Developing Attitude Scale on Economy Education towardTeacher Candidates of Social Studies: A Study of Validity and Reliability

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Abstract

Economics is a factor causing people to make decisions which result in their biggest happiness or sadness. We take economical decisions. While taking decisions, we solve problems, think creatively and sometimes adapt a critical manner and criticise several individuals and associations in different ways and methods. Claiming rights, calling someone to account, reacting against injustices and voting which is one of the most important duties of citizens, are the basic criteria of a functioning democracy. Social studiesisa discipline that is shaped in order to redound such abilities to individuals. The aim of this study is to develop a measurement tool in order to determine teacher candidates of social studies towards economy. Study was carried out through a sample consisting of 436 teacher candidates of social sciences. Validity and reliability analyses indicate that this measurement tool is adequate in measuring attitudes of teacher candidates of social studies towards economy education.

INTRODUCTION

Equal wages for equal jobs is a topic included in news but why equality is not yet provided? Should employers deal with social responsibility projects? Should attendance in education be obligatory? Should education be privatised? Which is better for citizens, privatisation or socialisation? Do citizens save enough? Are labour safety measures in Turkey sufficient? If there is a problem in labour safety, does it stem from privatisation policies or from the private sector itself? Should health services be free or well-off get better health services? What is the role of economy in today's international crises? How destructive are the wrong decisions made in economy administration? Do they cause temporary or long term depressions or collapse and destruction of civilisations? Do we look solutions for environmental problems when their economic

profits decrease? These are the problems that we encounter every day. We have to solve these because economy affects the whole society; including consumers, labourers, officials, businessmen, producers and citizens. We are all consumers, officials, labourers, officials, businessmen, producers but at the same time all of us are citizens. Therefore, we confront the above-mentioned economic problems all the time. We should make decisions on daily basis while solving these problems. Therefore, economics sometimes necessitateto makedecisions on a very complicated level. In this point, while making decisions, we solve problems, think creatively and sometimes adapt a critical manner and criticise several individuals and associations in different ways and methods. Therefore, we fulfil our duties as citizens. Claiming rights, calling someone to account, reacting against injustices and voting which is one of the most important duties of citizens, are the basic criteria of a functioning democracy. According to National Council for Social Studies (1994) social studies is a discipline that is shaped in order to redound such abilities to individuals; it is a combination of social sciences and humanities. The main aim of this field is to help young people become good citizens who make reasonable decisions with awareness of independent world, democratic society and cultural differences (NCSS, 1994).

How effective do economy classes in Social Studies programs in terms of making students to understand problems/issues of real world? The answer of this question is not wondered in undergraduate program of Social Studies Education which is part of higher education in Turkey for social studies teacher candidates. Although economics is a discipline of social sciences, it is generally neglected by social scientists. It is observed that economics in social studies research (thesis, articles, books, proceedings, projects) is not studied much. Courses in undergraduate programs are mostly given by instructors who studies economics-management.

Adapted learning concept in economics education and dealt problems (if any) do not provide logical thinking of economic problems that they have to face in the future. Off course, students remember some basic realities, diagrams, theories, concepts and motions. However, in social studies education programs, economics course is not taught in accordance with interdisciplinary manner by social scientists. Therefore, the course was thought indoors without establishing necessary connections with real life, in contrasts to the spirit of social studies. As a natural consequence, students will forget remnants of information as he or she cannot solve economic problems that he or she come across in his or her daily life because he or she lacks abilities of problem solving and creative

thinking. Weisbrod pointed out this issue in 1979 and asked this questions: "Why do economists have to investigate all problems? Why don't we leave the issue to the psychologists and education experts?" Relatedly, Gleason &Scyoc (1995) underlined that education is a significant factor in explaining economic knowledge and confirmed that economics education and social studies education research share same methodological and schematic problems (Becker, 1983a-b-c; Fraenkel, 1987; Wallen&Fraenkel, 1988; Becker et. al., 1990). In Turkey, the strong relationship between economics education and social studies education has not been investigated enough and this is a serious gap. In order to fill this gap, the aim of this study is to develop a measurement tool, particularly for the use of social studies experts and students.

Relevant Literature

Economics education has been studied approximately for 60 years world-wide, particularly in United States of America. Several publications were made in this topic. Social studies educators also do research and make publications. For social studies experts, the definition of economics is the balance to be established between unlimited needs of human beings and limited natural resources. Parker (2001) defined economics as work for production, distribution, exchange and consumption of goods and services that people need under scarcity conditions. Singer (2003) stated that 21th

century movements such as progressivism, bureaucratism, technocracy, fascism or socialism have increased the significance of social sciences, underlined that English economist John Maynard Keynes contributed to expanding role of social sciences in terms of managing the capitalist economic system, measuring the effects of government subsidised social programs and economic development and drew attention to the increasing importance of social sciences. According to Singer (2003), economics study how people, humans and nations produce and distributes the goods that they need to survive. Martorellaet. al. (2005) also associated the discipline of economics with production, consumption and exchange.

Social sciences also use similar terms in defining economics. According to Saunders &Gilliard (1995), concepts of economics are the basis of understanding economics and making sensible economic decisions. Concepts at the same time are basic words of economics. The main problem of everyone concerning economics is the limited resources and unlimited desires. This situation paves the way for scarcity. Scarcity forces people to sensibly decide on what to sacrifice, in order to fulfil their unlimited desires against limited resources. If individuals and societies cannot get what they want, as long as the resources remain limited to fulfil desires, they should prefer what they want most and do it constantly. Saunders

&Gilliard examined these choices with the concept of sacrifice. Sacrifice includes to choose or accept the less in order to acquire the more. Each sacrifice has consequences. Individuals prefer one good or service to another or prefer the more to the less and make self-sacrifice. These sacrifices might have positive incomes and they may positively affect the individual. An employer may increase his or her profit by neglecting measures of labour safety or he or she can take this measure and decrease his or her profit. In the latter, although the profit seems to diminish, the value of human life increases. If the employer thinks only profit, it may cause injuries or deaths of workers. Societies also make sacrifice; for example concerning the energy they need and the environment that they desire to protect. The assessment of sacrifices, when done systematically and carefully, include comparison of each alternative's pros and con. When it is done the opposite, in other words through making unplanned and unconscious sacrifices in order to increase profit, the consequences can be more destructive. In Easter Island, which is located on the Pacific Ocean, the rich and diverse natural life collapsed after a 400 year-old process of sculpture competition (14th- 18th centuries). The choice of making bigger sculpture resulted in a big environmental catastrophe (Diamond, 2006).

