Elementary Education Online, 2016; 15(4): 1436-1449,
İlköğretim Online, 15(4), 1436-1449, 2016. [Online]:http://ilkogretim-online.org.tr
doi http://dx.doi.org/10.17051/io.2016.08346

# Development of Want-Need Perception Scale for Primary and Secondary School Students

# İlk ve Ortaokul Öğrencileri için İstek-İhtiyaç Algı Ölçeğinin Geliştirilmesi

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**ABSTRACT.** In the development of the national economies, the economy education in school curricula has an important place, because students may not have received the necessary economic realities and requirements. For that reason, it is necessary to determine the perception of wants and needs of children. In this study, it was aimed to develop a scale for determining of elementary and secondary school students' perception of wants and needs. The study's data was obtained from 790 students who were attending to third, fifth and eighth grade in Turkey. The findings showed that Want-Need Perception Scale consists of 19 items. As a result of the study, the scale could be used to determine the need and want perception of the students at elementary and secondary schools.
**Keywords:** Social studies education, economic education, want, need, scale development.

**ÖZ.** Öğrenciler gerekli ekonomik gerçekleri ve gereksinimleri almadığı için, ulusal ekonomilerin gelişmesinde okul müfredatında ekonomi eğitimi önemli bir yere sahiptir. Bu nedenle çocukların istek ve ihtiyaç algısını belirlemek gereklidir. Bu çalışmada ilk ve ortaokul öğrencilerinin istek ve ihtiyaç algısını belirlemek için bir ölçek geliştirmek amaçlanmaktadır. Çalışmanın verileri, Türkiye'de üçüncü, beşinci ve sekizinci sınıfta okuyan 790 öğrenciden toplanmıştır. Araştırma bulguları, İstek-İhtiyaç Algı Ölçeği'nin 19 maddeden oluştuğunu göstermektedir. Bu çalışmanın bir sonucu olarak, bu ölçek ilk ve ortaokuldaki öğrencilerin istek ve ihtiyaç algılamalarını belirlemek için kullanılabilir.
**Anahtar Kelimeler:** Sosyal bilgiler eğitimi, iktisat eğitimi, istek, ihtiyaç, ölçek geliştirme.

## INTRODUCTION

Many of us think of economics as being related to expressions we hear frequently in our daily lives, words such as money, the stock market, currency, other financial instruments, unemployment or inflation. There are also many people who consider economics simply as the skill of managing money. But economics is neither a hard science, nor does it have such a narrow content. The wide scope and breadth of economics as a discipline is set forth in the introductions of all economics textbooks, whether domestic or international. The answer they give to the question "Why should we learn economics?" is thus: "In order to understand the world we live in" (Samuelson and Nordhaus, 1998; Taylor, 1998).

Economics, with its origins in basic human activities, is a field of study examining how to meet eternal and universal human needs with the limited resources available, and the decision-making processes concerning what to produce, for whom, at what cost and in what quantities. If all the actors in a society had always been able to get what they wanted, when they wanted it, there would be no need for economics. "Scarcity" refers to a situation in which our desires exceed what we have. Any attempt to alleviate the problem of scarcity requires making a choice between alternatives.

For instance, while a college-age individual has to make a choice between working and studying at university, the owner of a private sector firm has to decide what products or services to offer from many alternatives before starting their businesses. Similarly, a public sector manager has to make a choice between the budget allocations they have and which public goods/services to

Geliş tarihi: 25/03/2016, Kabul tarihi: 25/08/2016, Yayımlanma tarihi: 01/10/2016

supply. By their nature, wars are also the products of the choice made by nation states or other groups with regard to the financial crises, gains-losses, successes and failures they are facing and the resources they currently have available. Considered as a whole, since human life is built on a series of choices about how best to distribute finite resources, it is itself entirely an economic matter. And each choice made brings with it a set of costs.

Whether studying the meaning of society as a whole or of the individual, economics as an educational discipline aims to promote, within a systematic structure, skills in understanding, researching, analysing and communicating social, economic and political issues and problems primarily in economic terms. Having an education in economics means acquiring the ability to analyse and develop solutions for complex environments using a logical and understandable technique. In order to foster the above skills, and to aid in the realization of a world where opportunity costs are the minimum for all economic actors, economics should be included at all levels of the educational process.

