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Relationship between the Lifelong Learning Tendency and Information Literacy Self-efficacy of Students*

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ABSTRACT The aim of the study is investigating the relationship between lifelong learning tendency and information literacy self-efficacy of students. Correlational survey method is used. The study sample consists of 292 pedagogical formation students. The Lifelong Learning Tendency Scale and the Information Literacy Self-efficacy Scale were used to collect data. Descriptive statistics, t-test, Anova and Pearson Correlation Coefficients were used for analysis. A positive and medium-level relationship between lifelong learning tendency and information literacy self-efficacy of students (r=.382) was determined. The lifelong learning tendency and the information literacy self-efficacy of students differs significantly according to gender, field, foreign language level, the number of books they read in a month and their research skills. Also, the lifelong learning tendency of students differs significantly according to the status as to whether they are taking lessons in learning strategies and techniques.

INTRODUCTION

Individuals must show a tendency for lifelong learning in order to keep pace with the rapid information growth in the information society, develop themselves, and learn to learn. Lifelong learning consists of all of the formal and informal learning activities that students experience to develop their knowledge, skills, and abilities individually and socially (Dinevski and Dinevski 2004; Diker-Coskun and Demirel 2010). Lifelong learning is a key part of individuals updating their knowledge and skills, in that, people can learn if they are continuously in need of learning (Colakoglu 2002). Lifelong learning requires obtaining constantly changing information, and then using and evaluating this information effectively. To achieve this, one important factor for individuals is information literacy (Candy 2002).

Information literacy is a skill for finding, utilizing, and evaluating information (Sheehy 2001). Individuals with this skill are aware of the information required and the source of the solution to any problem, accessing that source, and using and evaluating that information effectively (Kurbanoglu et al. 2006). However, individuals must be confident and willing to use these skills. This is connected to information literacy self-efficacy. Considering that self-efficacy is a person's judgment, perception, or belief about what extent s/he can do something efficiently (Bandura 1977; Oguz 2012), information literacy self-efficacy can be explained as an individual's belief regarding their competence for obtaining, using, and evaluating information. It can be said that this belief in their ability to obtain, use, share, and evaluate this information with high information literacy self-efficacy is also strong (Kurbanoglu and Akkoyunlu 2007).

In a curriculum, a place should be given for activities for developing students' information literacy self-efficacy and improving their lifelong learning skills. However, teachers should first have a tendency for lifelong learning in order to pass it on to their students according to the necessities of time in the information era (Coolahan 2002: Chang et al. 2012). It is important for teachers to be information literate to cope with the rapid information growth and to choose and use the necessary information (Diehm and Lupton 2014), and their information literacy self-efficacy level should be high. In this way teachers can help their students develop these skills. Teacher training programs should help prospective teachers develop their lifelong learning tendency and information literacy self-efficacy. In this context, determining prospective teachers' lifelong learning tendency and information literacy self-efficacy can contribute to teacher training process. When the literature was investigated, research about prospective teachers' lifelong learning tendency (Knapper and Cropley 2000; Demirel 2009; Sahin et al. 2010; Chang and Lin 2012; Gencel 2013; Kilic 2014) and information literacy self-efficacy (Sheehy 2001; Kocak-Usluel 2006; Korkut and Akkoyunlu 2008; Tuncer 2013; Diehm and Lupton 2014) was encountered. Furthermore, some research on the literature (Can-

dy 2002; Kurbanoglu and Akkoyunlu 2007) emphasized that there is a relationship between the two and that there is a need for research which supports this view.

Objectives of the Study

It is aimed in this study to determine the relationship between lifelong learning tendency and information literacy self-efficacy. In accordance with this aim, the levels of students' lifelong learning tendency and information literacy self-efficacy were investigated, whether they differ significantly according to gender, field, level of foreign language, the number of books they read in a month, the level of their research skills, and the status as to whether they take lessons about learning strategies and techniques. It was also investigated whether there is a relationship between the lifelong learning tendency and information literacy self-efficacy.

METHODOLOGY

Research Design

The research was designed using a correlational survey method. Within this framework, it was attempted to determine the relationship between the lifelong learning tendency and information literacy self-efficacy.