Publications on economics education seems to include a large variety of topics. Researchers were also interested in the effects of economics course for high school students on economics courses in higher education. According to Karstensson&Vedder (1974), students, who begin economics courses with positive thoughts and better motivation, tend to be more successful in comparison to the students who lack such thoughts and motivation. The students, who previously took economics courses, become more interested in economics courses (Walstad&Soper, 1982; Myatt & Waddell, 1990; Durden & Ellis, 1995; Lopus, 1997; Wan &Cheo, 2012). The students, who have prior knowledge or basic technical skills for economics, have more chances for better achievement(Karstensson&Vedder, 1974; Anderson et. al, 1994). The level of recall for university students about economics courses is high when they grow up (Saunders, 1980). On the other hand, economics courses aim to improve "analytic competence" and "problem solving abilities" of students (Orlov&Roufagalas, 2012). As students with these skills get older, they also have better common sense knowledge about economics (Berti, et. al., 1986). As a result, it seems students having prior knowledge of economics are less worried, more interested in the topic; they also perform better in economics courses. Benedict & Hoag (2002) found out that the main reason for concern of students is the reputation of the course. Many researchers through their studies discovered a

positive and significant relation between student's college grades and high school grades of economics courses (Breeden and Lephardt, 2005; Durden & Ellis, 1995). Hingsmith (1974) indicated that one of the aims of in-service training for teacher candidates is to increase literacy of economics. Salemi et al. (2001) focused on literacy of economics and the importance of economics education for specialisation of students. Consequently the findings underline that having right perceptions and attitudes towards economics courses is crucial for students in order to be successful in economics courses. (Ballard & Johnson, 2004; Bachan& Reilly 2003).

Karstensson&Vedder(1974),

Soper&Walstad (1983) and O'Brien &Ingels (1987) conducted studies to measure students' attitudes towards economics. Hodgin (1984) stated that attitudes towards economics at the same time are affected by messages which include information about economic performance. Van Wyk (2012) also claimed that the more economic concepts students know, the more they like the topic; finally they pay more attention to economics topics and they become more knowledgeable.

On the other hand, it has been suggested that attitudes towards economics education are negative when there is a misbalance between the educator's teaching style and the student's learning style. (Karstensson&Vedder, 1974; Wetzel et al., 1982;

Charkins et al., 1985; Benedict & Hoag, 2002). Torrent (2011) gave useful information to overcome the above-mentioned situation. According to Torrent (2011), students learn in two ways: active learning based on cooperation and passive learning. In active learning, students construct knowledge through using his or her experiences whereas in passive learning, students wait to be filled with information, as an empty pot or glass waits on to filled. Many studies confirmed the benefits of active learning; however passive learning maintained its dominant position in economics education (Torrent, 2011).Jaworski, et. al. (2010) also supported this situation and asserted modern economics is basically taught through stable balance models. Nevertheless, there is a general opinion that economic education is developed through methods of learn by living such as active/student oriented learning which have many qualified properties. Learn by living, in comparison to traditional teaching, creates advantages such as high level of student motivation, better recalling of knowledge, increasing individuals' level of learning and encouragement of students' learning desires. The important thing is to make sure that students as active learners have experiences and reshape this experiences on their own (Egbert &Mertins, 2010).

The hours of economics courses in social studies teacher candidate programs have long been

discussed. For instance, Bach and Saunders (1965) found out that teachers, who took one or two-hour economic courses, were not successful. 16 years later, Yankelovich, et. al. (1981) claimed that economics is a crucially needed course in schools. Lynch (1990) suggested that social studies students at least take four hours economics course in order to influence students' learning. Allgood&Walstad (1999) continued this discussion after 24 years of Bach and Saunders indicated that high school students on undergraduate level should take at least six hours of economics courses because students' understanding of economics depend on that. Finally Miller &VanFossen (2008) stated that current research on teachers' knowledge on economics demonstrates that teachers do not take enough economics courses. This statement also show that in 40 years since 1965, this question has not yet been answered: How many hours of economics courses that teachers should take? Even this question is answered, another question arises: Should economics course be a separate course? Walstad and Watts (1985) identified many weaknesses in terms of combining economics courses with other courses: teachers' lack of self-confidence for teaching economics, superficial education, inadequatepresentation of ideas of economics in curriculum materials, insufficient time for economics courses in curriculum. The result of this is to confront young people, who generally complete university education without making decision on financial matters and therefore making these young people vulnerable to aggressive market tactics of financial institutions and psychological costs concerning big debts (Borden et. al., 2008).

An effective way to take care of problematic young people in economics education is to approach discipline of economics from a constructivist and social perspective. Likewise, Culbertson (1987) stressed an adaptation of such an approach. According to Culbertson, international companies ask convenient legal regulations from countries that they will invest. These regulations included low wages of labourer, fierce working conditions, tax deductions, regulations concerning flexibility of delivering investments to other countries in case of negative conditions and uncertain conditions of working life. In the discipline of economics, an approach from the constructivists, social responsibility and social functions perspective is needed (Culbertson, 1987). Culbertson demonstrated that economics course should be taught with a more social point of view, instead of concerning with numbers and formulas too much. A sensible approach to this problem is related with the time spent by the student for studying and its effects on academic achievement. Therefore, the motivations that encourage students to study also influence their performance (Bonesrønning&Opstad, 2012). Considering this,

social studies teacher candidate should be encouraged to spare more time for studying or reading economics. Kauper (2012) also is one of the educators that a new approach is needed for economics. Kauper urged that economics courses taught to student are not enough for students in terms of making connections with the real world in a meaningful way. According to Kauper, students reject the economics we teach, because it is not enough to explain the world they know. They are more concerned with technological developments in the world they now than a factory. We can explain this world with recent theory of economics; not a theory dates from 1956 (Kauper, 2012).