For example, elementary school students may not be ready to learn about economics at the macro level, but they are able to understand economics concepts at a basic level relating to their immediate environment. Elementary school students can discuss, express and write about the concepts of wants and needs, supply and demand etc. in their daily life, showing that they have attained this knowledge with regard to family and school life (Brophy Alleman and Knighton, 2009). Furthermore, it is clear that economic concepts such as inflation, unemployment, financial crises, tax policy and social service budgets are extensively discussed in written and visual media and daily adult conversations. These concepts, of course, affect not only adults but also students. They are, however, often used fairly indiscriminately, although they have different etymological and terminological properties. In teaching and explaining these concepts, and in helping students use them in discussion and written work, the necessary sensitivity should be shown (Singer, 2009).

In the core curriculum of United States' schools Civics and Economics are both taught subjects. Given the necessity of economic literacy for informed, effective, and responsible citizenship, it will be useful to look at the current status of economics education in the United States. Forty-eight states and the District of Columbia have standards for economics; thirteen states require an economics course to be passed for graduation. That course tends to be a one-semester twelfth grade requirement paired with a one-semester course in American Government. The National Center for Education Statistics (2001) stated, however, that only 47 percent of high school seniors have taken an economics course before graduation (as cited in Branson 2003).

This basic education is intended to produce individuals who know their civic responsibilities. It is known that at many stages of their lives, people make choices involving economic considerations. For this reason, it can be considered important that the students at the primary school level are able to understand topics such as production, consumption, and the place and importance of the economy in human life (Akhan, 2012). In Turkey, Social Studies and Life Sciences are the courses in the curriculum which include teaching related to the economy and in which concepts about the economy are taught to students at primary and secondary school level (grades 1-8). There are also topics related to economics at elementary and secondary school level within the Math, Turkish and Science and Technology curricula.

Life Sciences is the course aimed at educating a child to be a good person, a good citizen and an individual contributing effectively to her/his environment (Karabağ, 2009). Topics and subjects from real life fall within the scope of Life Sciences. Thus, learning about a child's needs and demands in daily life and the economic concepts related to the satisfaction of these needs and demands are also among the objectives of this course (MEB, 2009).

In the Life Sciences course, primarily studied at elementary school, the function of money as a medium of exchange is taught. Students are then taught the concept and function of the family

budget. Within the Life Sciences course, teaching related to the core economic concepts such as basic necessities, conscious use and conservation of resources is provided in the third grade (Table 1).

**Table 1.** *Acquisition of Knowledge Related to the Economy in Life Sciences Courses (Grade 1-3)*

| Grade | Theme | Acquisitions |
|---|---|---|
| 1 | My Unique Home | • Realizes the function of money as an agent of change.<br>• Realizes that money is a limited source by participating in the family budget preparation works. |
| | My School Excitement | • Expresses his/her own needs, requests and opinions by respecting others' sensitivity. |
| 3 | My Unique Home | • Comprehends that housing is one of the basic needs of the people and indicates the importance of meeting this needs.<br>• Spends his/her money in an appropriate way according to his/her priorities.<br>• Participates in a variety of activities describing the contribution of consciously consuming the resources to the family budget.<br>• Investigates the functions of advertisements for children and the relationship between advertisements, needs and opportunities.<br>• Explores from what and how people can save money. |

The basic aim of the Social Studies course is the development of good citizens (Sunal and Haas, 2010). For this purpose, the course content is shaped according to the level of students by taking advantage of knowledge derived from social science disciplines. Economics is one of the disciplines within the social sciences which goes into forming the Social Studies course. Among the general objectives of the Social Studies course curriculum, as for Economics, the statement that the student should "understand the place of the national economy in development and in international economic relations by understanding the basic concepts of economy" is included (MEB, 2005).

Garcia and Michaelis (2001) state that one of the features of social sciences courses is "to help students discover the concepts, attitudes and skills related to the quality of work, career awareness and the use of resources." In the Social Studies education program enacted in 2005 in Turkey, concepts, knowledge and learning areas related to the economy are included. The acquisition of knowledge and learning areas related to the economy in the Turkish Elementary School Social Studies Program (grades 4-7) are shown up.

In the Social Studies education program in primary and secondary schools in Turkey the knowledge to be acquired concerning the economy (Table 2) is related to the topics "the difference between demand and needs", "features of an informed consumer" and "the daily lives of communities" at the 4th level; "the relationship between economic activities and geographical features" and the "human impact on the economy" at the 5th level; and "the relationship between our country's resources and economic activities" and "the importance of paying taxes" at the 6th level.

The conceptualization of needs and wants and the importance attached to them become increasingly differentiated and expanded during long periods of either scarcity or abundance, as well as with changes in production and consumption activities (Yanıklar, 2010). This differentiation of the concepts of wants and needs tends to increase the distinction between them. The common ground of both these concepts is the level of benefit that is supplied, or is not supplied to people, as the case may be. However, while "needs" generally express essential requirements for survival, "wants" are more often related to the dreams and hopes of individuals for their lives. Needs, in the most general sense, can be evaluated as the factors which, if they are not met, mean that an individual is subjected to real deprivation and lack. Wants are things that people wish to have, but which are not essential.