Participants

This research includes 292 pedagogical formation students studying at Dumlupinar University Faculty of Education in the 2014-2015 spring term. 194 (66.4%) of the participants were female and 98 (33.6%) were male. 38 (13%) of students had graduated from the Turkish Language and Literature field, 34 (11.6%) from the History field, 33 (11.3%) from the Sociology field, 30 (10.3%) from the English Language and Literature field, 45 (15.4%) from the Mathematic field, 15 (5.1%) from the Biology field, 17 (5.8%) from the Chemistry field, 41 (14%) from the school of physical education and sports, and 39 (13.4%) from the faculty of fine arts. 18 (6.2%) of the students stated their foreign language level was "very good" , 35 (12%) of students' stated it was "good", 90 (30.8%) of them stated it was "moderate", and 149 (51%) of the students' stated it was "weak". 18 (6.2%) of the students read 4 or more books, 50 (17.1%) read 3 books, 52 (17.8%) read 2 books, 115 (39.4%) read 1 book, and 57 (19.5%) read no books in a month. 23 (7.9%) of the students' research skills are "very good", 133 (45.5%) are "good", 114 (39%) are "moderate", and 22 (7.5%) are "weak". 182 (62.3%) of the students took lessons in learning strategies and techniques, but 110 (37.7%) of them did not.

Data Collection

In this research, the "Lifelong Learning Tendency Scale (LLTS)" to assess students' lifelong learning tendency (Coskun and Demirel 2010) and the "Information Literacy Self-Efficacy Scale (ILSS)" (Kurbanoglu et al. 2006) to assess students' information literacy self-efficacy were used. The Cronbach's Alpha reliability coefficient of LLTS is .89, and in this research it is .92. Cronbach's Alpha reliability coefficient of ILSS is .92, and in this research it is also .92.

Data Analysis

In the data analysis, descriptive statistics to determine the students' lifelong learning tendency and information literacy self-efficacy were used. A t-test for bilateral comparison, an ANOVA for multiple comparisons, and a Pearson's correlation coefficient for determining the relationship between the two variables (Pearson's r) were used. A significance level of 0.05 was adopted in this study.

RESULTS

According to the research findings, the mean score for the students' lifelong learning tendency is M=128.55 (S=21.61), and the means of the sub-scales are, respectively, motivation (M=30.91; S=4.50), perseverance (M=30.91; S=5.73), lack of regulating learning (M=27.74; S=7.20), and lack of curiosity (M=42.04; S=10.30). The mean score for the students' information literacy self-efficacy is M=153.27 (S=24.03). The sub-scale with the highest mean score is locating and accessing resources (M=44.99; S=7.88) and the one with the lowest mean score is defining the need for information (M=5.60; S=1.49).

There is a significant difference between the lifelong learning tendency of female (M=130.20) and male (M=125.34) students in favor of females ($t_{(289)}=7.365$; $p<.05$); but there is no significant

difference in the information literacy self-efficacy of students according to gender ($t_{(289)}$=1.422; p>.05). A significant difference can be seen in the students' lifelong learning tendency according to field ($F_{(8-283)}$=14.020; p<.05), and the difference between students from the school of physical education and sports (M=103.37; S=18.72) and the chemistry (M=122.59; S=19.84) field is in favor of the chemistry students. Furthermore, a significant difference can be seen in the students' information literacy self-efficacy according to field ($F_{(8-283)}$=3.161; p<.05) and the difference between the students from the school of physical education and sports (M=138.98; S=24.55) and the sociology field (M=162.52; S=18.66) is in favor of the sociology students. Students' lifelong learning tendency differs significantly according to their foreign language level ($F_{(3-288)}$=9.364; p<.05) and the difference between the students with a "weak" (M=122.48; S=21.99) and "moderate" level (M=133.19; S=20.32),and also a "good" (M=113.63; S=19.48) and "very good" (M=140; S=12.19) level is in favor of the "moderate" and "very good" levels. Furthermore, a significant difference was found in the students' information literacy self-efficacy according to their foreign language level ($F_{(3-288)}$=3.973; p<.05), and the difference between students with a "good" (M=159.13; S=21.69) and "moderate" level (M=146.23; S=27.84) is in favor of the students with a "good" level. A significant difference was observed in the students' lifelong learning tendency according to the number of books they read in a month ($F_{(4-287)}$=27.549; p<.05), and the difference between students reading no books(M=109.24; S=19.29) and those reading 1 book (M=126.23; S=20.54), 2 books (M=138.42; S=18.04), 3 books (M=140.70; S=13.60), or 4 books (M=142.27; S=14.44) in a month is in favor of the students reading 1, 2, 3, or 4 books in a month. Between the students reading 1 book and 2 or 3 books it is in favor of those reading 2 or 3 books in a month. Moreover, a significant difference was observed in students' information literacy self-efficacy according to the number of books they read in a month ($F_{(4-287)}$=6.900; p<.05), and the difference between students reading no books (M=145.72; S=25.12) and reading 3 (M=163.02; S=17.57), 4 (M=170.88; S=17.37) in books a month, and also between students reading 1 book (M=150.10; S=22.53) and reading 3 or 4 books in a month is in favor of students reading 3 or 4 books in a month. A significant difference was found in the students' lifelong learning tendency according to the level of their research skills ($F_{(3-288)}$=7.499; p<.05), and the difference between students with a "moderate" level (M=122.15; S=22.44),a "good" level (M=134.30; S=20.12), and a "very good" (M=131.73; S=20.68) level is in favor of students with a "good" or "very good" level. In addition, a significant difference was found in the students' information literacy self-efficacy according to the level of their research skills ($F_{(3-288)}$=6.900; p<.05), and the difference between students with a "moderate" level (M=148.67; S=22.34) and a "good" level (M=157.57; S=24.34) is in favor of students with a "good" level. A significant difference was seen in the students' lifelong learning tendency according to the status as to whether they take lessons in learning strategies and techniques ($t_{(290)}$=7.300; p<.05). A significant difference was also seen in the students' information literacy self-efficacy according to the status as to whether they take lessons in learning strategies and techniques ($t_{(290)}$=5.436; p<.05).