Social approach to economics might be beneficial. Many students still avoid to make an effort to understand world of economics. They know that they want to get high grades but they are doubtful whether knowledge of economics that they are presented is really useful or not in their next lives. They think the time spared for practices, which are not associated with the real word, is a loss. They consider it confusing when teachers teach off the book. However, it might be necessary to go off the book, to make learned information permanent, life-long and useful(Kauper, 2012). Students should be encouraged to deal with real life problems (Mearman et. al., 2011; Kneppers, et. al., 2012). Because economic problems are indispensible parts of daily life; they exist as

problems in each individual's life. According to Schug&Waldstad (1991), economic decisions in order to solve these problems are made on daily basis. Because no connection is made between the teachings in schools and the ones in real life, students are not able to transfer their economic knowledge to their daily lives. They learn it only for a short while to pass the exams and then forget it. Therefore, students cannot see the life from the perspective of an economist. For this reason, student's life outside of the school must be considered. If students cannot do it, then students in economics courses should confront problems of real life. This should be achieved in a cooperative class environment. Similarly, as Contreras et. al. (2012) stated, a student's class performance has effects on success of his or her class mates. These are part of their daily lives and problems to be solved. Meaningful learning happens only through this way. In other words, it occurs only in such an environment where students construct and apply their mental models actively. Knowledge transfer is a significant goal in economics education. For example, Kennedy (2012) suggested that university students in the field of health should configure what they learn and use them in solving real life problems.

When these suggestions, which can be considered as reasons highlighting the perspective of social sciences, it is clear that daily life, with all

its aspects, should be included in the course as much as possible. However, there are serious obstacles against leading students to solve real problems. The world that creates real problems is complicated. Therefore, students feel that they need to learn multiple theories most of which are falsifiable. If a theory partially brings a phenomenon into the light, it is useful to learn it. Learning a theory also means better understanding of another theory. Both theories may present political suggestions and they might be closely connected. They encourage debates and discussions and through them other disciplines can be connected. Even in open and complicated environments, multiple methods and techniques are needed at the same time: multiplism equips students with different methodological approaches towards problems and different tools to solve these. Moreover, learning by discussion, students learn to confer their own methods through tough topics where multiple points of views exist. In short, they learn how to judge. Therefore, students become more creative, more problem solving. With multiple point of views based on different methodological and even different moral basis, they learn to confer hard situations in a better way (Mearman et. al., 2011). Similarly, education methods construct solid bridges between students' knowledge and the goals of the course. Inadequate education practices supports an abstract understanding of science which

does not deal with modern world (Geerling, 2012). The solution offers to this problem are to make students watch lectures recorder on internet over and over again (Chen & Lin, 2012) or to simplify the complexity of economics and use simulation model of the NetLogo software which aims to improve students' understanding of economics (Kochanski, 2012).

Apart from these obstacles concerning teaching real life problems in economics courses, there are some researchers who approach to the topic in the context of the aims of education and claim that academics should also follow studies published in different fields. According to Armento (1983) economic desires, productive resources, scarcity, opportunity costs and choices are basic economic problems. The source of these problems is the life itself. If the aim of education is to make students prepared for this world, which is the source of these problems, then students should educated with a method inspiring them thinking methods that are compatible with today's current status. In this context, students believe environmental problems are caused by the economy and they begin from their own concerns towards environment and try to solve problems of the real world (Dalziel, 2011). This could be decisive step to reach the above-mentioned aim of education. In addition, in the light of the evidences that prove that the world works as a complex system, students can

be educated about complexity (Mearman et. al., 2011) and therefore this might increase the adaptation of students to the world in a more successful way. However, in order to achieve this, economics educators should read more in fields associated with economics but academics do not tend to read non-economic topics (Hadsell&MacDermott, 2012). Nevertheless, it is necessary for academics to study and do research in other fields and improve them.

The Aim of the Study

Economics is the major factor, primarily affecting and even shaping human life. We all work to live our lives better. We get tired and exhausted but we have a rest then go back to the competition. We make numerous economic decisions in our daily lives. Some of these decisions make us happy, some make us sad. The important thing for all individuals is to maintain a better life and make accurate choices while making decisions. People in Turkey are no exceptions. The people in this country also make countless economic decisions in their daily lives; some of which make them happy, some make them sad. When the economic dimension is considered and higher education is focused, it is observed that social studies educators remain distant to the topic of economics. Thus, there are scarcely any studies on economics on the high education level in the literature. It is an

important shortcoming for the country that teacher candidates, who will educate posterity on a topic which affects and even shapes the lives of individuals, are not familiar. The aim of this study is to make a step in filling this gap in the field of social studies education.

METHOD

Sample

The data concerning the scale were acquired from 436 students, who study at the University of Aksaray, Faculty of Education and the University of Niğde Faculty of Education, Department of Social Studies Education on 2013-2014 academic year. The participants are second, third and fourth grade students. The students of University of Gaziantep, Nizip Faculty of Education, Department of Social Studies Education, where test-retest application was done, were not included in the sample.