**Table 2**. *Acquisition of Knowledge Related to the Economy in Grade 4-7 in Turkey*

| Grade | Learning Area | Acquisitions |
|---|---|---|
| 4 | Production, Distribution and Consumption | 1. Distinguishes its requests and needs.<br>2. Makes inferences about people's basic needs with reference to his/her own needs.<br>3. Relates his/her own needs with available resources.<br>4. Evaluates the products that he/she will purchase according to the standards set.<br>5. Makes use of his/her rights as an informed consumer.<br>6. Creates the production, distribution and consumption network of the products he/she uses.<br>7. Relates need with the professions. |
| 4 | Science, Technology and Society | 1. Designs original products with reference to the needs of the people around. |
| 5 | Production, Distribution and Consumption | 1. Realizes the economic activities taking place where he/she lives.<br>2. Relates the geographical features with the economic activities taking place where he/she lives.<br>3. States the professions related to the economic activities taking place where he/she lives.<br>4. Evaluates the place of the economic activities taking place where he/she lives in the national economy.<br>5. Realizes the impact of people on the economy.<br>6. Holds a view about contributing to the production.<br>7. Develops new ideas for production by cooperating. |
| 6 | Production, Distribution and Consumption | 1. Evaluates the role and importance of the resources and economic activities of our country by relating them with each other.<br>2. Designs Project proposals for marketing and investments by taking into consideration the geographical features of Turkey.<br>3. Argues the need and importance of paying taxes in terms of civic responsibilities and their contribution to the country's economy.<br>4. Discusses the effects of unconsciously consuming natural resources on the human life.<br>5. Evaluates the role of qualified manpower on the development of Turkey's economy.<br>6. Investigates the education, skills and personality required by the profession of his/her interest. |
| 6 | Our Country and the World | 7. Evaluates the economic relationships between our country and the other countries in terms of resources and needs. |

In the development of national economies, an education in economics within the school curricula has an important place, because students may not have experienced the necessary economic realities outside school. In this instance, courses in economics taught by schools to students help to meet this requirement (Davies, 2006). In some studies, children have been shown to have a significant share in the shopping choices and decisions of the families. One study found that children significantly affect the purchasing decisions in more than 100 product categories (cited from Tammi, 1998; Aktaş, Özüpek and Altunbaş, 2011). Today, due to children's roles in purchasing decisions and behaviors, economic literacy related to the family budget, savings, and investment-related issues has become increasingly important. In addition, economic literacy also has wide-ranging effects on the stability of the overall economy of countries (Jappelli, 2010). It is thus necessary to determine the perception of wants and needs among children. This is also important for achieving desired results in, and making

improvements to, the elementary and secondary school curricula. For that reason, the aim of this study was to develop a "wants-needs perception scale".

## RESEARCH METHOD

This study was designed according to the descriptive survey method. The study aims to develop "Want Need Perception Scale (WNPS)" for elementary and secondary school students and to perform the reliability and validity studies of the scale. Valid and reliable scale development is a challenging task in any research field because effective measurement is a cornerstone of scientific research (Slavec and Drnovsek, 2012).

In the development process of the scale, respectively; the phases of creating an item pool related to the items of the scale, taking expert opinion for content validity of the items, trial application and data analysis were pursued. In data analysis, a path from exploratory factor analysis concerning the scale to confirmatory factor analysis and validity and reliability study was followed.

"Want Need Perception Scale (WNPS)" developed by the authors were used for data collection. The scale was developed in order to identify the perception of requests and needs, one of the basic concepts of economy education, of the primary and secondary school students.

This measuring instrument consists of 20 items and prepared in five-level Likert format. Respondents were asked to rate items using a five-point Likert type scales (1= strongly disagree to 5= strongly agree). The lowest score that can be obtained from the scale is 20 while the highest is 100. During the preparation of the scale items, an attention has been given to use a simple, straightforward and understandable language appropriate to the level of elementary school students. There is no item in the scale which is scored in reverse.

In this study, analysis of the data was performed using the SPSS 17.00 software package. Exploratory factor analysis, confirmatory factor analysis, Cronbach's alpha internal consistency analysis, item correlation analysis, factor analysis and descriptive statistics techniques were used in the analysis. All analysis and results are given in detail below.

