



## **INVESTIGATING THE LEVELS OF STRAIN, FROM THE POINT OF VARIOUS VARIABLES, AT THEIR EFFORTS OF OBTAIN INFORMATION OF PRESERVICE TEACHERS' OF SECONDARY EDUCATION**

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The aim of this study is investigating the Levels of Strain, From the Point of Various Variables (according to gender, branch, working at a job which provides financial gain, the reason to prefer the teaching profession, the number of digests of related field which have been followed, the frequency of weekly using internet, the aim of using internet, the frequency of weekly utilization from a library at studies related with branch, and the number of read books monthly) , at Their Efforts of Obtain Information of Preservice Teachers' of Secondary Education. Study carried out by general screening model and data has been collected by content validity and reliability has been through a survey. The opinions of 115 teachers were included in the study. The scale developed by the researcher used in the research. Cronbach Alpha reliability coefficient of the scale has been determined as .968. The value of the normal distribution of the data set as 6.57. Preservice teachers' in their efforts to obtain information, the information needed to identify, access to information, assessment, use and in this process to consider the ethical and legal values of stages have been forced from time to time. Preservice teachers' views on the strain level did not vary according to personal characteristics. Preservice teachers in the social field to learn to work less hard than Preservice teachers in the fields of science and mathematics. Study skills and habits of the prospective teachers to learn to be scraped in pre-service education and in-service training of vocational qualifications to support this have been proposed.

Key Words: secondary education, preservice teachers, information, information literacy, pre-service education

### **INTRODUCTION**

In this day and age, while information production and its varieties have reached up to unbelievable dimensions, knowledge acquisition and sharing information

have gained importance increasingly, it has been defended that the political, economic and educational returns of literateness and knowledge generation are more than ever (Başaran, 2005). In this context, societies have studied to make progress in the way of being a knowledge-based society through investments which have been done for information. The amount and the increment in the speed of spread of the information, which is the most fundamental of the information age, has provided it to reach us in a great variety and eye-popping forms of information. This, also, has entailed to review newly the required qualifications of individuals which must have. (Erdem & Akkoyunlu, 2002). Being improvement and alteration in high-speed, have caused to loss the validity of information and skills that have been acquired in a very short time (Polat, 2006). The information societies of our days, in order for existing, it is necessary for individuals to have certain skills and to use these skills efficaciously (Saatçioğlu, et al, 2003). All of these, the importance of information literacy has introduced more clearly, in which Başaran described it in such a way that searching information and using effectively (Başaran, 2005). Thus, information literacy has been seen as one of basic skills, that at the individuals must have, who have the required qualifications belong to information age (Polat, 2006). Mandy (2008) has defined the process of knowledge acquisition, as describing the needs of information, determining the source of information, configuring the information, evaluation, usage and sharing it. Bruce (1997) puts in the words that the individual who has information literacy, learns by himself/herself, uses the information effectively, uses various information technologies and systems, has knowledge about information world by motivating himself/herself on the topic of information usage, approaches to the information critically, and has background and qualifications that facilitate the interaction with the world of information. Nevertheless, according to Bruce, information literacy is important for effective decision making, trouble shooting, research; and provides the individuals to get their continuing training responsibilities on their own in the context of personal and professional (Bruce, 1997).

In case that according to the definition of Saatçioğlu, Özmen & Özer (2003); information literacy, briefly, is the skills of reaching to the information and using the information; the individuals who have these skills, can find the information of their needs, evaluate it, use it effectively and, reorganize it and, benefit from technology effectively while performing all of these. Besides, it has been emphasized that the individuals who have information literacy, have skills of critical thinking, analysis, synthesis and be able to collaborate with others. In case that according to Başaran (2005), in addition to those; information literacy includes the getting information that has offered in various forms, and, changing the format of the information according to the properties

of target audience. By taking advantage of these definitions, the information literacy can be defined as, be able to describe the information needs of an individual, to reach the needed information, to evaluate the reached information, to configure it, to use it, and to share it, and having the property of renewability by supporting his/her properties through technology. Be producing the informaton such a condensed way, spreading, and sharing; lead to resolve qualified teacher understanding from a clued up teacher to a teacher who knows how to reach to the information. The teacher who is competence and qualified, has been defined as a teacher who is aware of needs of information, who knows the ways of reaching information, who learns the reached information by giving the meaning, who can produce new information from his/her learned information, and who can use his/her produced information at troubleshooting (www.ctc.ca.gov, 2001).