PROCESS

Scale Development Phase

Aftermath a literature review on the development of economics education attitude scale towards Social Studies teacher candidates (Demir andAkengin, 2010; BozdoğanandÖztürk, 2008; Öztürk, 2008; Karadeniz, 2005; Tavşancıl, 2014; Güven, 2003; Deveci, 2002), steps for developing measurement tools were determined as the following:

1. *Article Formation Phase:*Economics is taught in the undergraduate program of social studies education under the titles "Economics", "General Geography of Economics and Humanities" and "Geography of Economics and Humanities in Turkey". Courses like "Current World Issues" or elective courses like "Environmental Science", though not directly as the other courses, include economics oriented titles. In the literature review, there is no developed or adapted tool for measurement concerning economics, which has a dominant position in the undergraduate program of social studies education. Therefore in the article formation process, first of all foreign sources, then national sources were scanned (Armento, B. J., Rushing, F. W. & Cook, W. A., 1996; Bayhan, P., Yükselen, A. &Kaysılı, K. B., 2007; Miller, S. L. &VanFossen, P. J., 2008; Schug, M. C. &Walstad, W. B., 1991; Van Wyk, M. M., 2012) and article pool consisting of 63 items. Three of them were negative. Prepared items were applied to 25 students who study at the University of Aksaray, Faculty of Education, Department of Social Studies Education in terms of face validity. Students gave feedbacks through interviews concerning clarity of items and application duration. In line with the proposed amendments, eight items were removed from the scale.

2. *The Phase of Asking Expert Opinion:* Four experts on educational sciences were consulted about 55-article scale form in order to be sure whether the survey includes enough questions which also represent the phenomenon to be measured and content validity. These four experts in the field evaluated whether scale items are compatible with the discipline of social studies or not; three linguistic experts assessed items in terms of language and clarity. Experts also examine whether the scale measures student attitudes towards economics course and grammar clarity. In accordance with the suggestions, items were modified and five items were removed from the scale. Finally the scale, used for validity and reliability in the next phases, consisted of 50 items. The duration for answering questions is approximately 25 minutes.

3. *The Phase of Preliminary Test:* In total 50 items formed a draft scale for preliminary test. The items in the scale were organised as 5-point Likert Scale. The agreement degrees of the participants are the following: 1 "I Totally Agree", 2 "I Agree", 3 "Undecided" 4 "I Disagree" and 5 "I Totally Disagree". In calculating the points of student answers, the point scoring row for positive items was 5, 4, 3, 2, 1; for negative items was 1, 2, 3, 4, 5. In the draft scale the items 11, 20 and 27 were graded as negative. Accordingly, the highest

and lowest points from economics education attitude scale were respectively 250 and 50.

Draft scale was applied to 41 teacher candidates of University of Gaziantep, Nizip Faculty of Education, Department of Social Studies Education with two weeks intervals in spring semester of 2013-2014 academic year. In the same period, the pilot application of draft scale was applied to a total number of 436 teacher candidates studying social studies education at the universities of Aksaray, Adıyaman and Niğde. The acquired data were statistically calculated.

Tool for Data Collection

In this study, tool for data collection was only Attitude Scale on Economy Education Towards Teacher Candidates of Social Studies because no developed or adapted scale on economy education towards teacher candidates was found in the national literature.

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RESEARCH FINDINGS

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Data Analysis

In evaluating findings of the study, Lisrel 9,1 and SPSS 24 statistical software were used for statistical analysis. The study used descriptive statistics in assessing data. In order to demonstrate construct validity, Exploratory Factor Analysis was used. The dimensions obtain in Exploratory Factor Analysis were reassessed through Confirmatory Factor Analysis. For general reliability and reliability of sub-dimensions, Cronbach"s Alpha

was used. Cronbach"s Alpha coefficient was calculated for general reliability and reliability of sub-dimensions. Reliability of a measurement also shows its consistencies. The most common method for examination of reliability is Cronbach"s Alpha coefficient. This coefficient is the measurement of the internal consistency (homogeneity) of the scale's items. It is considered that the higher the Alpha coefficient indicates "the high consistency of the scale's items; the scale's items demonstrate similar properties or all items work together in line with the highness of the coefficient" (Alpar, 2006). The assessment criterion for Cronbach"s Alpha coefficient is the following:

If $0{,}00 \leq \alpha < 0{,}40$, then the scale is not reliable.

If $0{,}40 \leq \alpha < 0{,}60$ then the scale has low reliability.

If $0{,}60 \leq \alpha < 0{,}80$ then the scale is very reliable.

If $0{,}80 \leq \alpha < 1{,}00$ then the scale is highly reliable (Alpar, 2006; Özdamar, 2013).

Doing research with many variables often do not produce healthy results. If variables are different measurement values of a more general variable, general variable values can be created in order to facilitate the study and simplify the comments. Factor analysis is the formulation of general variable, which is called factor, consisting of a set of variables (Durmuş, B., Yurtkoru, E. S. &Çinko, M., 2012; Özdamar, 2013). Factor analysis is a group of multivariate statistical methods that is used to decrease and summarize

data. This method analyse mutual relations within several variable and explains these variables in terms of their common determinant properties (factors).

Factor analysis included KMO and Bartlett tests. KMO, was used to determine whether sample size is enough to do factor analysis or not and Bartlett test was applied to determine whether multivariate normality assumption occurred or not. After the tests, it is expected that KMO value is close to 1 and level of significance for Bartlett test is p<0,05 (Altunışık, R., Coşkun, R., Bayraktaroğlu, S., &Yıldırım, E., 2012). After this step, factor analysis is done in order to determine sub-dimensions of the scale. Next, factors are subject to reliability test one by one. In addition, variance declaration ratios of the factors are examined. The results were evaluated 95% reliability interval, p<0,05 level of significance and p<0,01 p<0,001 high level of significance.

Reliability Analysis

Reliability analysis of Attitude Scale on Economy Education Towards Teacher Candidates of Social Studies was done through test-retest and item analysis methods (Table 1).

Significant difference was observed between the point averages of preliminary and final tests of items7 "Economic class will be very beneficial in my teaching career" 21 "I have a solid

knowledge of mathematics" and 33 "The instructor of the class knew what to expect from me".

