

ADAPTATION OF THE EDUCATION PARTICIPATION SCALE (EPS)
FOR PARTICIPANTS IN LEVEL II LITERACY COURSES

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ABSTRACT

This thesis concerns the adaptation of the Education Participation Scale (EPS), which was developed by Boshier, and last revised by Boshier (1991), for implementation in Turkish adult literacy programs. The aim of the study was to conduct research on the reliability of the adapted version of the EPS. The study was carried out in two phases. First, the translational equivalence was established and then the reliability of the Turkish form of the EPS was studied.

The translational equivalence study included forward-translation of the instrument from English to Turkish followed by back-translation from Turkish to English and reconciliation sessions with experts. A test/re-test with the original English form and the translated form in Turkish was conducted by administering the alternate forms of the instrument to a group of 96 bilingual participants of adult education courses, mostly advanced courses of English as a foreign language. High factor-by-factor Pearson product-moment correlations (ranging from .724 to .942) between the scores of the two administrations demonstrated translational equivalence of the Turkish translation of the EPS.

In the second part of the study, the final Turkish translation of the instrument was administered to 172 participants in level II literacy courses at eight different People's Education Centers (PECs) in the province of Istanbul to ascertain factor structure and internal consistency. Factor analysis yielded seven factors that were comparable to Boshier's factor structure. The names given to the factors by Boshier (1991) were retained for this reason. The factors were Communication Improvement, Social Contact, Educational Preparation, Professional Advancement, Family Togetherness, Social Stimulation and Cognitive Interest. The internal reliability of the

adapted version of the EPS (Cronbach's alpha) was calculated and it was satisfactorily high, .897 for the instrument.

A test/re-test of the Turkish version of the instrument was conducted at a level II literacy course, during field-testing with a two week interval, to establish that the new form is reliable across time. High correlations at the factor level, ranging between .887 and .991 (Pearson product-moment), were obtained between the scores of the two administrations of the Turkish form of the EPS to 27 level- II-literacy-course participant at the Küçükçekmece PEC. Overall, the study indicated that the Turkish form of the EPS was reliable with regard to internal consistency and stability over time and it had a factor structure that was very similar to the English version of the instrument.

ÖZET

Bu tez Boshier tarafından geliştirilen ve en son 1991 yılında yine Boshier tarafından gözden geçirilen Eğitim Katılma Ölçeği'nin (EKÖ) Türkiye'de okuma-yazma kurslarında kullanılmak amacıyla Türkçeye uyarlanması üzerinedir. Bu çalışmanın amacı Türkçeye uyarlanan ölçeğin güvenilirliğini araştırmaktır. Çalışma iki temel aşamadan oluşmaktadır. Öncelikle çevirinin orijinal metinle eşitliği sağlanmıştır. Daha sonra ölçeğin bu yeni çevirilen formunun güvenilirliği araştırılmıştır.

Çalışmanın dilsel eşitlik kısmında ölçek öncelikle İngilizceden Türkçeye çevrildi. Daha sonra geri çevirme tekniği kullanılarak ilk çevirinin kalitesi sınıandı. Çevirinin son şeklini alma sürecinde uzman görüşünden faydalanıldı. Çevirinin geçerliliği (İngilizce formla eşdeğerli olup olmadığı) EKÖ' nün orijinal formunun ve Türkçe çevirisinin çeşitli yetişkin eğitimi faaliyetlerine (çoğunlukla ileri seviye İngilizce kurslarına) katılan 96 yetişkine uygulanması suretiyle incelendi. İki uygulama arasında faktör bazında yüksek çıkan Pearson product-moment korelasyonları (.724 ile .942 arasında) Türkçe çevirinin orijinal İngilizce formla eş değerde olduğunu gösterdi.

Çalışmanın ikinci aşamasında, Türkçe formun faktör yapısını ve iç tutarlığını ölçmek amacıyla, çevirinin en son hali İstanbul il sınırları içindeki sekiz farklı halk eğitim merkezinde ikinci kademe okuma-yazma kurslarına katılan 172 yetişkine uygulandı. Faktör analizi Boshier'in çalışmasındaki faktör dağılımına benzeyen yedi faktör ortaya çıkardı. Bu yüzden faktörlere Boshier'in (1991) verdiği isimler kullanıldı. Elde edilen faktörler sırasıyla Eğitimsel hazırlık, Sosyal Temas, Mesleki Gelişim, Aile Birliği, Sosyal Teşvik ve Öğrenme İlgisi'dir. Ölçeğin iç tutarlılığını

arařtırmak için Cronbach's alpha hesaplandı. Elde edilen yüksek sonuç (.897) ölçeğın iç tutarlılıđının olduđunu gösterdi.