This property has predicted that human brain is not a place to store the acquired information randomly, on the contrary, it is an active strategy center which must be used at individualistic and societal problems solving (Adıgüzel, 2005). In parallel to produce information, to alterate it and to spread it, it has also happened differentiations in the approaches of knowledge acquisition. In this context, the traditional approaches of knowledge acquisition has left its place to learning how to learn, self-directed, self-controlled and strategic individual understanding. In this regard, the individual who learns, no longer, is not the one who waits for thought and who takes the packed knowledge, he/she is the one who is active at learning, who takes the responsibility of self-learning, who is researcher, who is interrogator and who discovers the knowledge. Thus, the education process is not limited to the education which is done in the school, it has continued lifelong in parallel to requirements of the individual. This situation, has changed the social structure and has necessitated to review newly the qualifications that the individuals must have (Sağlam et al, 2007). In the scope of learning lifelong, five stages, which the individual in educational activities must follow during the process of knowledge acquisition and in using it, and, have been ordered as such. These are knowing the needed information, accessing to information, evaluating the information, using the information and accepting ethical and legal regulations at information usage (ACRL, 2003).

Sheehy (2001) has also ordered the stages of information literacy as such, the definition and the meaning of information, collecting information, organizing the information, analysing information, and evaluating it, interpreting the information and offering it, and conveying the information and collaboration. In case Eisenberg & Johnson (2002) have determined these stages as describing the need of information, searching the information, finding the source of information, using the source of information, trasmitting the information and

evaluating the information. As is seen, change and development facts based technology in information societies of these days, have required the qualified and new man power in high level, far beyond available one. The places have been felt and seen mostly, where the effects of this rapid change and progress, are universities that they will train the qualified man power in high level. In the same way, technological advances and the rapid information production have also become reality in educational institutions, mostly in universities, being in the first place. This fact has made reorganize information technologies and libraries, university education, which is known as lifelong learning areas, inevitable. In the process of reorganizing, which will take place in this sense, the skills of knowledge acquisition have become crucial, that have been predicted to get preservice teachers gain during preservice education. In the universities, where the knowledge has made such a rapid and condensed progress, prosperousness of preservice teachers, and being in education process that will continue lifelong, and gaining their fundamental skills that associated with these, are possible (Polat, 2004). That is why, while higher education institutions prepare preservice teachers for schoolteaching profession, it is necessary to have them gained the skill and learning habituality which they will use it lifelong. The teachers, who are the most important component of education institutions where they have been expected to lead to change and development in each field, have been expected to become up-to-date as having the qualifications of the logic of age, and equipped. Thus, at the efforts of obtain information for secondary field preservice teachers, it has been needed to determine their strain level.

The general target of this study, is to investigate their strain level, at the effort of secondary field preservice teachers' obtain information, from the point of some variables based on preservice teachers' views. It has been sought answers to these questions in the scope of this research:

1. What is the strain levels at the efforts of knowledge acquisition of secondary field preservice teachers?
2. Have the views associated with secondary field preservice teachers' strain levels at the efforts of their obtain information showed significant distinctness according to gender, branch, working at a job which provides financial gain, the reason to prefer the teaching profession, the number of digests of related field which have been followed, the frequency of weekly using internet, the aim of using internet, the frequency of weekly utilization from a library at studies related with branch, and the number of read books monthly?