Item Analysis

After the first reliability analysis of 50 items, Cronbach's Alpha reliability coefficient was found .938. The first reliability analysis revealed that the items 9, 11, 18, 20, 21, 26, 27, 29, 30, 34, 35, 38, 39, 40, 45, 46, 47, 48 and 50 have no contribution to the scale. Therefore these items were removed from study. Consequently 15 more items were removed and 35 items remained in the scale. This time, second reliability coefficient test value rose to .939. In this phase, the items 35, 38, 45 and 48 which were believed not to contribute the scale, were removed and 31 itemsremained. The third test revealed that reliability coefficient value rose to .944. As there is no need for removal of another questions, from now on analysis were made concerning 31 items.

Exploratory Factor Analysis

In order to calculate reliability of 31 items on the Economics Education Attitude Scale, internal consistencies coefficient of "Cronbach Alpha" was calculated. General reliability of the scale was found very high (alpha=0.944). Exploratory Factor Analysis was employed in order to demonstrate construct validity of the scale. The Bartlett test (p=0.000<0.05) revealed a relationship between factor analysed variables. The test

(KMO=0.936>0,60) identified that sample size was enough for factor analysis. During factor analysis, the varimax method was chosen and therefore the structure of the relationship between factors remained same. Aftermath factor analysis, the variables explained 58.423 % of the total variance. They were classified under 5 factors. According to alpha values concerning reliability and variance value, it was understood that Economics Education Attitude Scale is a valid and reliable tool. Factor structure of the scale is shown Table 2.

In assesing factor analysis of Economics Education Attitude Scale, handling factors whose self-value is more than one, high factor loads which show significance of variables within the factors and difference of factor loads for the same variable were paid attention. The highness of reliability coefficients and explained variance ratios showed that the scale has a strong factor structure (DeVillis, 2011; Tavşancıl, 2014). The first factor's items were examined. For the reliability of 9 factors, which constitute value of economics as a course, alpha was found 0.890 and explained variance value was identified 15.357 %. The second factor's items were examined. For the reliability of 8 factors, which constitute difficulty of economics as a course, alpha was found 0.839 and explained variance value was identified 13.054 %. The third factor's items were examined. For the reliability of 6 factors, which constitute content of economics

course, alpha was found 0.848 and explained variance value was identified 12.740 %. The fourth factor's items were examined. For the reliability of 5 factors, which constitute the factor based upon learning by cooperation, alpha was found 0.846 and explained variance value was identified 9.967 %. The fifth factor's items were examined. For the reliability of 3 factors, which constitute the performance of the instructor, alpha was found 0.718 and explained variance value was identified 7.305 %.

Confirmatory Factor Analysis

According to the exploratory factor analysis results of Economics Education Attitude Scale, the theoretically constructed 5 factor model consisting of 31 items was tested through confirmatory factor analysis (CFA). CFA, which was applied 31 items, all items were acquired positive factor loads. Therefore, CFA tested the model consisting of 31 items and five potential variables. As a result, acquired goodness of fit indexes GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), CFI (Comparative Fit Index), NFI (Normed Fit Index), RMSEA (Root-Mean-Square Error of Approximation) and S-RMR (Standardized Root Mean Square Residual) were examined and Chi-square value was found significant ($\chi2=1057,45$; N=436, sd=420, $\chi2/df=2,52$, p=0,000). Goodness indexes were found as follows: RMSEA=0,059;

GFI=0,96; CFI=0,95; AGFI=0,94; NFI=0,94; NNFI=0,95; SRMR=0,061

The Chi-square test tests the hypothesis "there is no difference between covariance matrix and factor covariance matrix" (Özdamar, 2013). Chi-square statistics were considered as shortcoming of goodness of fit(Stapleton, 1997). Relatedly small statistical values indicate that model is compatible with the observational structure whereas big statistical values indicate that the model is incompatible with the observational structure; in other words it does not adequately explain the structure observed. However, Chi-square statistics is an accumulated statistics; as the number of variables increases, the value is higher. Therefore Chi-square degree of freedom is used. If this value is lower than 5, then the model has goodness of fit; if it is lower than 3, he model has very goodness of fit (Diamantopoulos, Siguaw, &Siguaw, 2000; Seçer, 2013; Byrne, 2014). In this study, Chi-square degree of freedom values were found lower than 5; so we can say that the model is compatible with the observed structure ($\chi 2/df=2,52$).

Goodness of fit indexes is generally measurements of the sum of variances and covariences which are explained by the model. Coefficient of determination is calculated in multiple regressions R^2. It can be said that the more goodness of fit values get close to 1, the more they

are compatible. For goodness of fit values, values between 0,90 and 0,95 are acceptable; if they are over 0, 95 then they are highly fit (Dickey, 1996; Stapleton, 1997; Byrne, 2014).On the other hand, if model's error indexes vary between 0,08 and 0,05, then model is acceptable. If they are lower than 0,05, then the model is good. If RMSEA index (Root-Mean-Square Error of Approximation) is close to 0,00, then there goodness of fitness is high. If RMSEA is lower than 0,05, then the model's fitness is perfect(Browne &Cudeck, 1993; Berberoğlu&Uygun, 2012). Uygun, Şahin&Okur (2010) also accepted SRMS values lower than 0.08 as indicators of fitness. In the light of this information, the suggested model's general fitness is good. In CFA, saturated model was obtained through using Modification Indexes. The errors of items S42-S43; S1-S16; S4-S22 and S10-S14 were correlated in the structure of model. Therefore these match-ups indicated that these question pairs are theoretically close to each other. Confirmatory Factor Analysis Standardized Solution value vary between 0,38 and 0,98 and it was observed that their t-tests were significant (Figure 1-2)

CONCLUSION AND SUGGESTIONS

The word economics comes from "oikia" (in Greek *home*) and "nomos" (in Greek *rule*); it means "home management"). Individuals make economic decisions every time in their lives and most of the

time these decisions determine their fate of lives. The aforesaid decision directly influences the societies that individuals live in. It can be said that the probability of serious social and economic problems is high in societies where individuals making wrong economic decisions. Therefore, right decisions on economics are crucial.