### Scale Development Procedures

#### Development of Initial Set of Scale Items

In the first step of the scale development, 3 open-ended questions were asked to 80 students at 3th, 5th and 8th grades. The open-ended questions were as follows:

- According to you, what is the need? As a consumer, what do you need?
- What do you need to pay attention to when buying a product?
- Is there a difference between requests and needs? Explain by giving examples.

Considering the responses given by the students, an item pool of 63 items was created. These items were presented for review to 2 social studies education specialists, 1 measurement and evaluation specialist and 1 Turkish language specialist. In line with the feedback and suggestions from specialists, the necessary arrangements were made and the number of items in the pool was reduced to 43.

#### Initial Scale Development

Initial analyses were conducted to purify the measures and provide an initial examination of the scale. To this end, a pre-application was carried out with 250 students at 3th, 5th and 8th grade levels in Ankara by preferring convenient sample. As a result of pre-application, 29 student's papers were not assessed for deficiently filling or marking all options as the same. Respondents were 221 primary (third class) and secondary (fifth and eighth class) students.

There are two categories of factor analysis. These are exploratory (EFA) and confirmatory factor analysis (CFA). There are differences between EFA and CFA as following (Kline, 2013: 173):

- While unrestricted measurement models are estimated in EFA, restricted measurement models are analyzed in CFA. This indicate that the researcher must explicitly specify the indicator-factor correspondence in CFA
- While unrestricted measurement models in EFA are not identified, CFA models must be identified. In other words EFA concerns the rotation phase, but CFA does not concern the rotation phase.
- It is assumed in EFA that the specific variance of each indicator is not shared with that of any other indicator. However, CFA permits, depending on the model.
- Output from CFA computer procedures contains the values of numerous fi t statistics that assess the fit of the whole model to the data. In contrast, fit statistics are not generally available in standard methods of EFA (including principle components analysis and principle axis factoring, defined later) carried out by computer programs for general statistical analyses, such as SPSS and SAS/STAT, but some more specialized computer programs, such as Mplus may print certain types of fi t statistics for particular EFA methods.
- Procedures for EFA are available in many computer program such as SPSS and SAS/STAT. However, more specialized computer tools for structural equation modeling (SEM) are needed for CFA because the latter is the SEM technique for estimating restricted measurement models. Some widely used SEM computer tools include LISREL and Mplus.

There are some aims of EFA. These are to i) reduce the number of variables, ii) examine the structure or relationship between variables, iii) detection and assessment of unidimensionality of a theoretical construct, iv) evaluates the construct validity of a scale, test, or instrument, v) development of parsimonious (simple) analysis and interpretation, vi) addresses multicollinearity (two or more variables that are correlated), vii) used to develop theoretical constructs, viii) used to prove/disprove proposed theories (Williams et al., 2010).

Exploratory factor analysis was carried out to test construct validity of the want-need scale. Exploratory factor analysis with principal components and varimax method was made to examine dimensionality of 43 scale items. After inspection of item content, 15 items were deleted (because of 15-item low factor loadings < 0.40 and loading on two factor) and then a final two factor model was estimated with the remaining 28 items. Table 3 presents the results of exploratory factor analyses. Two factor model obtained explained approximately 32% of the total variance.

Besides, the factor solution exhibited Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.80 and Barlett's sphericity was 1704.706. The test show that the variables are not independent. These results indicated that the variables and data in the study became appropriate for exploratory factor analysis. As shown in Table 3, α coefficient of these factors has acceptable levels ranging from 0.760 to 0.857 indicating internal consistency among the items within each dimension.

Confirmatory factor analyses (CFA) is a data analyses method of structural equation modelling. *CFA is used for the assessment of fit between observed data and an a priori conceptualized, theoretically grounded model that specifies the hypothesized causal relations between latent factors and their observed indicator variables* (Mueller and Hancock, 2001).

**Table 3**. *Results of Exploratory Factor Analysis*

| Factors | Factor Loadings | Variance (%) | α |
|---|---|---|---|
| **1. Factor: Wants** | | | |
| M3 | 0.678 | 18.677 | 0.857 |
| M5 | 0.669 | | |
| M13 | 0.669 | | |
| M4 | 0.628 | | |
| M10 | 0.610 | | |
| M30 | 0.596 | | |
| M16 | 0.592 | | |
| M21 | 0.587 | | |
| M22 | 0.537 | | |
| M23 | 0.527 | | |
| M41 | 0.526 | | |
| M18 | 0.505 | | |
| M24 | 0.492 | | |
| M15 | 0.484 | | |
| M31 | 0.475 | | |
| M6 | 0.451 | | |
| **2. Factor: Needs** | | | |
| M37 | 0.662 | 13.032 | 0.760 |
| M29 | 0.653 | | |
| M36 | 0.635 | | |
| M25 | 0.608 | | |
| M34 | 0.554 | | |
| M38 | 0.512 | | |
| M35 | 0.486 | | |
| M42 | 0.471 | | |
| M19 | 0.455 | | |
| M20 | 0.442 | | |
| M17 | 0.424 | | |
| M39 | 0.410 | | |
| ***Total Variance Explained*** | ***31.709*** | | |
| ***Kaiser-Meyer-Olkin Measure of Sampling Adequacy*** | ***0.802*** | | |
| ***Barlett's Test of Sphericity*** ***Approx Chi-Square*** | ***1704.706*** | | |
| ***df*** | ***378*** | | |
| ***Sig.*** | ***0,000*** | | |