#### **METHOD**

This research has been carried out in general scanning pattern. The preservice teachers who are registered to the Harran University Social and Science

Institutes' post graduate program without thesis, in the academic year 2010-2011 Spring term, has formed the target population of the study. Because of targetting to be reached to all the registered preservice teachers to the mentioned institutions secondary education field teaching post graduate program without thesis, it has not been gone to the way of sampling. Surveying tool has been sent to all 150 preservice teachers, who are registered at the Harran University Social and Science Institutes, secondary education field teaching post graduate program without thesis. 120 of the sent surveying tools have returned, 115 of these have been taken within the scope of evaluation. In the first section of surveying tool which is used in the research, the questions about personal informations of preservice teachers, in case in the second section, the items related to the efforts of preservice teachers' knowledge acquisition have taken part.

### **The Tool of Data Collection**

In this research, as a data collection's tool, a tool (Information Literacy Scale) has been developed by the researcher with intent to determine preservice teachers' strain levels at their efforts of obtain information. The draft of the scale has been prepared by scanning the related literature during the developing of the scale. The draft of the scale, has been offered to field's specialists for the content validity, and has been given the final shape to the first prototype of the scale which has formed with 42 items in the line with specialists' views. For the scale, validity, and confidence, the study has been applied to 115 person of a group of volunteer preservice teachers who are registered to the post graduate program without thesis, and the studies of developing the scale have been carried out on the basis of this application. In the prepared evaluation instrument as a five-point likert type scale, response codes that will be given to each item, in accordance to these degrees; have determined as 5 for always, 4 for usually, 3 for sometimes, 2 for rarely, and 1 for never.

It has been benefited from Exploratory Factor Analysis (EFA), in providing the validity of the structure of Information Literacy Scale. With the aim to determine the suitability of collected data to the factor analysis, first of all, in the performed analysis on 42 items which are found in the scale, the value of KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) has been found as .771, Bartlett Test as 1.812. At the result of the first factor analysis, the items that can not take load value over the level of acceptance in neither factor, and, the items that their load values between two factors, are less than .1, have removed, and the analysis has been repeated on 38 functioning items. At the result of the second factor analysis, in order to determine whether a factor can be extracted from correlation matrix or not, in the performed analysis, while

the coefficient of KMO is calculated as .786, the value Bartlett's Sphericity is also determined as  $\chi^2=2.412$ ,  $p<.01$ . Being Bartlett's Sphericity's significance value is less than .05, has showed that factor can be extracted from correlation matrix (Çokluk, et al, 2010).

In order to determine whether 38 items, which are obtained from at the result of the performed second factor analysis operations related to Information Literacy Scale, are separable to meaningful independent factors from each other, or not, they have been rotated about principle axes and main components analysis has been performed. At the result of performed rotation (Varimax rotated) operations, it has been determined five factors. In case the number of the items grouped on these factors; in the first factor is 10, in the second is 9, in the third is 8, in the fourth is 5 and in the fifth is 6. The titles, for the first factor "defining the information need", for the second "information retrieval", for the third "evaluation of information", for the fourth "using the information", and for the fifth factor "ethical and legal values", have been given. While the factor load values of the items composing Information Literacy Scale, before rotation, range between .353 and .695, it has been seen that factor load values after the rotation, range between .420 and .763. At the result of the performed analysis, 38 items which were thought that they satisfied the conditions in the sufficient level, have been taken, and 4 inoperative items are extracted from the scale as well. In the performed reliability calculations associated with scale, as a whole, Cronbach Alpha reliability coefficient of the scale has been determined as .968. Cronbach Alpha reliability coefficients related to sub-dimensions of the scale, have been calculated as .719, .753, .712, .703 ve .720. Being Cronbach Alpha's values is greater than .700, is sufficient for reliability (Bayram, 2004). In developing Information Literacy Scale, and determining the factors which are formed the sub-dimensions of the scale, Kaiser's determination has been taken into consideration if eigenvalues of the factors are greater than 1.00 (Çokluk, et al, 2010). In this regard, at the result of the second factor analysis, it has been seen that items, which have eigenvalue greater than 1, of the scale have kept together under five factors. The eigenvalues of the factors that have formed sub-dimensions of the scale, have been determined as 8.20, 6.25, 4.30, 2.80 and 1.95 respectively. These five factors which take place in Information Literacy Scale, have explained 68.30 of the total variance. In case the factor variances of the scale, have explained at the ratios 17.55%, 36.25%, 45.12%, 57.72% and 68.30%, respectively.