The Pearson's correlation coefficient (r) was .38 between the lifelong learning tendency total score and the information literacy self-efficacy total scores. If the correlation coefficient is between 0.70-1.00, it can be said to be high; if it is between 0.69-0.30, it can be said to be moderate; if it is between 0.29-0.00, it can be said to be low (Buyukozturk 2005). According to the result of the analysis, a positive and significant relationship is seen at a moderate level between the lifelong learning tendency total score and the information literacy self-efficacy total scores.

DISCUSSION

According to this research, the level of students' lifelong learning tendency can be said to be high, considering that the mid-score of the LLTS is 94.5 (Diker-Coskun and Demirel 2010). This result is similar to some research (Garipagaoglu 2013; Kilic 2014; Ozciftci and Cakir 2015) in the literature. In accordance with this, it can be said that students keep their learning constant; they are motivated in the activities with regard to lifelong learning and they are consistent in this. However, in some research (Tunca et al. 2015; Yahsi-Cevher et al. 2016), lifelong learning tendency of students at university is seen low. In this context, some regulations at univer-

sities can be done to help students be lifelong learners. Lifelong learning offices should be established at universities (Titrek et al. 2013) and there should be cooperation with these offices. Furthermore, Poyraz and Titrek (2013) indicated that there should be cooperation and coordination not also with the offices inside the universities but also with the offices outside the universities. In this research, it is also indicated that the students' information literacy self-efficacy is medium level; because the highest score students can take is 280 from the ILSS (Kurbanoglu et al. 2006). However, students' information literacy self-efficacy is generally high in some research (Korkut Akkoyunlu 2008; Demiralay and Karadeniz 2010). It can be said that students' information literacy self-efficacy is not good enough in this research. Students can be said to have lack of information skills. The increase in information source can be a challenge for them and it can lead to anxiety (Kay and Ahmedpour 2015). It can be improved by helping students gain positive experiences in accessing and using information efficiently on a daily basis.

According to this research, it can be seen that females' lifelong learning tendency is higher than males'. In some research (Rogers 2006; Kilic and Ayvaz-Tuncel 2014; Keskin and Yazar 2015), gender is seen as a key factor in lifelong learning. Females are becoming more prominent in the education and business worlds and educated females can see positive results from their education in their lives (Jenkins 2004). So, it can be said that they are constantly developing themselves to maintain their positions in patriarchal societies. Furthermore, students' lifelong learning tendency differs significantly according to field. This finding is in parallel with some research (Sahin et al. 2010; Gencel 2013; Tunca et al. 2015) findings in the literature. The need for information and the way of using it can be different for students in different fields. For example, students in a school of physical education or fine arts generally study alone and rarely have a need for searching and using information. The students' lifelong learning tendency differs significantly according to their foreign language level. It can be said that students with a high foreign language level also have a high lifelong learning tendency level. Considering that language is a constantly evolving phenomenon (Gencel 2013) and is quickly lost if it is not improved constantly, this finding can be said to be significant. In this research, it was seen that students' lifelong learning tendency differs according to the number of books they read in a month. Considering that the reading habit is one of the principal aspects of lifelong learning and that students make this habit part of their lives in order to become lifelong learners (Odabas et al. 2008; Birch 2012), it is possible that the number of books students read in a month is increasing and the lifelong learning tendency is also increasing. In this research, students' lifelong learning tendencies differ according to their level of research skills, and students with a high level of research skills also have a high lifelong learning tendency level. One of the most important skills of lifelong learners is doing research (Boynak 2004 cited in Parkinson 1999). In this way, students can keep up with the rapid information flow of this era, and they can produce new information themselves. In this research, students' lifelong learning tendencies differ according to whether they take lessons in learning strategies and techniques, and those that take these lessons have a high lifelong learning tendency level. At this point, students that study learning strategies can be considered to have a tendency for lifelong learning. Using learning strategies help individuals with learn to learn, and in this way to contribute to lifelong learning (Candy 1994; Demirel 2009). Considering this function of strategy teaching, this research result is significant.

