, search software, professional assistance and gray sources	8

Validity and reliability of data collection

Reliability

In order of reliability, then conduct a pilot study among 30 graduate students at Mazandaran University and collected their responses, calculates the population variance for Cronbach's alpha coefficient, which after data entry using software SPSS 16.0, the Cronbach's alpha coefficient was calculated (table 2). Number Cronbach's alpha should be above 7% reliability factor is approved in the questionnaire for this study, Cronbach's alpha is 86/0 that the reliability of this questionnaire.

Variables	Reliability	Understanding the sources of gray	The use gray	Sources Search methods of gray	The availability of resources gray
Cronbach's alpha	86	83	85	78	78
Total data	43	9	15	13	6

Analysis information

Inferential statistics and data analysis using SPSS 16.0 software environment is carried out. In this study was to assess and describe the information about the general characteristics of respondents from tables and graphs, descriptive statistics were used.

Then, using the Kolmogorov-Smirnov test for normality of the data determined and then using parametric tests are based on the hypothesis of single factor t-test, Pearson correlation and partial correlation is used.

Analysis of the questionnaires

Table's demographic questionnaire

Demographic information in the following tables of people who completed the questionnaires has been reported. Report dimensions include gender, education and a master's degree and doctoral students at Mazandaran University.

Table 4: demographic Sex

Sex	Abundance	Percent (%)
Female	190	44.8
Man	154	55.2
Sum	334	100

As can be seen in the table with a frequency of 154 men and 44.6 percent of female respondents and 55.1 percent of the total respondents with a frequency of 190 people and comprise a total of 344 Dad and answer the questions.

Table 5: demographic respondents

Component	Indicators	Physics	Literature	Management	Geography	Sociology	Chemistry	Economy	Biology
Field of Study	Abundance	32	42	44	40	47	52	53	34
	Percent	9.3	12.2	12.8	11.6	13.7	15.1	15.4	9.9

According to Table 5 can get in Mazandaran University graduate and doctoral curricula teach eight disciplines? So all respondents who have responded to the resolution of the 8 disciplines including physics, with many respondents 32 and 9.3 percent, with an abundance of literature 42% and 12.2%, and 12.8% of 44 patients with an abundance management, geography has a lot of 40 and 11.6 percent, sociology with a frequency of 47 and 13.7%, chemistry 52 with a frequency of 15.1%, and 15.4 percent of economics with a frequency of 53 respondents green field with a frequency of 34 and 9.9% of the survey respondents make up.

Table 6: Demographic respondents' master's degree and Ph.D.

Sex	Abundance	Percent (%)	
MSc	Female	153	44.5
	Man	104	30.2

Ph.D	Female	36	10.5
	Man	51	14.8
Sum		334	100

As shown in Table 6 is observed with a frequency of 36 Ph.D students were female and 10.5 percent male students and 51 doctoral degrees with a frequency of 14.8%, with a lot of graduate students and 153 undergraduate students and 44.5% Masters with a frequency of 104 students and 30.2 percent of the survey respondents, respectively.

Statistical reports

First, using the Kolmogorov-Smirnov test, we determine the normality of the data. Depending on the type of parametric or non-parametric data obtained from the test method used.

The Kolmogorov-Smirnov test (KS)

H_0 : Distribution of students' familiarity with normal gray resources.

H_1 : Understanding the sources of the distribution of students is not normal gray.

Table 7: Kolmogorov-Smirnov Trading in gray sources

Variable	Test	Number	The significance level	Test results	Type of test
Trading in	1.242	344	0.091	H_0	One-sample T

Table 8: Kolmogorov-Smirnov test resource usage Grew

Variable	Test	Number	The significance level	Test results	Type of test
Trading in	1.555	334	0.066	H_0	One-sample T

According to the data of the study were normal, verification and parametric test assumptions and hypotheses depending on the type of test used t-factor.

Research Questions

Question 1: The rate of Mazandaran University graduate students with resources what is gray?

