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The relationship between the perceived learning strategies of prospective teachers and their interaction and monitoring anxiety

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Abstract

Investigating the relationship between the perceived learning strategies of prospective teachers and their interaction and monitoring anxiety, the present study was conducted in the Faculty of Education at Ahi Evran University. The study revealed that prospective teachers are inclined to use all the learning strategies cited in the measuring instrument. It further found that prospective teachers have medium levels of interaction and monitoring anxiety, and that individuals with interaction anxiety also possess monitoring anxiety. According to study results, prospective students have medium level anxiety for both interaction and monitoring, and monitoring anxiety scores are higher than interaction anxiety scores.

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Keywords: Interaction anxiety; monitoring anxiety; learning strategy; motivation; prospective teachers.

1. Introduction

Although learning depends on many factors in an individual, the underlying factor, above all, is motivation which refers to the state of eagerness for learning. The motive forces the organism to react in certain ways and consequently to learn something (Selçuk, 1999). Therefore, motivation involves the behaviors resulting from desires. A motivated person is an individual incorporating his beliefs with successful behaviors. For active participation of students in the learning process, not only the teacher should motivate students to involve them in the process but also students are expected to have low level of social anxiety. Even though the objectives are suitable for the level of students and even though proper techniques are employed in the learning-instruction process, lack of motivation on the part of students can result in failure of the learning process. Motivation level of students and their ability to use the appropriate learning strategies in suitable cases is considered as important for their success in academic life (Pintrich *et al.*, 1993).

There are a variety of psychological variables impacting motivation. Social anxiety is among these variables. As social beings, humans are supposed to engage, either directly or indirectly, in continuous communication and interaction with their environment. Meeting new people and entering into new environments at any time, humans may further complicate the communication process. Within this complex structure, the individual is happy to the

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extent that s/he establishes effective interaction and communication. While some individuals can easily express themselves, many others experience communication problems and difficulties in establishing healthy communication with their environment. This in turn leads to conflicts and quarrels, thereby turning life into unbearable suffering. Given that learning-instruction is also a communication process, interpersonal communication, with its growing importance, can be an important issue to consider in training prospective teachers.

The difficulties in interpersonal communication can arise from several reasons, including the individual himself and his environment. The most important one among these reasons is perhaps social anxiety (Öztürk, 2004). It is well known that heredity as well as environment plays a role in the formation of social anxiety (Yüksel, 1995). Furthermore, it could also be suggested that social anxiety originates from the lack of social skills, and people feel concerned about integrating into social environments since they lack the necessary social skills. The level of social skills impacts the experiences and success of students not only in their daily lives but also in their schools. It is generally suggested that the perception levels regarding the way individuals with high levels of social anxiety are perceived and evaluated by others do have an impact on the anxiety they experience. Accordingly, individuals are motivated to make certain impressions on the persons they interact with (Öztürk, 2004). Interpersonal relations are categorized into two, i.e. dependent and independent. Social anxiety arising from dependent relations rather has to do with timidity and shyness. Social anxiety arising from dependent relations is referred to as interaction anxiety. On the other hand, the term monitoring anxiety is used for social anxieties such as speech anxiety, stage fright and audience anxiety, which could be cited among the anxieties occurring in independent relations (Leary, 1983; cited in Öztürk, 2004).

The effectiveness of learning-teaching environments is directly correlated with the motivation levels of students as well as the learning strategies used in designing such environments. To put it differently, the capacity of applied learning strategies to sufficiently contribute to learning outputs rests upon the motivation of students in general and in particular the levels of social anxiety that affect their motivation levels. Learning strategy refers to each of the techniques facilitating the individual's learning on his own. Learning strategies are intended to help students process the knowledge and retain long-term information (Özer, 1998). Therefore, learning strategies consist of behaviors and thoughts which are expected to impact the way students choose, organize and integrate the new available information (Çakmak *et al.*, 2008). It is further stressed that learning strategies not only secure effective and long-term learning, but also high-level learning strategies used by students positively affect academic success. Thus, identifying the learning strategies that students use and their relationship with social anxiety levels is an important subject deserving scholarly attention.

1.1. Purpose

This study aims to determine the nature of the relationship between the motivation levels of prospective teachers and their interaction and monitoring anxiety. To this end, it seeks answers to the following questions:

1. What is the distribution of learning strategies of prospective teachers according to sub-dimensions?
2. How are the interaction and monitoring anxiety levels of prospective teachers?
3. What kind of a relationship is there between the learning strategies of teachers and their interaction and monitoring anxiety?

2. Methods

The study is a descriptive research using the survey method. In this framework, it attempted to determine the nature of the relationship between the learning strategies of prospective teachers and their interaction and monitoring anxiety. The study group consists of a total of 58 students, 38 female and 20 male, attending the Department of Turkish Language Teaching at the Faculty of Education at Ahi Evran University.

2.1. Data Collection Instrument

The scope of the study included the Learning Strategies subscale of the Motivation and Learning Strategies Scale, and the Interaction and Monitoring Anxiety Scale.