Although economics is important in daily life, as a scientific field little is known about it. The complexity of economic events and the discipline of economics in our country and world make economics hard to be understood by everyone. However this does not mean that people are not interested in economics. Thus, in today's world individuals with different identities act in economics itself. Having the identities of citizen, labourer, official, shopkeeper or businessman, each individual makes economic decisions. Therefore it is likely to make mistakes when economics is only considered about spending or saving money. Instead, it would be better to treat economics as a social science investigating human behaviours. The necessity of treating economics as a social science also reveals its position as a course in the discipline of social studies. Thus, each individual has his or her own economic world and this world begins to form at very early ages. When individual reaches to school age and become a student, this world continues to develop and take form. Teacher, voluntarily or involuntarily, play a decisive role in

this process. They seek ways to transfer more knowledge to students. Thereby, they contribute to development of their attitudes towards economics. They do not implant an idea through teaching the basics of economics and apply these to discussions concerning economic issues and institutions but they provide basic information to students to make decisions on vital subjects. Therefore the more students get knowledgeable about economic concepts, the more they like the topic and consequently acquire more information. Students having no opportunities of economic education and increase their understanding of economics will probably pay no attention to the subject and their own economic worlds. As one of the aims of the discipline of social studies is to improve student skills for solving daily life problems, it is necessary to take measurements to prevent students from doing research on economics and consequently from being indifferent to their daily life problems.

In national literature, it is observed that scholars and educators in social studies do not pay necessary interest. There is limited number of studies on economics. Thereby, this study aims to develop a measurement tool to determine economic attitudes of social studies teacher candidates. In this context, a draft scale consisting of 50 items was developed in consideration with relevant literature review. A pilot study was applied in a sample consisting of 436 social studies teacher candidates.

Test- retest applications were made in two weeks intervals and after reliability analysis, Cronbach's Alpha value was calculated .944. In the light of the findings of the second reliability analysis, exploratory factor analysis, (KMO=0.936>0,60), it was identified that sample size was enough for factor analysis. Then a 5 factor structure consisting of 31 items was obtained. Exploratory factor analysis result of the measurement tool was tested by confirmatory factor analysis and Chi-square values were found significant. Goodness indexes were found as follows: RMSEA=0,059; GFI=0,96; CFI=0,95; AGFI=0,94; NFI=0,94; NNFI=0,95; SRMR=0,061. Statistical results confirmed that Economics Education Attitude Scale toward Social Sciences Teacher Candidates is a highly valid and reliable measurement tool. Therefore this measurement tool can be used in social sciences educators' and particularly social studies teacher candidates' studies on economics. In this context, it is suggested that the scientific value of this measurement tool should be increased by different researches through validity and reliability studies in different samples.

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**Table 1. Test-Retest Findings on the Basis of Items(n=41)**

	Test		Retest			
	Mean	**Sd**	**Mean**	**Sd**	**Z**	**p**
1. I will use what I learnt from economics class throughout my entire life.	3,320	1,171	3,220	1,215	0,942	0,352
2. The graphics I learnt from economics class helps me to understand real world issues better.	3,200	1,054	3,200	1,123	0,000	-
3. I like economics because it's easy.	2,370	0,968	2,270	1,073	0,598	0,553
4. Gathering knowledge I gathered from economics class provide me better job opportunities in the future.	3,030	1,102	2,920	1,075	0,561	0,578
5. Economics is suitable for me as a lesson.	2,800	1,018	2,750	1,056	0,321	0,750
6. I will make use of what I learnt from the economics class in my teaching life.	3,800	0,901	3,660	0,911	1,000	0,323
7.Economic class will be very beneficial in my teaching career.	3,640	0,932	3,330	0,927	2,508	**0,017**
8. I will make use of a lot what I learnt from economics class in my teaching life.	3,330	1,095	3,250	1,080	0,552	0,584
9. I had basic knowledge about economicsclass before taking it.	3,000	1,095	2,680	1,128	1,394	0,171
10. Economics isn't hard as a class.	2,830	1,200	2,710	1,226	0,702	0,487
11. There isn't much knowledge to learn from graphics that are presented in the economics class.	2,340	1,196	2,460	1,027	-0,636	0,529
12. Understanding the notions and theories of economy are easy.	2,930	1,058	2,590	1,024	1,861	0,070
13. I can understand economics formulas and apply them in real life.	2,970	1,135	3,180	1,211	-1,213	0,232
14. Lots of students will find economics easy as a class.	2,610	0,919	2,320	1,059	1,636	0,110
15. I don't like economics as a lesson because it challenges my mental abilities.	2,610	1,046	2,490	1,186	0,646	0,522
16. Economics enable me to think about current controversial issues	3,380	1,042	3,080	1,285	1,638	0,110
17. My economics knowledge level ishigh enough to apply this knowledge to my teaching technique.	2,540	1,043	2,460	0,989	0,453	0,654
18. My calculating level is high enough to arrange and analyze data.	3,410	1,048	3,200	1,327	1,198	0,238
19. I have capacity to understand economics class.	3,880	0,966	4,100	0,744	-1,548	0,130
20. I hate economics because I hardly pass the lesson.	2,330	1,309	2,520	1,240	-0,781	0,440
21. I have a solid knowledge of mathematics.	2,550	1,280	2,170	1,107	2,152	**0,038**
22. The economics knowledge that is gathered from different sources helps me to understand lesson.	3,460	1,051	3,290	1,123	0,980	0,333
23. I like to read articles written about economics.	2,510	1,003	2,540	1,051	-0,138	0,891
24. I find economics topics very interesting and amusing.	2,410	0,865	2,290	0,901	0,696	0,491
25. Learning economics subjects relaxes me.	2,760	1,179	2,490	1,003	1,426	0,162
26. I didn't feel nervous or be frustrated during the economics exams.	2,510	1,143	2,760	1,044	-1,056	0,298
27. There aren't many topics in this lesson to be learnt.	2,800	1,159	2,520	0,847	1,478	0,147
28. Studying economics satisfies to me a lot.	2,270	0,905	2,350	0,921	-0,595	0,555
29. I usually did preparetions before coming to class.	2,540	1,120	2,390	1,115	0,746	0,460
30. I usually read some articles and writings about economics before the class.	2,120	0,939	1,820	0,675	1,864	0,070
31. I did some regulations to learn some topics completely.	2,740	1,163	2,490	1,233	1,326	0,193
32. I really like theoretical content of economics.	2,710	1,123	2,410	1,048	1,702	0,096
33. The instructor of the class knew what to expect from me.	2,770	0,974	2,350	1,099	2,102	**0,042**
34. The instructor of the class was really good at explaining topics (he gave us comprehensible instructions).	2,460	1,098	2,270	1,184	1,091	0,282
35. The instructor of the class dominated the lesson completely (he/she specified the framework or extent very well).	2,590	1,245	2,370	1,113	1,120	0,269
36. The instructor of the class chose the hard way to make the lesson interesting (he/she adopted constructive teaching method).	2,020	1,107	1,980	1,107	0,247	0,806
37. The instructor of the class gave me instructive and constructive feedbacks.	2,150	1,195	2,170	1,116	-0,136	0,893
38. Lecturers from school of business administration should not teach economics.	3,100	1,497	3,070	1,367	0,094	0,926
39. I care what students have to say about the lesson especially cooperation.	3,980	1,060	4,000	1,025	-0,117	0,907
40. I studied economics during whole semester.	2,520	1,154	2,350	1,027	1,125	0,268
41. I am good at solving economics problems.	2,590	1,204	2,560	1,205	0,129	0,898
42. I learnt to think more critical after economics class.	2,600	1,194	2,950	1,154	-1,595	0,119