CFA were conducted to congeneric measurement properties of the scale using LISREL 8.7 Confirmatory factor analyses were firstly performed for each dimension and then all factor constructs within measurement model were evaluated together. Consequently, totally 8 items, 3 item (M3, M5 and M6) from wants construct and 5 item (M42, M19, M20, M17, M39) from needs construct, were deleted (from examining low factor loading, modification index and residual matrix value) and then model fit was substantially improved. There are some statistics that can be used to assess goodness

of fit. The study was used chi-squared test/ sd, root mean square error of approximation (RMSEA), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), normed fit index (NFI), non-normed fit index (NNFI) as model fit measures. The chi-squared test indicates the difference between observed and expected covariance matrices. Chi-square ($\chi 2$) is the most common method of evaluating goodness of fit. The test is generally a reasonable measure of fit for roughly 200 cases But for models with more cases, the chi-square test is almost always statistically significant. The chi-squared test is affected by sample size. Thus $\chi^2$/sd is used (http://www.jaqm.ro). For wants factor construct was estimated $\chi^2$/sd = 1.68, p=0.000; RMSEA= 0.055; GFI= 0.931; AGFI= 0.901; CFI= 0.972 NFI= 0.928; NNFI= 0.966. For need factor construct was estimated $\chi^2$/sd = 2.98, p=0.000; RMSEA= 0.095; GFI= 0.949; AGFI= 0.897; CFI= 0.941; NFI= 0.911; NNFI= 0.911.

Results of goodness of fit indices of measurement model were estimated $\chi^2$/sd = 1.557, p=0.000; RMSEA= 0.050; GFI= 0.894; AGFI= 0.867; CFI= 0.953; NFI= 0.873; NNFI= 0.946. The results suggest an acceptable fit of the model to the data.

*Reliability and Validity (Convergent and Discriminant)*

Measurement model was assessed using confirmatory factor analysis (CFA) and was examined validity and reliability. Reliability concept is consistency of measurement – when different persons perform the measurements, on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing. The reliability coefficient is the correlation between two or more items which measure the same thing. Method of testing for internal consistency generally in the behavioural sciences is coefficient alpha. (Drost, 2012 as cited Bollen, 1989).

Table 4 shows the reliability results of measurement model. Reliability was assessed using Cronbach's alpha and Composite Realibility (CR). As appearing in Table 4, reliability of the subscales is acceptable as coefficient alpha ($\alpha$) estimates range from 0.736 to 0.827 (Nunnually, 1978). Composite reliability estimates range from 0.744 to 0.825 (Fornell ve Larcker 1981). Composite reliability of all the scales was greater than 0.60 (Bagozzi and Yi, 1988). Factor loads obtained as a result of analysis, it ranges between 0.44 and 0.61 for wants latent variable, between 0.42 and 0.66 for need latent variable. Validity refers to how accurately a study answers the study question or the strength of the study conclusions. For outcome measures such as tests, it refers to the accuracy of measurement (Sullivan, 2011). To assess construct validity was proposed two aspects. These are convergent validity and discriminant validity. Convergent validity is the degree of confidence- is well measured by its items. Discriminant validity is demonstrated when a test does not correlate with variables. In other words discriminant validity is the degree to which measures of different from others. In other words convergent and discriminant validity examine the extent to which measures of a latent variable shared their variance and how they are different from others (Alarcon and Sanchez, 2015). Convergent validity is evident in that all confirmatory factor loadings are significant (t values range from 5.68 to 9.54).

Discriminant validity of constructs was conducted with chi-square difference test. The results are shown in Table 5. The $\chi^2$ values of the constrained and unconstrained models were compared and the $\chi^2$ difference was much larger than the 3.841 threshold. Therefore, the result shows the existence of discriminant validity between two constructs ($\Delta\chi^2$= 378.54, $\Delta$sd = 1, p= 0.05).