The first question test uses an average of a community at the level of 5 percent, hypotheses testing is as follows:

To examine the hypothesis that a significant amount of familiarity is the graduate students of Mazandaran, the test "t-agent" was used. Since the codes 1 to 5 are different options specific questions and variables measured on ordinal scale. Then each question can be viewed as a random variable that takes the values of 1 to 5. With this vision can be used different statistical methods. Major statistical methods focusing on average been done. Including this test, according to the normal distribution of the population, compared test with a test fixture (one-sample T-Test) is T. With these test mediocrity numerical scores shows the average range. Given the options 5 children in Likert scale ranging from 1 to 5 have been scored, an average of inquiries by the mediocrity (3) test is sent. The null hypothesis and the alternative hypothesis are as follows:

H₀: The students learn not at normal levels. $H_0: \mu \leq 3$

H₁: Meet the students at normal levels. $H_1: \mu \geq 3$

H₁: Meet the students at normal levels.

Table 9: Kolmogorov-Smirnov test resource usage Grew

Variable level	Number	Average	Statistics T	Degrees of freedom	The significance level	Mean	Confidence interval	
							Limit low	Limit High
Trading	334	29.761	99.043	343	0.000	26.762	26.230	27.293

Test results show that the value and number it 99.043, df value is equal to the number 343 and sight is equal to 0.000. Since sight is smaller than 5%, H_0 is rejected. If the value of significance level of p-Value of 0.05 = α is smaller, the variable studied and the amount of test (3) there is a significant difference, in this case, if the average is higher than the number 3 was examined, evaluated as a strong factor in society and if the average of the study was lower than the number three cause of poorly studied there in the population. Given the above, statistical hypothesis H_0 is rejected and the alternative hypothesis H_1 is confirmed.

We can conclude: The rate of graduate students at Mazandaran University of gray resources is desirable.

Q2: Mazandaran University graduate students' use of resources what is gray? The second question test using an average of a community at the level of 5 percent, hypothesis testing is as follows:

$$H_0: \mu \leq 3$$

$$H_1: \mu \geq 3$$

Table 10: t test on students' use of resources gray

Variable level	Number	Average	Statistics T	Degrees of freedom	The significance level	Mean	Confidence interval	
							Limit low	Limit High
Trading	334	44.590	76.989	343	0.000	41.590	40.528	42.653

Test results show that the value and number at 76.989, df value is equal to the number 343 and the sign is equal to 0.000. Since sight is smaller than 5%, H_0 is rejected. The mean sample tested, value 44.590, ($-\mu = 44.590$) and 95% confidence interval is between 40.528 and 42.653. This means that an average of all these factors have signed with the number 3. According to both upper and lower limit values are positive; we can say that on average greater than 3 are all factors in the situation of these factors at a high level.

Q3: What methods of Mazandaran University graduate students search for resources are gray? According to the researchers, No. 3 questions for students seeking to gray resources that their responses according to plan on the table Likert scale 10 is given.

Table 11: respondents lot of searching gray respondents

Number	Asking questions	Many respondents					Abundance
		Too much	Much	Low	Very little	I do not have access	
1	Librarian of gray resources that we need to search for my help.	127	153	31	23	10	334
2	Gray resources that we need to find my website to help the library	36.9	44.5	9.0	6.7	2.9	100 (%)
3	I search library resources that we	108	136	49	31	20	334

	need software with gray.						
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According to the table above, there are three ways to search for resources for students in master's and doctoral gray there: Help the Librarian, using the library's Web site, with the help of library software. According to data obtained from a survey of students, 127 students from 344 people and 10 librarians in the library will help students to search library resources do not help. A total of 108 students on the library's website to search their resources, 20 students did not do a search with the library's website. A total of 88 students of the available software library to search for information resources will help, but 20 students do not use software libraries to search for sources of information.

Question 4: Mazandaran University graduate students, the gray-use methods for access to resources?

3 questions for students to have access to these research questions that their responses according to sources, gray design on the Likert scale (4-9) is given.