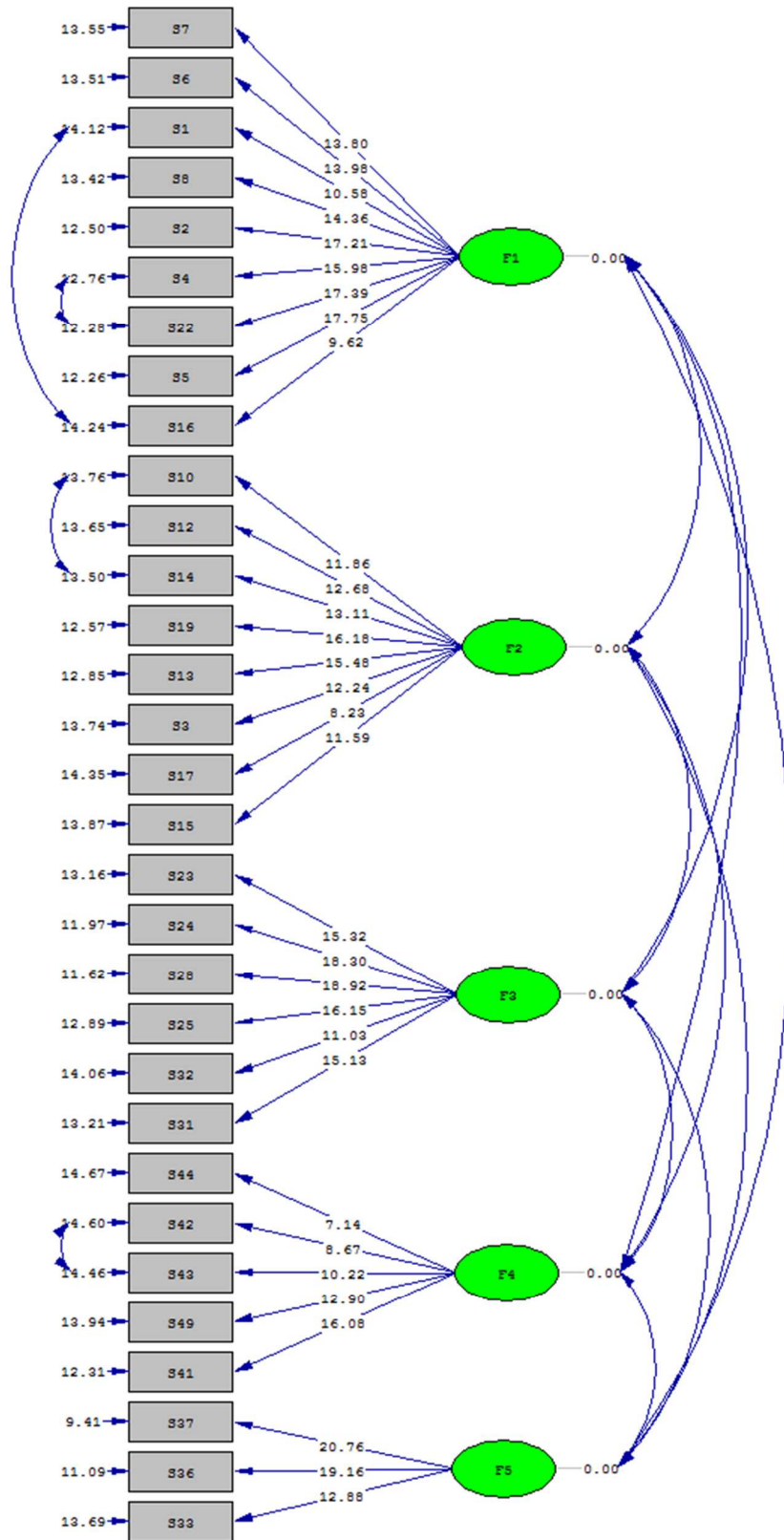|					
43. The economics class developed my analyzing ability.	2,730	1,154	2,830	1,196	-0,520	0,606
44. I developed my research ability with economics class.	2,730	1,096	2,760	1,200	-0,119	0,906
45. Economy is an important part of daily life and economics class has to be taught in this context.	3,830	0,946	3,710	1,101	0,696	0,491
46. An economics education starting from childhood is a necessity due to consumption frenzy in Turkey.	4,120	0,939	4,120	1,114	0,000	-
47. Societies confront with conflicts between limitless demands and limited sources and these confrontations constitute economics' core content.	4,150	0,691	4,170	0,972	-0,151	0,881
48. A good economics education will help me to take accurate economy decisions in my profession and private life.	3,900	0,871	3,880	0,992	0,124	0,902
49. I learnt to discuss economy concepts.	3,050	0,887	2,770	1,202	1,380	0,176
50. The purpose of economics education should be to train the students on howto developpossible solutions to the "real world problems".	4,100	1,091	4,070	1,034	0,183	0,855