The Motivation and Learning Strategies Scale prepared by Pintrich, Smith, Garcia and McKeachie (1991) was adapted into Turkish and subjected to validity and reliability analysis by Büyüköztürk, Akgün, Karadeniz, Kılıç Çakmak and Demirel (2007). The adapted scale includes the Motivation subscale consisting of 31 items and the Learning Strategies subscale consisting of 50 items. The present study uses the learning strategies subscale consisting of 50 items.

According to the validity and reliability analyses performed by Pintrich, Smith, Garcia and McKeachie (1991), the factors of the Learning Strategies Subscale and their Cronbach's Alpha values are as follows: Recapitulation 0.69; elaboration 0.76; organization 0.64; critical thinking 0.80; self-reliance 0.79; managing time and work environment 0.76; endeavoring 0.69; peer collaboration 0.76 and help seeking and 0.52. On the other hand, in the scale adapted into Turkish by Büyüköztürk, Akgün, Karadeniz, Çakmak and Demirel, the Cronbach's Alpha values pertaining to the same factors of the learning strategies subscale vary between 0.51 and 0.83.

Furthermore, in order to determine the social anxiety levels of students, the study used the "Monitoring and Interaction Anxiety Scale" developed by Leary (1983), adapted into Turkish by Öztürk (2004) and subjected to validity and reliability analyses. The original form of the scale consists of 27 items, 15 about interaction anxiety and 12 about monitoring anxiety. The Cronbach's Alpha value of the interaction anxiety subscale was calculated to be 0.82, the Cronbach's Alpha value of the monitoring anxiety subscale was calculated to be 0.87, and the Cronbach's Alpha value of the entire scale was calculated to be 0.91.

These results demonstrate that the scales used in the study have high validity and reliability values, and they are sufficient to measure the perceived learning strategies as well as interaction and monitoring anxieties of the prospective students participating in the study.

Within the framework of the sub-problems of the study, frequency, percentage, arithmetic mean and the Pearson's r correlation analyses were performed on the collected data. A statistical level of $p < .05$ was deemed to be sufficient for the significance of the relationship between the factors.

3. Results

3.1. Findings on the Distribution of Learning Strategies of Prospective Teachers according to Sub-Dimensions

Table 1 summarizes the distribution of learning strategies of prospective teachers and findings on the differentiation between the distributions in question according to gender.

Table 1. Learning Strategies of Prospective Teachers according to Gender

Learning Strategies	N	Female		N	Male		N	Total		Variance Analysis	
		X	Ss		X	ss		X	ss	t	P
Recapitulation		4,61	1,13		4,77	1,45		4,67	1,24	-0,444	,659
Elaboration		5,45	1,02		5,06	1,23		5,32	1,10	1,299	,199
Organization		5,20	1,31		4,68	1,43		5,02	1,36	1,393	,169
Critical Thinking		4,80	1,24		4,55	1,27		4,72	1,24	0,732	,467
Self-Reliance	38	5,84	0,99	20	5,42	1,19	58	5,70	1,08	1,426	,159
Managing Time and Work Environment		4,46	0,96		4,42	0,76		4,44	0,89	0,134	,894
Endeavoring		4,62	1,41		4,75	1,25		4,67	1,35	-0,340	,735
Peer Collaboration		4,59	1,54		3,83	1,39		4,33	1,52	1,862	,068
Help Seeking		5,41	1,192		4,62	1,41		5,12	1,50	2,143	,036

An examination of the distribution between the learning strategies of prospective teachers in Table 1 demonstrates that the highest mean value in general is self-reliance ($X=5.70$), while the lowest is peer collaboration ($X=4.33$). Accordingly, it could be suggested that the students are inclined to use all the learning strategies.

An examination of student preferences of learning strategies according to gender reveals that the highest mean value for both female and male students is self-reliance (female $X=5.84$, male $X=5.42$), whereas the lowest is peer collaboration (female $X=4.59$, male $X=3.83$). Thus, it could be suggested that, despite an insignificant difference, female students prefer peer collaboration more than males.

3.2. Findings on the Interaction and Monitoring Anxiety Levels of Prospective Teachers

Table 2 summarizes the status of prospective teachers about interaction and monitoring anxiety, and the findings on the differentiation between their status according to gender.

Table 2. Interaction and Monitoring Anxiety of Prospective Teachers according to Gender

Kaygı	Female			Male			Total			Variance Analysis	
	N	X	Ss	N	X	ss	N	X	ss	t	P
Interaction Anxiety	38	2,63	,70	20	2,47	,48	58	2,57	,634	,931	,356
Monitoring Anxiety		2,66	,96		2,77	,87		2,70	,921	-,439	,662

An examination of Table 2 demonstrates that prospective teachers have medium levels of interaction ($X=2.57$) and monitoring anxiety ($X=2.70$). Furthermore, although interaction and monitoring anxieties of prospective teachers do not vary according to gender, their monitoring anxiety scores are apparently higher than their interaction anxiety scores.

3.3. Findings on the Relationship between Learning Strategies and Interaction and Monitoring Anxieties

Table 3 summarizes the findings on the relationship between the learning strategies of prospective teachers according to the sub-dimensions and their interaction and monitoring anxiety.