**Table 4.** *Measurement Model*

| ***Construct*** | ***Stand. loading*** | **α** | **CR** |
|---|---|---|---|
| ***Wants*** | | ***.827*** | ***.825*** |
| M41 | .48 | | |
| M4 | .50 | | |
| M10 | .49 | | |
| M13 | .61 | | |
| M15 | .51 | | |
| M16 | .56 | | |
| M18 | .51 | | |
| M21 | .60 | | |
| M22 | .44 | | |
| M23 | .52 | | |
| M24 | .44 | | |
| M31 | .44 | | |
| M30 | .60 | | |
| ***Needs*** | | ***.736*** | ***.744*** |
| M29 | .57 | | |
| M34 | .49 | | |
| M35 | .46 | | |
| M36 | .63 | | |
| M37 | .66 | | |
| M38 | .42 | | |
| M25 | .55 | | |
| $\chi^2$/sd = 1.557 | | | |
| NFI= .873 | | | |
| NNFI= .946 | | | |
| CFI= .953 | | | |
| GFI= .894 | | | |
| AGFI= .867 | | | |
| RMSEA= .05 | | | |

**Table 5.** *Results of Discriminant Validity*

| **Model** | **$\chi^2$** | **sd** |
|---|---|---|
| Constraint model | 638.57 | 168 |
| Unconstrained model | 260.03 | 167 |
| **Δ**$\chi^2$ | 378.54 | |
| **Δ**sd | | 1 |
| 1 $\chi^2$ .05 = 3.841 | | |

**Scale Validation**

Scale validation study was conducted to validate the scale using a separate sample. The study population is formed by the students from 3, 5 and 8 grades in Turkey. The data for this analysis were obtained from 790 primary (third class) and secondary (fifth and eighth class) students at Ankara, Kastamonu, Yozgat and Ardahan cities in Turkey. Scale validation study was conducted to validate the scale using a separate sample consists of 850 students. 60 among the answer sheets were not assessed for not being filled accordingly. Respondents consisted of 391 female and 399 male. %53 of sample was eighth class students whereas %23-24 of sample was third and fifth class students. Approximately 34% of respondents have lived in city and others have lived in town, village and district.

**Table 6.** *Confirmatory Factor Analysis Results of the Scale*

| ***Construct*** | ***Stand. loading*** | **α** | **CR** |
|---|---|---|---|
| ***Wants*** | | ***.649*** | ***.820*** |
| When buying a product, I do not care whether or not its price is affordable (M31). | .53 | | |
| I would like to buy what I want to buy (M30). | .68 | | |
| I immediately spend the money I get from my father (M4). | .59 | | |
| When I go to a shopping center, I would like to buy everything I like (M10). | .58 | | |
| I would like to buy everything I like (M13). | .63 | | |
| My requests are more important than my needs (M15). | .52 | | |
| When I buy something, I am fascinated by its ads (M16). | .44 | | |
| When I go to market to spend some time, I necessarily do shopping (M18). | .49 | | |
| Everything I want is also my need (M21). | .62 | | |
| I do not like to buy those my friends won't like (M23). | .28 | | |
| I keep pace with the fashion about clothing (M24). | .37 | | |
| I'd like to buy something to eat or drink even if I am not hungry (M41). | .56 | | |
| ***Needs*** | | ***.733*** | ***.728*** |
| When buying a book, I care whether or not the book is appropriate for my age (M25). | .29 | | |
| We have to meet our basic needs in order to sustain our lives (M29). | .58 | | |
| Requests vary from person to person, however, the needs are for everyone (M34.) | .49 | | |
| Meeting needs is compulsory for the people (M35). | .64 | | |
| Clothing is a vital need for people (M36). | .54 | | |
| Feeding is a vital need for people (M37). | .58 | | |
| I look at its expiry date before buying a product.(M38). | .43 | | |
| $\chi^2$/sd = 3.60 | | | |
| NFI= .922 | | | |
| NNFI= .935 | | | |
| CFI= .943 | | | |
| GFI= .933 | | | |
| AGFI= .915 | | | |
| RMSEA= .057 | | | |

*Confirmatory factor analyses;* confirmatory factor analyses were conducted to 20 items developed in scale purification. The results of measurement model was $\chi^2$/sd = 3.99, p=0.000;

RMSEA= 0.062; GFI= 0.922; AGFI= 0.902; CFI= 0.929; NFI= 0.906; NNFI= 0.919. This goodness fit indices showed an acceptable fit of the model to the data. However, modification indices were examined. As a result of this, several modification indices were important. Thus, error covariance of two items (between M37 and M36) was added to this model and also an item (M22) deleted from examining low factor loading, modification index and residual matrix value. Then, confirmatory factor analysis was conducted to again. Result of goodness of fit indices of measurement model was estimated $\chi^2$/sd = 3.60, p=0.000; RMSEA= 0.057; GFI= 0.933; AGFI= 0.915; CFI= 0.943; NFI= 0.922; NNFI= 0.935 and model fit was substantially improved.