With the aim to determine the suitability of research data, according to normal distribution among groups, the Kolmogorov-Smirnov normality test has been made. The obtained Kolmogorov-Smirnov value (6.75) has shown normal distribution because it is greater than Kolmogorov-Smirnov table value. At the

result of this test, parametric tests have been used in data analysis. For the statistical analyses which are made in the research, the level of significance has been taken as .05. At the analysis of the obtained data, it has been made use of arithmetic mean, standard deviation, t-test, one-way analysis of variance and Tukey tests.

## FINDINGS

In this section, from preservice teachers' views regarding the strain levels at the efforts of preservice teachers's knowledge acquisition and, at the result of statistical analyses of obtained data associated with, whether these views have shown significance difference or not, according to personal properties of preservice teachers, the reached findings and the interpretation of these findings have been included.

### The Strain Levels of Preservice Teachers at the Efforts of Their Knowledge Acquisition

Under this title, the obtained findings from the views of preservice teachers associated with their strain levels at efforts of their knowledge acquisition, have been included.

Table 1: Preservice teachers' views associated with defining information need

	<i>M</i>	<i>SD</i>
Defining information need	4.14	.82
Commissioning by sharing information need with others	3.85	.78
Knowing where to find needed information	4.03	.77
Knowing fundamental concepts related to needed information	3.95	.77
Knowing the importance and kinds of information sources	3.96	.81
Knowing how to organize information according to its basic properties	3.83	.78
Determining suitability and aims of information sources	4.76	6.89
Determining kinds and fields of information sources	3.77	.81
Reviewing scope and structure of information need continuously	3.44	.92
Making time-planning oriented to obtain the needed information	3.73	2.92

As is seen from Table 1, the arithmetic mean of the data that obtained from preservice teachers's views related to their strain levels at defining information need has changed between  $M=3.44$  and  $M=4.14$ . All the values between these arithmetic means, come to mean that what kinds of information have preservice teachers needed, they could determine it frequently. According to this result, it can be said that preservice teachers made proper decision on the topics that determining information need, its scope and variety, determining the source of information and their kinds, but, from time to time, they were put to it on the topic that what kinds of information did they need.

Table 2: The views of preservice teachers relative to accessing to information

	<i>M</i>	<i>SD</i>
Selecting the most appropriate method in order to access to information	4.24	2.81
Determining the selected method and tools, its content and scope, in order to access to information	3.78	.77
Benefiting from different sources in order to access the needed information	4.28	2.85
Tracing the changes in information and communication technologies	3.67	.93
Benefiting from the electronic sources at reaching information	3.72	.92
Benefiting from current printed sources at reaching information	3.74	1.00
Knowing which keywords and relative terms and how to use them while they are using web sources, databases and search engines.	3.87	.99
Knowing the ways of reaching to needed information in library	3.99	.82
Classification the obtained data according to certain criteria	3.90	.85

When Table 2 evaluated, it has been seen that the arithmetic mean of the data that obtained from preservice teachers's views related to their strain levels at accessing the needed information, has changed between  $M = 3.67$  and  $M = 4.28$ . It has been determined that preservice teachers always made proper decision about how to select the most suitable method and how to benefit from different sources at accessing the needed information. It can be said that sometimes they were put to it at benefiting from web sources and library's data sources on the topic accessing to information.

