

## Chapter 73

# Cross-Sectional Evaluation of Distance Education Students' Learning Styles and Critical Thinking Dispositions in Turkey

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### ABSTRACT

*This study aims to examine distance education students' learning styles and critical thinking dispositions. This cross sectional survey was conducted on 114 Turkish distance education students from various departments in a state university. The data of the study were collected through Grasha-Riechmann Student Learning Style Scale (GRSLSS) and California Critical Thinking Disposition Inventory (CCTDI). Cronbach Alpha coefficients of the scales were .76 for GRSLSS and .79 for CCTDI. To analyze the data, descriptive statistics (frequencies, percentages, means and standard deviations), t-test and one-way analysis of variance tests were used. The results indicated that the dependent learning style was the most preferred style and the avoidant learning style was the least preferred style. The further analysis regarding learning style indicated that female students perceived themselves more dependent than male students. The results also indicated that students in teacher training programs scored higher in independent and avoidant sub-scales, while students in arts and sciences programs scored higher in dependent, collaborative, competitive and participant sub-scales. The results manifested that students' critical thinking dispositions were at a low level, and they mostly had analyticity and open-mindedness dispositions. Female students were found to have more critical thinking dispositions than male students.*

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## **1. INTRODUCTION**

Rapid changes and improvements in communication technology surround mankind and societies in many parts of life. Almost every field is affected by these rapid changes and improvements in education systems are the leading ones. The distance education system, which is thought to be an alternative to the conventional education system, has its application area today in many countries by including modern communication technology and giving a chance to deliver education to more people (Candemir, İnceelli, & Ünal, 2002). In a world where the technological improvements are always up-to-date, it will be very logical to give importance to Distance Education Learning.

Together with the developing technology, education standards and opportunities have changed in many countries such as Turkey. Instead of conventional educational classes and programs, many distance programs were opened in Turkey and some of the lessons were performed through computer connections. Furthermore, a student has a chance to register in any distance education program, which is specified by the Distance Education Faculty (also known as Open Education Faculty) of Anadolu University, and to pass their exams in his or her hometown by the Distance Education Faculty of Anadolu University opened in 1982. It is The Distance Education System of Anadolu University has 35 bachelor's and associate degree programs with enrolled students who live not only in Turkey but also in Turkish Republic of North Cyprus and 6 Western European countries and provides all these students with educational services and facilities via a contemporary distance education system (Demiray & Sever, 2009). The number of distance education programs being offered by Turkish colleges and universities, especially by Anadolu University, is continuing to grow. 40% of the students in Turkey are students of Anadolu University and the Open Education Faculty. The millions of distance education students in Turkey mean that there is a gross manpower potential in

Turkey after the education process is completed. Thus, this diverse manpower needs a critical way of thinking so as to make some progress for achieving their personal development and offering something new to their environment beyond the ordinary. Research on the learning styles and critical thinking dispositions is urgently required to provide valuable information about the types of students that are best suited for distance learning programs and to help students to decide which distance learning program is best for them. As every individual acquires knowledge in different ways and has their own ways of learning, the learning styles of these individuals vary. Therefore, with all these concerns, this study aims to examine distance learning students' learning styles and critical thinking dispositions and to investigate whether their styles and dispositions change according to their gender and departments.

## **2. LITERATURE REVIEW**

Over the last decades, it has been a matter of issue how students think and in which way they try to think and learn in the education system. From this standpoint, the term "learning style" may help for understanding the extent of how individuals learn and the term "critical thinking" in the extent of how they need to think.

Human beings are as unique as are the fingerprints used to identify them. While there are certainly extensive categories for grouping people, every individual will have their own unique type of learning style. According to Dunn & Dunn (1992), learning styles refer to students' preferred physical and socio-psychological conditions and preferred teaching/learning methods.

Critical thinking is a key element that should be taken into consideration for increasing the qualities of every field in life in terms of the characteristics it includes (Güven & Kürüm, 2006; Kürüm, 2002). According to Torres & Cano (1995), critical thinking is important in the ability of guiding someone

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