Table 3. The Relationship between Learning Strategies and Interaction and Monitoring Anxieties

Variables		Monitoring Anxiety	Interaction Anxiety
Recapitulation	r	,01	-,093
	p	,91	,489
Elaboration	r	,01	,154
	p	,92	,248
Organization	r	,12	,242
	p	,35	,068
Critical Thinking	r	-,05	-,145
	p	,70	,279
Self-Reliance	r	,22	,236
	p	,09	,074
Managing Time and Work Environment	r	,283 (*)	,362(*)
	p	,03	,005
Endeavoring	r	,392(*)	,296(*)
	p	,00	,024
Peer Collaboration	r	-,24	-,223
	p	,05	,093
Help Seeking	r	,07	,230
	p	,60	,082
Monitoring Anxiety	r		,787(*)
	p		,000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

An examination of Table 3 reveals that both interaction and monitoring anxiety have a significantly positive correlation with managing time and work environment (interaction $r=0.362$, $p<0.05$; monitoring $r=0.283$, $p<0.05$) and endeavoring (interaction $r=0.296$, $p<0.05$; monitoring $r=0.392$, $p<0.05$). Thus, it could be suggested that the higher the interaction and monitoring anxieties of students, the greater the need they feel for managing time and work environment and endeavoring. To put it differently, this could be interpreted as indicating that individuals experiencing problems with managing time and work environment are more inclined to feel social anxieties such as interaction and monitoring.

On the other hand, despite the absence of a significant relationship, it could be suggested that both interaction and monitoring anxiety have a negative relationship with critical thinking and peer collaboration, and there is likewise a negative relationship between interaction anxiety and recapitulation. Individuals with high critical

thinking skills who can develop learning environments based on peer cooperation have lower levels of interaction and monitoring anxiety, which could be interpreted as indicating that sociability reduces interaction and monitoring anxieties. Furthermore, it is also observed that there exists a positively significant relationship between interaction anxiety and monitoring anxiety. Accordingly, greater interaction anxiety is accompanied by greater monitoring anxiety.

4. Conclusion and Discussion

Considering anxieties such as social interaction and monitoring together with factors of learning strategies such as self-reliance, critical thinking, peer collaboration and organization of the work environment, the present study demonstrated that the highest mean value for the learning strategies of prospective teachers belongs to self-reliance, while the lowest one pertains to peer collaboration. Nevertheless, it was further observed that students are inclined to use all learning strategies, a result indicating that prospective teachers have strong feeling of self-confidence. The observed low level of peer collaboration can be attributed to the fact that individual activities dominate the current educational approaches. It is also seen that female prospective teachers have stronger self-reliance feelings compared to males. It was found that female students prefer greater collaboration with their peers. Similarly, it was concluded that prospective teachers have medium levels of interaction and monitoring anxiety, which do not vary according to gender.

The study also revealed that monitoring and interaction anxieties have a significantly positive relationship with managing time and work environment. It was further seen that students experiencing problems with organizing their work environment had increasing social anxieties such as interaction and monitoring. On the other hand, despite the lack of any significant relationship, the study found that both interaction and monitoring anxiety have a negative relationship with critical thinking and peer collaboration, and there is likewise a negative relationship between interaction anxiety and recapitulation. Individuals with high critical thinking skills who can develop learning environments based on peer cooperation have lower levels of interaction and monitoring anxiety, which could be interpreted as indicating that sociability reduces interaction and monitoring anxieties.

To conclude, as they are likely to contribute positively to teacher training process, we recommend further studies that will conduct a more in-depth investigation into such social anxieties and the factors based on learning strategies such as individual learning and peer collaboration

References

- Büyüköztürk, Ş., Akgün, Ö.E., Karadeniz, Ş., Kılıç, E. & Demirel, F. (2007) The Turkish Adaptation Study of Motivated Strategies for Learning Questionnaire (MSLQ) for 12–18 Year Old Children, INTED 2007 International Technology, Education and Development Conference (7 - 9 March 2007). Spain: Valencia.
- Özer, B. (1998). Öğrenmeyi Öğretme. Eğitim Bilimlerinde yenilikler. Hakan, A. (Ed.), (pp. 149-163). Anadolu Üniversitesi Açık Öğretim Fakültesi Yayınları: Eskişehir:
- Öztürk, A. (2004). Sosyal Kaygıya ilişkin Kendini Sunma Modeli, Unpublished PhD Thesis, Gazi University, Ankara
- Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educational and Psychological Measurement*, 53(3), 801-814.
- Pintrich, P.R., Smith, D.A.F., Garcia, T. & McKeachie, W.J. (1991). A Manual for the use of the motivated strategies for learning. Michigan: School of Education Building, The University of Michigan. ERIC: ED338122.
- Selçuk, Z. (1999). Gelişim ve öğrenme. Sixth edition. Ankara: Nobel Yayınları.
- Yüksel, N. (1995). Ruhsal Hastalıklar, Ankara: Hatipoğlu Yay.