Table 12: The frequency of available resources gray

Number	The availability of resources gray	Many respondents					Abundance
		Too much	Much	Low	Very little	I do not have access	
1	Help from library staff	92	61	87	68	36	334
		26.7	17.7	25.3	19.8	10.5	100 (%)
2	I am providing the resources that we need gray	149	109	50	20	16	334
		43.3	31.7	14.5	5.8	4.7	100 (%)
3	Access to special thanks Library	88	79	120	46	11	334
		25.6	23.0	34.9	13.4	3.2	100 (%)

According to the table above, there are three ways to access library resources Gray: With the help of librarians, student access to gray resources and using special tanks Library provides access to resources gray. Students using library resources to access the frequency of 92 make up the gray and

the number of students who assisted to access resources not constitutes an abundance of 36 people. Likewise also refer to the chart, the results show that 149 of the 344 gray access to resources, and of this number 16 students with their ability to find sources Nmyknndv of the total number of samples 88 people students with special tanks have access to the library, 11 students do not have access to special tanks library.

Test research hypotheses

First hypothesis: the graduate students' familiarity with gray and access resources there is a significant relationship.

A total of 22 questions (9 questions for familiarity with and 13 questions as students access the variable score), Kolmogorov-Smirnov test considered using the data normality we do.

Kolmogorov – Smirnov (KS)

Assuming the test:

$$H_0: P = 0$$

$$H_1: P \neq 0$$

H_0 : Understanding the distribution and access of students to normal gray resources

H_1 : Distribution familiarity with and access to the resources students are not normal gray

Independent variable: Amount trading

The dependent variable: student access to gray resources

Table 13: Kolmogorov-Smirnov test between the familiarity and access to gray

Variable	Statistics of test	Number	The significance level
Familiarity with and accessible	1.242	344	0.091

Since sight is equal to 0.091, and is larger than 0.05, the assumption has been confirmed H_0 as normal data. Parametric tests can be used here Hajht according to the type of relationship between the variables we used Pearson correlation test.

Pearson correlation coefficient

The relationship between two variables, we used Pearson correlation coefficient.

H_0 : Trading and significant relationship between the student accesses to resources, there is no gray

H₁: The Gray relationship between the familiarity and student accesses to resources, there are significant:

Table 14: The correlation coefficient between the familiarity and access to gray

Variable level	Correlational	The correlation coefficient	Number	The significance level
Familiarity with and access to resources between gray	Pearson	0.479	344	0.000

Results Table 14 demonstrated that students' familiarity with and access to resources, there is a significant gray. ($p=0.000$ and $r=0.479$). Because $p=0.50$ of $p=0.000$ significance level is smaller so calculated correlation coefficients are statistically significant at the level of $p=0.50$ is also a positive correlation, the increase familiarity with graduate students Additional sources of gray, their access to these resources increases and vice versa. The research hypothesis about the familiarity between the graduate students and their access to resources, there is a significant gray; with 0.95 reliability is confirmed.

The second hypothesis: the graduate students' familiarity with and use gray sources that there is a significant relationship.

A total of 24 questions (9 questions and 15 questions for understanding the students' use of resources as the score variable gray), Kolmogorov-Smirnov test considered using the data normality we do.

Kolmogorov – Smirnov (KS)

Assuming the test:

$$H_0: P = 0$$

$$H_1: P \neq 0$$

H₀: Trading and distribution of students' use of resources are a normal gray

H₁: Trading and distribution of students' use of resources is not normal gray

Independent variable: Amount trading

The dependent variable: Students use gray sources

Table 15: Kolmogorov-Smirnov test between the familiarity and access to gray

Variable	Statistics of test	Number	The significance level
Familiarity with and accessible	1.038	344	0.241

Since sight is equal to 0.241, and is greater than 0.05, it can be assumed to have been H_0 approved and therefore parametric tests and according to the type of relationship between variables we used Pearson correlation test.

Correlation coefficient

The relationship between two variables, we used Pearson correlation coefficient.