Table 3: The views of preserve teachers related to evaluation the information

	<i>M</i>	<i>SD</i>
Summarizing basic consideration by examining the obtained information sources	4.00	.85
Determining the reached information's relation about topic and its benefit	3.98	.89
Reexpressing the information inventively, that obtained from sources, newly, by associating with previous information	3.83	.89
Evaluating the information and information sources according to certain criteria such as reliability, validity, impartiality, up-to-dateness	3.72	.93
Questioning and distinguishing modified, wrong and sided information	3.84	.91
Evaluating and understanding the different viewpoints in the information sources	3.97	.86
Taking into consideration the evaluating criteria related to web sources	3.54	1.05
Making decision whether there is additional information's need or not, by evaluating the obtained data	4.15	4.12



Table 3, includes the obtained data from the views of preservice teachers, associated with their strain levels at evaluating the information they have reached. The arithmetic mean of these data has changed between  $M = 3.54$  and  $M = 4.15$ . All the values between these arithmetic means have been implied that preservice teachers have often evaluated the information correctly. However, it has been seen that, from time to time, preservice teachers were put in to it, associated with evaluating the web sources.

Table 4: The views of preservice teacher, related to using the information

	<i>M</i>	<i>SD</i>
Using the obtained data for troubleshootings, by arranging them in a systematic way	4.00	.84
When necessary, saving all the information quotations by arranging them properly, in order to reach the sources again	3.87	.99
Comparing and integrating the new and previous data in order to determine the basic properties, importance and contradictions of data	3.91	.90
Introducing the results by interpreting the obtained data	3.96	.98
Determining the relation between extracted results and concepts, based on reached data	3.99	.84

As is seen from Table 4, the arithmetic means of obtained data from views of preservice teachers, related to the strain levels at knowledge acquisition, have changed between  $M = 3.87$  and  $M = 4.00$ . All the values between these arithmetic means have been implied that preservice teachers frequently knew correctly how to use the reached data. According to this result, it can be said that, preservice teachers were put to it very few on the topics: arranging the reached data properly, extracting results by interpreting and, using the information in troubleshootings.

Table 5: The views of preservice teachers, associated with accepting ethical and legal regulations on using the information and knowledge acquisition

	<i>M</i>	<i>SD</i>
Taking into consideration security issues, personal rights on electronic environments and on printed source	3.77	.96
Showing the original sources of the used information, completely and properly	3.94	.99
Reaching to and using the information licitly	3.99	.90
Considering security and secrecy issues associated with the information that will be used	4.07	.83
Considering the topics associated with the right to knowledge acquisition and equality	4.15	.84
Doing no harm to information sources and venerating to all users' right for using the sources	4.30	.85

Table 5 has included the obtained data from the views of preservice teachers, associated with their strain levels at accepting ethical and legal regulations on

using information and knowledge acquisition. The arithmetic means of these data have changed between  $M=3.77$  and  $M=4.30$ . According to data at Table 6, it can be said that preservice teachers are always sensitive and take care, on topics: doing no harm to information sources, and venerating to all users' rights of using sources. It is possible to say that preservice teachers were put to it from time to time, on topic: at showing, completely and properly, original information sources.

**Comparison of the Views of Preservice Teachers, Associated With Their Strain Levels in Their Efforts of Knowledge Acquisitions, From The Point of Some Variables.**

In this title, it has given a place for the obtained findings intended for the views according to preservice teachers' personal properties associated with their levels at their knowledge acquisition whether they they have differed from the significant distinctness or not.

Table 6: t-test results of the views of preservice teachers, according to their branches

<i>Branch</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Social branch	47	4.06	.67	113	1.901	.049
Science and math. branch	68	3.86	.46			

$P < 0.05$

At Table 6, it has been examined that in the efforts of preservice teachers' knowledge acquisition, related to their strain levels whether their views according to their branches have differed from the significant distinctness or not. Significant distinctness has been come out according to performed t-test:  $t(113) = 1.901, P < .05$ . According to this result, it can be said that the branch variable is an important variable, which affects the strain levels in their efforts of preservice teachers's knowledge acquisition. When Table 6 has examined as a whole, it has been seen that, contrary to expectations, in the efforts of knowledge acquisitions of preservice teachers of the social branch, their strain levels are low; in their efforts of knowledge acquisitions of preservice teachers of the science and mathematics field, their strain levels are higher than in accordance with preservice teachers of the social field.