*Reliability and validity;* composite reliability of needs construct was 0.728 whereas composite reliability of wants construct was 0.820. Coefficient alpha for needs construct was 0.733 and wants construct was 0.649. The results supported reliability of all of the scales. Convergent validity is evident in that all confirmatory factor loadings are significant (t-values range from 5.89 to 20.01). The results are shown in Table 6.

Discriminant validity was again tested by chi-square difference test. The results are shown in Table 7. The $\chi^2$ difference was much larger than the 3.841 threshold. Therefore, the result shows the existence of discriminant validity between two constructs ($\Delta\chi^2$= 859.27, $\Delta$sd = 1, p= 0.05).

**Table 7.** *Results of Discriminant Validity*

| **Model** | **$\chi^2$** | **sd** |
|---|---|---|
| Constraint model | 1395.58 | 150 |
| Unconstrained model | 536.31 | 149 |
| **$\Delta\chi^2$** | 859.27 | |
| **$\Delta$**sd | | 1 |
| 1 $\chi^2$ .05 = 3.841 | | |

## CONCLUSION

The study represents a first attempt to develop the Want Need Perception Scale (WNPS). There are 19 items in "Want-Need Perception Scale". As a result of EFA and CFA analyses, it was found out that the scale have two constructs and need construct were obtained from seven items while want construct were obtained from twelve items. This paper examines the development and validation of the scale of "needs versus wants" for education of economics. The concepts of needs and wants are the basis of consumption and consumers are not only rational but also emotional assets, so their emotion side impacts on consumer perception. Thus, this article was aimed the development of a practical scale of "wants" based consumption and "needs" based on consumption. The scale development study can be important for a lot of consumption areas because of deficiency of the measures for evaluating these situations. Herein, new studies about different subjects using the scale can be conduct to consumer behaviour area and consumer education. Besides, the scale can be relevant for cross-cultural studies.

The findings showed that "Want-Need Perception Scale" could be considered as a valid and reliable measurement tool. Although the scale shows construct validity, more study should conduct to refine our knowledge of needs and wants. Thus, further research might also continue the validation of the assessment of the need and want constructs. For this purpose, developing different type of scales will contribute to the creation of a standard want- need scale. General validity of a scale will determine whether students have won the basic knowledge and skills of the economy or not. Also with such a scale, basic economic knowledge is to be imparted to children, in the scope of social studies and other courses, is likely to reach that objective can be tried.

This study has some limitations that should be taken into consideration. Firstly, the study was conducted to several cities within Turkey. Therefore, generalizing of the scale can be risks in other cities and other countries. Secondly, the study was used student sample. Thus, the results can be

verifies on different sample characteristics. Lastly, the scale can be measured only want and need concepts. Further research should examine the scale reliability and validity

Considering the importance for children to be trained as conscious individuals, it is required to develop assessment instruments for measuring these features and precisely measure these features. Because children also have the right to speak in family expenditures today. In this context, it is considered important to determine the wants and need perceptions of children in economic issues, as well.

Examining the relevant literature in Turkey, there is no scale aimed at determining the wants and needs of children in economic issues. This scale is believed to determine the wants and need perceptions of children, and prepare convenient training programs for them.

As a consequence, the scale being presented in this study could enable us to determine the wants and need perceptions of secondary school students.

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# İlk ve Ortaokul Öğrencileri için İstek-İhtiyaç Algı Ölçeğinin Geliştirilmesi


**ÖZET**

***Amacı ve Önemi:*** Bu çalışmanın amacı, ilköğretim düzeyinde olan öğrencilerin istek ve ihtiyaç kavramlarını algılama düzeylerini belirlemeye yönelik bir ölçek geliştirmektir. Geliştirilen bu ölçek ile çocukların istek ve ihtiyaç algılamalarının farklı alanlar bağlamında ortaya konabilmesi ve bu yolla çocuklara yönelik verilecek olan eğitimlerde daha fazla bilinçlendirilmeleri mümkün olabilecektir.