H_0 : Students between the access and use of resources, there is no significant relationship grew

H_1 : Students between the access and use of resources, there is a significant gray

Table 16: The correlation coefficient between the access and use of resources students Grew

Variable level	Correlational	The correlation coefficient	Number	The significance level
Familiarity with and access to resources between gray	Pearson	0.291	344	0.000

Results Table 16 shows that students between the access and use of resources, there is a significant gray. ($p=0.000$ and $r=0.291$). Because of significance level $p=0.000$ is smaller than $p=0.50$, so the calculated correlation coefficients are statistically significant at the level of $p=0.50$. IE by increasing access to resources graduate students grew, gauge their use of these resources increases and vice versa. So the hypothesis that graduate students access to resources between the gray and the extent to which there is a significant relationship, with 0.95 reliability is confirmed.

RESULT AND DISCUSSION

In order to solve the problem and answering the research questions, the following steps were taken: library studies and literature review, extract and localize variables, preliminary field studies and validation of variables, the final design of the measuring tool and final field studies and finally, after collect data, analyze the data and information was collected. To analyze the data, descriptive and inferential statistical methods and software used 16SPSS.

This research is applied and the method of research is descriptive and correlational. Questionnaire was used to collect data. After collecting data from between 30 prototype, the software Spss, Cronbach's alpha coefficient was 0.776 for the questionnaire with 13 questions reliability of access to resources, questionnaires with reliability of 0.845 and gray sources 15 question questionnaire gray sources familiar with the reliability of 0.831 and ninth questions, the questionnaire with six

questions searching gray with reliability of 0.785 and 0.864 with 43 total reliability reliability was obtained. 344 are the number of the research sample was obtained through the sample. As a result, the same number of randomly distributed questionnaires was collected.

Results Descriptive statistics also show that the respondents were male and 154 female respondents are 190 people. As well as a master's degree in educational levels in male students and 104 female gender persons to 153 persons, a doctorate in educational levels in male and female sexuality 36 persons, with 51 people. As well as the frequency of respondents in economics, with 15.4 percent who responded were the highest academic field and the lowest degree in physics for the students who responded to questions? A total of 344 people responded to the questionnaire.

In this study, according to data normality assumptions of parametric tests and according to t-test and Pearson correlation coefficient was used to test the hypotheses.

Search results based on research questions

The results of the first question

To determine the amount of familiarity with the resources of Mazandaran University graduate students one-sample t-test was used gray. Since the results of the analysis, obtained a significant level of 0.000 is smaller than 0.05, shows the hypothesis H_0 is rejected. As positive values lower and upper limits of the test (Test Value = 3) greater familiarity between the graduate students can conclude that there is no significant difference with gray sources. Hence, the introduction of graduate students at Mazandaran University of gray resources is at normal levels. This research study Amanda Lawrence (2012) in relation to the sources of information is not gray yet well known among college students, inconsistent. Aschvpfl research study (2011) that the audience because of lack of scientific conferences and scientific communities to identify sources of gray in different conferences and academic circles, the study is inconsistent. Research Rabyna (2008) examined students' familiarity with gray sources and found that among student resources gray as strong there, so the study is consistent. According to the results the same or different investigations that have been conducted on students' familiarity with gray sources, should provide students with educational programs and attract and facilitate consultation among the students, familiar gray with the resources themselves.

The second question test result

The second question test that examines the use of Mazandaran University graduate students Grey's resources, the results of this analysis indicate that a significant level of 0.000 and less than 5% since sight H_0 is rejected. The positive difference between the amount of test sample (Test Value = 3) showed that the upper and lower limit values are both positive. It can be concluded that the introduction of graduate students with no significant difference of gray.