EKÖ'nün Türkçe formunun zaman içinde deđişmezlik (stability) deđerlerini saptamak üzere, ölçek Küçükçekmece Halk Eđitim Merkezinde ikinci kademe okuma-yazma kursuna katılan 27 katılımcıya iki hafta arayla iki kez uygulandı. Faktör bazında elde edilen yüksek Pearson product-moment korelasyonları (.887 ile .991 arasında) EKÖ'nün zaman içinde deđişmezlik geçerliliđinin olduđunu ortaya koydu. EKÖ'nün bu çalıřmayla adapte edilen Türkçe formunun içsel ve zaman içinde deđişmezlik (stability) geçerliliđinin olduđu ve ölçeğın faktör yapısının İngilizce orijinaline çok benzediđi sonucuna varıldı.

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1. INTRODUCTION

In the simplest terms the word “literacy” means to be able to read and write. It is one of the very basic skills necessary for survival in the modern world to do the simplest errands such as buying food from local market or using the public transportation systems. Although there are individuals in Turkish society, or probably in any society, who have found ways to cope with not knowing how to read and write, being literate is such an indispensable part of everyday life that those people would have to rely on other people around them to perform at least some of the tasks of their daily routine (Fingeret, 1983).

When we look at the literacy situation in Turkey, despite the combined efforts of the Ministry of National Education (MONE) and some Non-governmental organizations (NGOs), the picture is not very bright. First of all, available information regarding the literacy skills of the people is limited to population census data. Census data takes literacy as a condition that adults either have or do not have, and gives the number of illiterate members as a percentage of the population. The problem is that such statistical analyses typically define literacy in terms of the number of years of schooling completed, and by the self report of the people interviewed for the census, and there is no way to know if what they have reported reflects their true abilities.

Moreover, some people might even decide not to report their true literacy status as they are simply uncomfortable revealing such personal information to a stranger, the government official in this case, or they fear that they might be forced to attend a local literacy course in the future (Nohl & Sayılan, 2004). Therefore, there might be more illiterate people in Turkey than suggested by population census data. Yet, the following statistics still give an idea about the issue in Turkey.

Table 1.1

Literacy and Schooling Status of the Turkish Population According to the Results of the Year 2000 Census: Population 6 Years of Age and Over

	Total Number of People 6 Years of Age and Over	Illiterate	Literate	Literate but No School Completed	Literates Completed at Least Primary School
Total	59,859,243	7,589,657	52,259,381	12,886,331	39,359,807
Male	30,245,445	1,857,132	28,384,266	6,512,324	21,869,477
Female	29,613,798	5,732,525	23,875,115	6,374,007	17,490,330

Source: State Institute of Statistics, Prime Ministry. 2003.

According to the data presented, 87.3% of the population is literate. The percentage of males who are literate is 93.9%, while only 80.6% of females stated that they could read and write. The inequality that is apparent here between men and women in terms of being literate also exists between the west of the country and the east, between the cities and smaller districts or villages and between the rich and the poor (Nohl & Sayılan, 2004; Ulusavaş, 94).

Moreover, 12,886,331 people (21.53% of the total population) over the age of 6 stated that they were literate, yet did not complete school. As stated earlier, it is highly questionable if we can depend on the self-report of individuals about their literacy skills. Moreover, even if it is assumed that these people are literate, it is a sad fact for the Turkish educational system that more than 20 million people, 7.5 million of which state that they are illiterates, in the country have not gone through compulsory schooling.

The relatively low schooling ratio for basic education, 91.95% for the year 2004 (ISI, 2004), indicates that illiteracy is not only a problem of today. It is going to

be a challenge in the future to teach literacy skills to low-literate or illiterate adults who dropped out of school before attaining literacy skills or never had the chance to go to school. The fact that schooling ratio is even lower for girls means that the inequality between men and women in terms of literacy will still exist. Hence, it appears that the MONE and NGOs will continue designing and offering adult literacy courses, which will continue to assume a crucial role in increasing the literacy level in the country.

The most important opportunities for illiterate adults in Turkey to learn how to read and write are the free-of-charge literacy courses provided by state-funded People's Education Centers (PECs). PECs and some NGOs such as the Mother-Child Education Foundation (MOCEF), the Rotary Club and the Association for Supporting Contemporary Life (ASCL) have recently started working together to reach out to these people. The cooperation is not limited to planning outreach programs. In addition, the MOCEF, the Rotary Club and the ASCL are cooperating with PECs in the service of literacy courses to the public, and they also have been given permission to create their own curricula (Nohl & Sayılan, 2004).