Table 7: The t-test results of the views of preservice teachers, according to their situations of being working on a job which provides financial gain

Situations of working	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>p</i>
Yes	29	3.93	.40	113	128	.899
No	86	3.94	.60			

$P > 0.05$

As is seen in Table 7, the views of preservice teachers associated with their strain levels in their efforts of knowledge acquisitions; so as to determine, whether they have differed from the significant distinctness or not, because of the obtained value (-.128) at the result of t-test is less than the value of t table; have not been found meaningful in the .05 significance level of [ $t(113) = -.128, P > .05$ ]. Accordingly, it can be said that for the preservice teachers, being working on a job in parallel to their teaching educations, is not a factor that affects the strain levels in their knowledge acquisitions.

Table 8: The results of variance analysis of views of preservice teachers according to their reasons to prefer the school teaching

<i>Reasons to prefer the schoolteaching</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>The source of the variance</i>	<i>Sum of Squares.</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
I want to	83	3.96	.55						
For job opportunities	25	3.96	.58	Between	1.013	2	.507	1.642	.198
In my family wants to	7	3.57	.51	Groups	34.549	112	.308		
Total	115	3.94	.56	Within Groups	35.562	114			
				Total					

$P > 0.05$

When the Table 8 has been examined, the views of preservice teachers associated with the strain levels in their efforts of knowledge acquisition; so as to determine, whether have differed from the significant distinctness or not, according to their reasons for preferring schoolteaching, it has been determined that they have not shown meaningful difference according to the result of one-way variance analysis [ $f(112) = 1.642, P > .05$ ]. According to this result, the reasons of preservice teachers for preferring the schoolteaching, can not be said a factor which affects their views related to their strain levels in their efforts of knowledge acquisition.

Table 9: The results of one-way variance analysis of views of preservice teachers, according to the number of the digests they have followed

<i>Number of the digests</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance Source</i>	<i>Sum of Squares.</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>	<i>Difference</i>
1. 0	72	3.83	.55	Between						
2. 1	32	4.14	.57	Groups	2.374	3	.791	2.647	.043	3-1
3. 2	11	4.08	.47	Within	33.187	111	.299			
Total	115	3.94	.56	Groups	35.562	114				
				Total						

$P < 0.05$

According to the data in Table 9, the views of preservice teachers, associated with the strain levels, in their efforts of knowledge acquisition, have been seen that they have showed significant distinctness, according to the number of the digests they have followed, relative to their fields [ $f(111) = 2.647, P < .05$ ].

According to this result, it can be said that the number of the followed digests related to their fields is a factor which affects their strain levels in their efforts of knowledge acquisitions. According to the performed Tukey test, so as to specify this difference, it has been determined that the difference has arisen through views of preservice teacher who has not followed any digest and preservice teachers who have followed two digests. While 72 of 115 preservice teachers, who joined to the research, have followed no digest, they have indicated that 32 of them have followed 1 digest, 11 of them 2 digests. According to this result, it can be said that preservice teachers who have the highest strain levels in their efforts of knowledge acquisition, are the preservice teachers who have followed no digest.

Table 10: The results of variance analysis of views of preservice teachers, according to the aim of using the internet

Purpose of using internet	<i>n</i>	<i>M</i>	<i>SD</i>	Variance Source	Sum of Squares.	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	Description
Research	26	4.15	.76	Between Groups Within Groups Total	1.881 33.681 35.562	5 109 114	.376 .309	1.217	.306	
Communication	34	3.83	.42							
Knowledge acquisition	25	3.88	.43							
Fun	16	3.98	.33							
Total	101	3.94	.56							

$P > 0.05$

When the Table 10 has been examined, the views of preservice teachers associated with the strain levels in their efforts of knowledge acquisition, so as to determine whether have differed from the significant distinctness or not, have not shown meaningful distinctness, according to the purpose of using internet, according to the result of the performed on-way variance analysis [ $f(109) = 1.217$ ,  $P > .05$ ]. According to this result, it can be said that the using internet purposes of preservice teachers, is not a factor which affects the views associated with their strain levels in their efforts of their knowledge acquisition. However, from the preservice teachers who give the answer “Yes” to the question “Are you using internet?”, 34 of them have indicated that they have used internet on the purpose of communication, 26 of them research, 25 of them knowledge acquisition and following current news, 16 of them fun.