In conclusion, the students' use of resources Purpose: The purpose of the present study was gray at normal levels Sabelagh (2007), Anderson (2008), Akbepour and Esyandow (2012) in connection with the acquisition and management of resources and the use of gray sources gray with the present investigation

The results of the third question

Research questions that graduate students at Mazandaran University of gray, what methods they use to search for resources? Analytical results indicate that the three questions raised related to the search for resources, the 344 respondents, 127 students to obtain the necessary information from sources gray, help librarians class. Students also use the library's website dedicated a lot of

resources are gray. According to many students seek help from librarians in the field of gray, Shabd was not because of lack of knowledge or software is required and students. Okoroma (2011), Lawrence (2012) Search Resources with electronic documents and the Internet mean access to gray resources, and ways to search for resources that do not do well. Find Sablagh due to lack of resources (2007). He has advised a challenge for librarians and students with the help of librarians can easily learn how to search for these resources in cyberspace.

The results of the fourth question

The fourth question, in relation to the research that graduates students at Mazandaran University, the gray-use methods for access to resources? 11 expert question of student access to gray resources has been raised that the number of 344 students responded. 146 of the respondents have pointed to the availability of supervision and 102 people have been referred to the reports and innovations to articles. The results indicate that students, in order to achieve government documents and technical research reports less gray have access to resources. Since most students have access to resources to help librarians are grayed out because of lack of knowledge in students' Gray resources because these resources for specific contacts were printed and less in cyberspace, with the help of the librarians would more and more efficient use of resources and access gray. Therefore, research Mansourian (2011) is consistent.

The results of the test hypotheses

The first hypothesis test result

According to the first assumption, the introduction of graduate student's resources gray and there is a significant amount of their access. Kolmogorov-Smirnov test of normal distribution of data from sources Gray students' familiarity with the significant level of 0.091 Suppose H_0 has been approved and Pearson correlation coefficient was used to determine the relationship between variables. Using the Pearson correlation coefficient of 0.479 and a significant amount of 0.000 was obtained. Since it achieved sight is smaller than 0.05, so the research hypothesis about the familiarity between the graduate students and the availability of resources gray There is a significant relationship, with 0.95 reliability is confirmed.

Saffarzadeh research (2014) shows of that, none of the libraries, the so-called gray resources in the library are not used and lost their familiarity and access to them is low due to lack of awareness that is consistent with the study. Okoroma study (2011) that the relationship between the available resources and their familiarity between students was gray with the present study. Due to the extensive volume of data sources, gray, difficult to recover these resources. In some cases, they even accurate bibliographic information not readily available. The high costs associated with maintaining these resources and occupies considerable space in special libraries. Provide a model for systematic collection of electronic versions of gray and converting print version of this resource in the form of a letter, can store, retrieve and preserve these resources for special libraries and facilitate users. The aim of this paper is to present a conceptual model for the delivery of specialized library resources through the doorway gray letter. Special Libraries, Management Planning country that has a large amount of resources are gray can be prepared using this template Integrated web page for access to a single port or a letter of gray, then finding the needed information time of the users among these are information resources.

The second hypothesis test result

According to the second assumption of resources between the gray-graduate students access and use it there is a significant relationship. Kolmogorov-Smirnov test of normal distribution of data,

students' familiarity with the significant level of 0.241 assumptions of gray resources H_0 have been approved and Pearson correlation coefficient was used to determine the relationship between variables. Using the Pearson correlation coefficient of 0.291 and a significant amount of 0.000 was obtained. Since it achieved sight is smaller than 0.05, so the research hypothesis about the familiarity between the graduate students and the availability of resources gray There is a significant relationship, with 0.95 reliability is confirmed. Research Symandlow (2012) and research Mansourian (2014) is consistent. We can conclude that gray sources with specific target audiences by creating gray are produced. Since the proliferation of limited and non-commercial purpose, the access to these resources, there is no published market; students have easy access to them. Gray has the resources to efficient use of resources as much as possible to spread any form, Because of gray resources and easy access to their important role in informing the team plays.

Gray resources provided in electronic format and put them on the integrated web pages and portals are designed to meet the information needs of staff, ease and speed of recovery will provide information for users. In this way, information resources can be made of the gray wide range of users. Email newsletters, video, images, audio files, photos, slides and high-quality maps and so forth. If the user is integrated, can accept for comfortable use and gives the user no confusion.

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