No matter who provides the materials or the curriculum, only government-funded PECs offer the official certificates after the course has finished. There are two levels of literacy courses. While level I courses aim to enable the participants to read and write and perform basic arithmetic, level II courses educate low-literate adults towards a primary school certificate, which is the equivalent of the first five years of compulsory basic education. In August 1997 the parliament approved a new Basic Education Law (4306), which extended the duration of compulsory schooling from five to eight years. As a result, successful completers of the level II literacy courses have to attend open schooling (açık öğretim) if they want to get their basic education

diploma. Yet, this does not decrease the key role that level II literacy courses play since the only way to get the basic education diploma is to get the primary school certificate first.

Participation in literacy courses is quite low despite the number of people who are illiterate. Moreover, as suggested by Table 1.2, most of the completers of the level I literacy course do not actually go on with the level II course to receive the primary school certificate. This is an alarming statistic for two main reasons; first, as mentioned above, 21.53% of people in Turkey have not gone through compulsory education, and level II courses are their only opportunity to complete their basic education. Secondly, when governments and donors finance literacy programs, they do so with the expectation that once made literate, people will stay literate. But, that expectation holds true only if reading functions have become largely automatic, and this requires instruction over an extended period of time (Abadzi, 2003). Hence, level II courses provide new literates with the opportunity to practice and improve their new reading skills.

Table 1.2

Enrollment Numbers for Level I and Level II Literacy Courses for 2000/01 in Turkey

Kind of Course	Number of Courses	Number of Participants		
		Total	Male	Female
All Courses	6,145	122,661	67,586	55,075
Level I	4,663	88,679	44,347	44,332
Level II	1,482	33,982	23,239	10,743

Source: State Institute of Statistics, Prime Ministry. 2001.

According to the data presented in Table 1.2, it seems that only one out of three completers of the level I literacy course carries on with level II. However, the

actual condition is probably even worse, as level I completers are not the only individuals who are eligible to take level II. It is possible for primary school drop-outs who have completed the first three years of schooling to start at level II without attending level I, and applicants who can pass the PEC test assessing literacy skills prior to the beginning of the course may skip level I as well. Therefore, many participants in level II courses have never taken part in the level I course. In addition, it appears that there are more men than women in the level II course, which does not help the inequality in terms of literacy skills between the two genders.

Durgunoğlu, Öney, and Kuşçul (2003) studied the literacy skills of people who had participated in the level I Functional Adult Literacy Program (FALP) offered by the MOCEF and, based on the failure of the participants to acquire reading and writing skills in 90 hours, they concluded that:

A 90-hour course is unrealistic. For participants who already have some basic proficiencies acquired on their own (such as recognizing letters or even recognizing some words), FALP produced immediate and longer-lasting gains. However, 90 hours were not enough to form a literacy base in participants who had very little experience with schooling or literacy. (p. 34)

This conclusion implied that either the duration of the level I courses should be extended or completers of level I courses should be encouraged to participate in level II courses. Based on this data, the MOCEF actually extended the program to 120 hours (Durgunoğlu & Öney, 2002). However, at PECs, level I courses are still 90 hours. The fact that most of the participants of level I courses choose not to attend level II courses means that they are missing the chance to practice their newly acquired skills in a classroom setting.

It seems that simply providing level II literacy courses for successful completers of the first level I courses and for drop-outs from primary school is not enough to motivate people to participate. Evaluating the effectiveness of level II

literacy courses in offering a certificate equivalent to a primary school diploma, Okçabol (1990) stated that, even during literacy campaigns, less than five percent of the new literates continued onto the level II courses and received a diploma.

Enrollment in level II courses should be increased, if the eradication of illiteracy is desired in Turkey. Level I and II literacy courses are offered at every PEC in the country. In places where there is not a local PEC, the courses are offered in a building that is chosen by the closest PEC, which provides the instructors as well as the learning materials. From this perspective, it seems that anybody who wants to learn how to read and write can do so by simply applying to the nearest PEC. Moreover, completion of the two-level literacy program offered by PECs also means being able to attain a basic education diploma in the end, which is necessary to perform some of the daily tasks in an adult's life such as getting a driver's license. Yet, the majority of people who finish level I literacy courses prefer to refrain from enrolling in level II literacy courses.