According to this research, students' information literacy self-efficacy does not differ significantly according to gender. This result is similar to some research results (Kocak-Usluel 2006; Korkut and Akkoyunlu 2008) in the literature. Furthermore, students' information literacy self-efficacy differs according to students' field of study. This finding is similar to some research findings (Burdick 1996; Onal and Cetin 2014). The students' information literacy self-efficacy differs significantly according to their foreign language level. It can be said that students with a high foreign language level also have a high information literacy self-efficacy level. This may be because students with a high foreign language level can access resources in foreign languages and can use and evaluate those resources. In this way, students' information literacy self-efficacy increases. According to this research, students' information literacy self-efficacy differs according to the number of books they read in a month. Some research indicates that the reading

habit is an important part of developing information literacy (Brier et al. 2004; Odabas et al. 2008). This may be because reading books provides students with a lot of benefits as well as skills in accessing, interpreting, and evaluating information. In this research, the students' information literacy self-efficacy differs according to their level of research skills. Considering that information literacy is a prerequisite of research skills (Wurman 2001; Tuncer 2013), this result is expected. In this research, the students' information literacy self-efficacy differs according to whether they take lessons in learning strategies and techniques. Learning strategies help students to process information and learn on a long-term basis (Weinstein and Mayer 1986). Learning strategies are used to access and organize new information and to relate it with others. Thus, improving learning strategies increases information literacy self-efficacy.

In this research, it was determined that there is a significant and positive relationship between the lifelong learning tendency and information literacy self-efficacy at a moderate level. The students' lifelong learning tendency increases as their information literacy self-efficacy increases. Conversely, students' lifelong learning tendency decreases as their information literacy self-efficacy decreases. Improving prospective teachers' lifelong learning tendency can improve their information literacy self-efficacy. If the students' information self-efficacy is high, they can cope up with changing information at great speed. To do this, students should have a lifelong learning tendency. Because having a tendency for lifelong learning requires reaching, using, and evaluating new information, as well as updating themselves throughout their lives. Therefore, this result of the study is significant.

CONCLUSION

Aim of this study is investigating the relationship between lifelong learning tendency and information literacy self-efficacy. Findings show that the students' lifelong learning tendency and information literacy self-efficacy are positively related. Furthermore, it was found that the students' lifelong learning tendency and information literacy self-efficacy differs significantly according to gender, field, foreign language level, number of books they read in a month, and their research skills. Also, the students' lifelong learning tendency differs significantly according to the status as to whether they take lessons in learning strategies and techniques or not.

RECOMMENDATIONS

According to the research findings, it may be proposed that during teacher training there should be lessons to help prospective teachers increase their tendency for lifelong learning and their level of information literacy self-efficacy. In this context, lifelong learning project offices should be established and there should be cooperation with these offices. Furthermore, it is thought that the findings of this research may be useful for the authorities in the curriculum and teacher training fields to realize the importance of lifelong learning and information literacy and to make some regulation in this regard. Developing students' skills during the pre-service period on teacher training programs will help students keep themselves up to date and always be equipped with new information in their fields. It is very important to create a teacher profile for the information era. In this research, teaching learning strategies, research skills and reading books affect the lifelong learning tendency and information literacy self-efficacy positively. In this context, prospective teachers should be motivated to learn and use their learning strategies effectively, to develop their research skills by doing some research in their field, and to read books. Furthermore, some qualitative research should be carried out to investigate in depth the factors affecting the lifelong learning tendency and information literacy self-efficacy. Some research to analyze these skills with different variables such as their attitude or research anxiety, their learning skills, media literacy, or academic procrastinates could be carried out.

NOTE

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