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THE RELATIONSHIP BETWEEN PRE-SERVICES SCIENCE TEACHERS' EPISTEMOLOGICAL BELIEFS,  
LEARNING APPROACHES AND UPE SCORES

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The purpose of this study is to identify the relationships between epistemological beliefs, learning approaches and university entrance scores of freshmen pre-service science teachers, and to investigate whether there is a significant difference among their Undergraduate Placement Examination scores based on the levels of epistemological beliefs (very developed, developed, underdeveloped, and never developed level) and learning approaches (very deep, deep, surface, and very surface level). The survey research design was used in this study and the study group consisted of 290 freshmen pre-service science teachers at Mersin University, İstanbul University, Cumhuriyet University, Mugla University, Gazi University and Dokuz Eylul University at the autumn term of 2014-2015 academic year. Epistemological Beliefs Questionnaire (the belief that depends on effort, the belief that depends on innate ability and the belief that there is single truth), developed by Schommer (1990) and adapted by Deryakulu and Büyüköztürk (2002) into Turkish and Revised Two Factor Study Process Questionnaire (surface approach and deep approach), developed by Biggs, Kember and Leung (2001) and adapted by Önder and Beşoluk (2010) into Turkish, were used to gather the data.. Because the collected data was not normally distributed, Spearman Brown Rank-Order Correlation Test and Kruskal-Wallis H Test were employed to analyze it. As a result of the analysis, it was concluded that pre-service science teachers' beliefs of learning depend on effort and innate ability were more developed, they preferred deep approach more than surface approach, there was no meaningful relationship between UPE scores and learning approaches, but there was meaningful but weak relationship between UPE scores and epistemological beliefs, the UPE scores showed no significant difference based on levels of learning approaches and epistemological beliefs. It was given some suggestion on UPE questions type and science teacher education based on the results obtained from this study

Keywords: learning approach, epistemological beliefs, UPE score