Thus, Turkey is faced with the problem that illiterate members of the society do not all take advantage of the widely available literacy courses. The success of literacy campaigns or other such efforts to make the society more literate depends heavily on determining the factors that influence the decision of illiterate people to participate in literacy courses. Therefore, it is necessary to understand the reasons that motivate adults to participate in literacy education, as it is crucial to the development of programs that meet their needs and aspirations. However, the researcher has not found a single reliable survey instrument or interview form in Turkish that is designed to collect data regarding the reasons that people state as their motivations to participate in level II literacy courses, or level I literacy courses for that matter.

In light of the above stated problem, the purpose of this study is to adapt a survey instrument to be used with participants in level II literacy courses. Deciding on the method to study the motivational orientations of participants in adult education activities, including literacy courses, is very critical. The necessary sample size and research logistics require that the data be gathered with an instrument that would allow for quantification. In addition, the survey instrument would need to be adapted into the Turkish setting for the purposes of this study. In order to make comparisons between the results obtained from this study and similar international studies, a survey instrument that has been used in many countries and in many types of adult education programs was also desired.

In fact, various survey instruments have been developed to study the relationships between motivational orientation scores, obtained using these instruments, and other variables, such as age and socio-economic status, so as to determine variables that would account for the participation behaviors of adults in educational activities. The most enduring, often used, and psychometrically checked instrument is the Education Participation Scale (EPS) (Darkenwald & Valetntine, 1982). Boshier (1971) aimed to develop an instrument to study reasons of participation in a way that would allow cross-cultural and inter-institutional replication. By 1985, the EPS had been used in New Zealand, Europe, North America and Africa. Boshier and Collins (1985) estimated that about 60,000 participants had completed some form of the EPS factor structure of which is well-established. Boshier, (1991) stated that the instrument was extensively revised in early 90's to make it more appropriate for international participants and low-literates (see Appendix A for the EPS).

At least five reasons can be found for adapting tests:

1. Very often adapting a test is considerably cheaper and faster than constructing a new test in a second language.
2. When the purpose for the adapted test is cross-cultural or cross-national assessment (such as with many credentialing exams), an adapted test is the most effective way to produce an equivalent test in a second language.
3. There may be a lack of expertise for developing a new test in a second language.
4. There is a sense of security that is associated with an adapted test more so than a newly constructed test especially when the original test is well-known.
5. Fairness to examinees often results from the presence of multiple language versions of a test (Hambleton & Patsula, 1998 p. 155).

In this case, the adaptation of the EPS was preferred over developing a new instrument because of a combination of the reasons mentioned above. Firstly, the current researcher has not done any instrument development, thus it seemed more plausible to work with a psychometrically sound instrument rather than developing a new instrument. Moreover, there is relatively more research done employing the EPS, in comparison to other survey instruments, in determining the reasons for participation in adult education activities (Boshier, 1991), thus the results of this research might give some insight into the participation issue across cultures.

1.1 Purposes of the Study and Research Questions

This study has two main purposes, which are:

1. to translate and adapt the EPS instrument, which was developed by Boshier, and last revised by Boshier (1991), for implementation in Turkish adult literacy programs, and
2. to conduct research on the reliability of the Turkish version of the scale.

To reach these purposes, the following research questions directed the study:

1. is the adapted version of the EPS an equivalent of the original English version both literally and conceptually?

2. is the adapted version of the EPS reliable in terms of internal consistency and stability over time?
3. what are the demographic characteristics of literacy course participants in level II literacy courses?

1.2 Significance of the Study

It can be argued that it is not necessary to study the reasons people have in mind to be participating in literacy courses. Obviously, someone who is enrolled in a literacy course is there to learn how to read and write. However, such a perspective does not consider the complexities of motivational orientations. Inferring the motivations of people based on the educational activities that they attend is not an effective way to study motivations, as people sometimes enroll for reasons that are not related to the course content at all (Boshier, 1971; Burgess, 1971; Houle 1961).

The Turkish adaptation of the EPS will provide practitioners and researchers with a survey instrument that is reliable and valid in order to investigate the reasons that people state to be participating in level II literacy courses in Turkey. Determining the reasons that people state for their participation in literacy courses, more specifically in level II courses, is needed, as being aware of these reasons can help practitioners and policy-makers create new programs that will attract more adult learners to participate in such courses. The diversity of learners and their motivations can also be considered by program planners and recruiters in developing outreach messages that appeal to different kinds of potential learners. The results can be used by practitioners in trying to obtain a better understanding of the population to be served.