***Yöntemi:*** Bu doğrultuda ölçek geliştirme prosedürünün her bir adımı sırasıyla gerçekleştirilmiştir.
Bulgular: Öncelikli olarak üçüncü, beşinci ve sekizinci düzeyde okuyan 80 öğrenciye 3 tane açık uçlu soru yöneltilmiş ve 63 unsur ortaya çıkmıştır. Daha sonra elde edilen 63 unsur, dört farklı uzmana gönderilerek unsur sayısı uzmanların değerlendirilmesi sonrasında 43'e düşürülmüştür. Başlangıç ölçeğini geliştirmek için Ankara'da yaşayan ve aynı düzeyde okuyan 250 öğrenciye ön uygulama yapılmıştır. Öğrencilerin verdikleri yanıtlar incelendiğinde 29 kişinin yanıtının geçersiz olduğu görülmüştür. Geriye kalan örneklem sayısı üzerinden açıklayıcı faktör analizi yapılmıştır. Analiz sonuçlarına göre, 28 unsurdan oluşan iki faktör yapısı ortaya çıkmıştır. İki faktörlü model, toplam varyansın %32'sini açıklamaktadır. Bu faktörlerin Cronbach Alpha (İç Tutarlılık) değeri, kritik değer olan 0.70'in üzerindedir.

Ölçek geçerliliği, farklı bir örneklem kullanılarak gerçekleştirilmiştir. Örneklem, Ankara, Kastamonu, Yozgat ve Ardahan'da yaşayan ve 3, 5, 8. sınıfta okuyan 850 öğrenciden oluşturulmuştur. Ancak katılımcıların ankete verdikleri yanıtlar incelendiğinde 60 tane anketin özensiz doldurulduğu tespit edilmiştir. Bunun üzerine bu anketler, analize dâhil edilmeyip, doğrulayıcı faktör analizi 790 gözlem üzerinden gerçekleştirilmiştir. Katılımcılardan 391 tanesini kız öğrenciler, 399 tanesini erkek öğrenciler oluşturmaktadır. %53'ünü sekizinci sınıf öğrencileri oluştururken,, yaklaşık olarak %34'ü şehir merkezlerinde yaşamaktadır.

Doğrulayıcı faktör analizi sonucunda; istek yapısı için uyum iyiliği indeks değerleri; 2/sd = 1.68, p=0.000; RMSEA= 0.055; GFI= 0.931; AGFI= 0.901; CFI= 0.972 NFI= 0.928; NNFI= 0.966. İhtiyaç yapısı için uyum iyiliği indeksleri; 2/sd = 2.98, p=0.000; RMSEA= 0.095; GFI= 0.949; AGFI= 0.897; CFI= 0.941; NFI= 0.911; NNFI= 0.911'dir.

Ölçüm modeli için uyum iyiliği indeksleri; 2/sd = 1.557, p=0.000; RMSEA= 0.050; GFI= 0.894; AGFI= 0.867; CFI= 0.953; NFI= 0.873; NNFI= 0.946 olarak bulunmuştur. Bu sonuçlar, verinin analiz için uygun olduğunu göstermektedir. Ölçüm modelinin güvenilirliği, Cronbach Alpha ve Bileşik güvenilirlik açısından değerlendirilmiştir. Alt boyutlar için Cronbach Alpha ve Bileşik güvenilirlik, kritik değerin üzerindedir. Yapıların faktör yükleri 0.42-0.66 arasında değişmektedir. Bu değerler, yapı geçerliliğinin olduğunu göstermektedir. Ayırt edici geçerlilik ise ki-kare fark analiziyle değerlendirilmiştir. Analiz sonucunda iki yapının ayırt edici geçerliliği olduğu bulgusuna ulaşılmıştır.

***Sonuç:*** Analizler sonrasında ölçeğin istek yapısının 12 maddeden, ihtiyaç yapısının 7 maddeden oluştuğu görülmektedir. Bu çalışma bazı sınırlılıklara sahiptir. İlk olarak, çalışma Türkiye'nin birkaç şehrinde gerçekleştirilmesidir. Bu nedenle ölçeğin diğer şehirler ve ülkeler için genelleştirilmesi uygun değildir. İkinci olarak bu çalışmada ilköğretimin farklı düzeylerinde yer alan gençlerin istek-ihtiyaç algılamasını ortaya çıkaramaya yönelik olarak gerçekleştirilmiştir. Bu bulgular, farklı örneklem karakteristiklerine sahip kişiler üzerinde doğrulaması yapılabilir. Son olarak da bu ölçekte, yalnızca ihtiyaç ve istek kavramlarına ilişkin yapılar ortaya çıkarılmaya çalışılmıştır. Gelecek araştırmalar, ölçeğin güvenilirliğini ve geçerliliğini doğrulamaya yönelik olarak gerçekleştirilebilir.