Table 11: The results of variance analysis of views of preservice teachers, according to the period of enjoyment from the library

Duration of Library Services	<i>n</i>	<i>M</i>	<i>SD</i>	Variance Source	Sum of Squares.	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Never benefited	15	3.76	.63	Between Groups Within Groups Total	.912 34.650 35.562	3 111 114	.304 .312	.974	.408
1-5 Saat	92	3.96	.56						
6-10 Saat	8	4.01	.18						
Total	115	3.94	.56						

$P > 0.05$

In Table 11, it has been examined that the views of preservice teachers related to their strain levels in efforts of knowledge acquisition, whether have shown meaningful distinctness or not, according to the periods of enjoyment from the library. With this aim, it has arisen that according to the result of the performed one-way variance analysis, have not shown meaningful distinctness [ $f(111) = .974, P > .05$ ]. According to this result, for the preservice teachers, the periods of enjoyment from the library, can not be said a factor which affects their strain levels in their efforts of knowledge acquisition. However, while preservice teachers whose strain levels are the highest level in their efforts of knowledge acquisition; have never benefited from libraries, with the arithmetic mean 3.76, the ones with the arithmetic mean 3.96 have benefited 1-5 hours in a week, and the preservice teachers with the arithmetic mean 4.01 who have benefited 6-10 hours from the libraries have followed that. When the Table 11 has been examined as a whole, it has been seen that the preservice teachers' periods of utilization from libraries more and more, the strain levels in their efforts of knowledge acquisition have decreased.

Table 12: The results of variance analysis of views of preservice teachers, according to the number of the books they read in a month

Number of book	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
0	11	3.81	.44						
1	39	4.05	.54						
2	44	3.82	.60	Between Groups	1.622	4	.406	1.314	.269
3	12	4.05	.48	Within Groups	33.940	110	.309		
4	9	4.14	.61	Total	35.562	114			
Total	115	3.94	.56						

$P > 0.05$

As is seen from Table 12, the views of preservice teachers associated with their strain levels in efforts of knowledge acquisition, have not shown significant distinctness, according to variable “the number of the books they read in a month” [ $f(110) = 1.314, P > .05$ ]. According to this result, it can be said that the number of the reading book monthly, is not a factor which affects their strain levels in their efforts of knowledge acquisitions. However, when the Table 12 has been examined as a whole, while the least compelled preservice teachers in their efforts of knowledge acquisition, their monthly book reading numbers are maximal, in case preservice teachers who have not read any book, are the preservice teachers who have the highest compelled in efforts of knowledge acquisition.

## **CONCLUSION, DISCUSSION AND SUGGESTIONS**

In the research, it has been reached to the following conclusions based on the obtained findings.

1. The reached conclusions obtained from the views of preservice teachers in the efforts of knowledge acquisition, associated with determining their strain levels in the stages: defining the needed information, access to information, evaluating the information, using the information and considering ethical and legal rules.

- It has been specified that in the stage of defining the need information; preservice teachers had the least difficulty on the topic of arranging the reached information properly, extracting conclusions by interpreting, and using the information in troubleshooting.
- It has been determined that in the stage of accessing to information; although preservice teachers have always made correct decision how to have been benefited from different sources in order to access the information and how to choose the optimal method in order to access the information; had difficulty from time to time, in utilising from WEB bases and from databases of libraries.
- It can be said that, in the stage of evaluating the information; it has been determined that preservice teachers, have structured and evaluated the information which they have reached, though not always but mostly. The constructivist education programs, which has been applied in elementary and secondary education institutions, have important effect to this situation.
- It has been determined that in the stage of using the information, preservice teachers have the least difficulty on the topics: organizing and interpreting the accessed information properly, exposure the conclusions and using the information in troubleshooting.
- It can be said that in the stage of knowledge acquisition and using information, preservice teachers are always sensitive and take care on the topics: doing no harm to information sources, and respecting to the rights of all users for using sources. However, it has been determined that preservice teachers have difficulty from time to time. This situation has arisen from using different methods on the topic of showing sources.