Table 2. Factor Structure of Economics Education Attitude Scale

Dimension	Item	Factor Load	Explained Variance	Cronbach's Alpha
Value of economics as a course (Eigen value=11.756)	I7	0,773		
	I6	0,756		
	I1	0,737		
	I8	0,733		
	I2	0,712	15,357	0,890
	I4	0,605		
	I22	0,534		
	I5	0,500		
	I16	0,456		
Difficulty of economics as a course (Eigen value=1.960)	I10	0,787		
	I12	0,670		
	I14	0,640		
	I19	0,605	13,054	0,839
	I13	0,591		
	I3	0,550		
	I17	0,506		
	I15	0,479		
Content of economics course (Eigen valuer=1.724)	I23	0,762		
	I24	0,736		
	I28	0,647	12,740	0,848
	I25	0,622		
	I32	0,560		
	I31	0,557		
Cooperative learning (Eigen value=1.386)	I44	0,796		
	I42	0,772	9,967	0,846
	I43	0,754		
	I49	0,524		
	I41	0,507		
Performance of instractor (Eigen value=1.286)	I37	0,828		
	I36	0,756	7,305	0,718
	I33	0,617		

Total Variance %58.423

Figure 1. Economics Education Attitude Scale Confirmatory Factor Analysis(CFA) factor loads
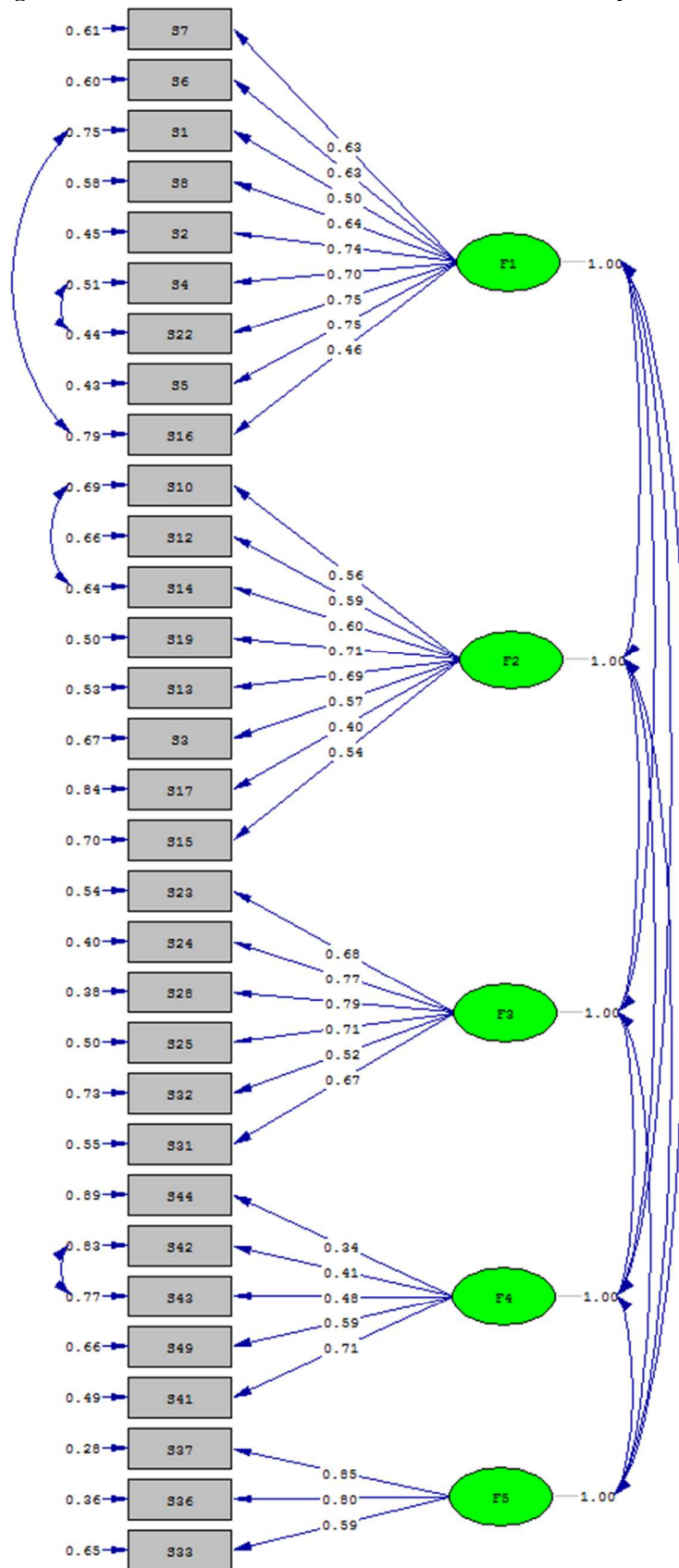
Chi-Square=1057.45, df=420, P-value=0.00000, RMSEA=0.059

Figure 2. Economics Education Attitude Scale Confirmatory Factor Analysis (CFA) t tests