2. The obtained results from the views of preservice teachers associated with their strain levels in efforts of knowledge acquisition, whether have shown

significant distinctness or not, according to their personal properties, can be ordered as such:

- It has been determined that, in efforts of preservice teachers at branch science and mathematics, their strain levels of knowledge acquisition are higher as regards preservice teachers at the social branch.
- It has been determined that the working situations of preservice teachers in a job which provides financial gain, and their reasons to prefer schoolteaching, have not affected their views associated with their strain levels in their efforts of knowledge acquisition.
- While it has been seen that the preservice teachers who have used the internet, have less difficulty in their efforts of knowledge acquisition, it has been determined that the preservice teachers have used the internet mostly having the research and communication purposes.
- The periods of weekly enjoyment from libraries, have not seen as the factors which have affected the preservice teachers' strain levels in their efforts of knowledge acquisition.
- It has been seen that while the number of the books, which preservice teachers have read, has increased, the strain levels in their efforts of knowledge acquisition have decreased.

It is possible to say that the conclusions are similar or parallel, in case comparison of the obtained findings from the research, with the findings of research having the same property. As a matter of fact, according to the study which Akkoyunlu & Kurbanoglu (2003) have made, the finding "since information and skill have needed technology usage, information literacy self-sufficiency of preservice teachers whose technological self-efficacy has developed, has affected favorable (positive) from this, as well", has matched up with the finding that, in our research, in the efforts of knowledge acquisition of preservice teachers who have used the internet having research and communication purposes, their strain levels have become lower. In case Polat's study (2004), all in all, the strain levels in the activities of information literacy, it has been determined that the skills of the information literacy of the graduate students have developed at all points, especially; for the students the topic of knowing the ethical/legal rules, information usage and access to information, has come in the question lack of information. It has been said that these findings have showed analogousness with the findings in our research in relevant sections. According to the made study of Sađlam et al (2007), on research assistants, determining that they are not in the expected level on the topics of

determining information need, access to information, evaluation and using it, and in this process, considering ethical and legal values, have qualities to supported our findings. Smagorinsky et al (2008) students needed to learn new dispositions in order to succeed in the workforce. In particular, she shared the curriculum's assumption that they would work in relatively low-level occupations in which deference to authority in this example, the authority of customers in a commercial environment was a beneficial trait, one that they needed to learn in order to have successful work experiences. Yet the students complained that this preparation was not necessary for the futures they saw for themselves, which they envisioned as willing participation in the blue-collar work network to which their friends and relatives provided them entrée. Ball et al (2008) That there is a domain of content knowledge unique to the work of teaching is a hypothesis that has already developed. However, the notion of specialized mcontent knowledge is in need of further work in order to understand the most important dimensions of teachers' professional knowledge.

It has been brought forward the following proposals based on obtained results from the research:

- It has been seen that the preservice teachers, have difficulty, even if just a hint, in implementing all the stages such as defining the information need, accessing to information, evaluating the information, and in this process, considering ethical and legal values. That is why, it is necessary to support the preservice teachers on the topic of the skills of knowledge acquisition, in prevocational training, must be educated as equipped and, they must be promoted with suitable in-service training programs on the topic of accommodating themselves to innovations.
- It has been determined that the preservice teachers who used the internet with the intent of knowledge acquisitions, who benefit from from libraries, who followed periodicals related to their branches, and whose book reading habit are high, have not difficulty in their efforts of knowledge acquisition. Thus, it is necessary to put lectures that will have these habits and skills gained, in prevocational training programs for preservice teachers, and to organize activities that will have the sustainability of these skills provided.



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