Although studies have been done regarding the motivational orientations of participants in general adult education courses at PECs in Turkey, the researcher has not been able to reach any studies that describe the characteristics of the participants in literacy courses that focus on their motivational orientations. Therefore, this research will be useful in terms of providing practitioners and other researchers with first-hand data regarding the characteristics of learners in literacy courses and their motivational orientations. Furthermore, findings would make it possible to give a profile of a typical literacy education participant.

2. LITERATURE REVIEW

The successful adaptation of the EPS for low-literate participants of literacy courses in Turkey would not be possible without understanding the key concepts involved in the issue first. Therefore, research regarding literacy education, as well as educational participation, is presented in this section. Special focus is given to the areas where the two concepts overlap. The review of the literature begins with literacy education in general and is narrowed down to current trends in adult literacy education in Turkey. The participation behaviors of adults, with special reference to literacy education, are discussed in the secondarily. Lastly, issues related to measurement, and the development (1971) and revision of the EPS by Boshier (1991) are presented.

2.1 Literacy Education

This chapter starts with an outline of the evolution of literacy as a concept, emphasizing the difficulty in creating a definition that is valid across time and different cultures. Next, issues specific to the literacy education of adults are presented. The outcomes of literacy education and, in specific, adult literacy education, are examined with the intention of trying to determine the reasons why governments, international organizations and local NGOs are investing in adult literacy courses. The discussion ends with a brief history of literacy education in Turkey, followed by a general evaluation of the current practices in the area as well as information regarding available literacy courses offered for adults.

2.1.1 Definitions of Literacy

Although it seems very easy to define literacy, as a concept it has proven to be both complicated and dynamic, continuing to be interpreted and defined in a variety

of different ways (Abadzi, 1994; Holme, 2004; Mace, 1992; UNESCO, 2005). This is especially true when it is considered that literacy is perceived in a unique way in every country as it is necessary to define literacy within the context in which it exists (Mace, 1992).

Trying to define the term examining its opposite, illiteracy, creates even more problems as illiteracy, or being illiterate, evokes strong feelings among people. The researcher has personally known some illiterates who stated that they were embarrassed that they could not read the prices of the fruit in the weekly marketplace or that, in an urban setting, they felt awkward asking the driver about the bus route clearly written on the bus. Defining illiteracy is also problematic because it depends on the way it is recognized by literate members of the society. The way literate people characterize an illiterate person that is working with them at the same company, for example, might give clues about the definition of the term illiteracy in that culture.

Another issue surrounding the term literate is that it changes from person to person and being literate is not necessarily static. For example, if two people are literate, it does not mean that they possess the same level of literacy skills, and a literate person can always improve their literacy skills. The indeterminate nature of literacy was pointed out in one of the early United Nations Educational Scientific and Cultural Organization (UNESCO) reports in 1957 (cited in Holme, 2004):

Literacy is a characteristic acquired by individuals in varying degrees from just above none to and indeterminate upper level. Some individuals are more or less literate than others but it is really not possible to speak of illiterate and literate persons as two distinct categories. (p. 11)

If it is not possible to reach a universal definition of literacy (Mace, 1992), why is it critical to try to describe what literacy is and who can be considered as literate person? The answer to this question suggested by UNESCO (2004), which has been at the forefront of international literacy efforts since its foundation in 1946, is:

The way literacy is defined influences the goals and strategies adopted and the programs designed by policy-makers as well as the teaching and learning methodologies, curricula and materials employed by practitioners. Its definition also determines how progress or achievements in overcoming illiteracy are monitored and assessed. (p.12)

No matter how difficult it is to define literacy, for the purposes of literacy campaigns, research studies and international comparisons, a simple, straightforward and easily measurable definition of literacy is needed. Many of the common definitions are the result of national or international efforts to measure the literacy levels of populations. One of the earlier examples of this is the definition of literacy used by UNESCO in the middle of the 20th century to carry out international literacy studies (UNESCO, 2004); “A person is literate who can, with understanding, both read and write a short simple statement on his or her everyday life” (p. 12). This is a very simplistic definition, but its aim was to standardize international statistics and, considering the huge difference between countries in terms of literacy, it was not easy to come up with a working definition.

To be able to compare outcomes of literacy programs in an international context, it was mandatory to examine if the ease of acquiring literacy varies from one language to another. In order to throw some light on this question, UNESCO’s ‘fundamental education’ program in 1956 included, among other activities, an international study of the teaching of reading and writing. One of the conclusions of this study greatly influenced subsequent international action for the promotion of literacy, as it proposed a new definition of literacy (UNESCO, 2000). According to this definition the only meaningful standard of literacy is a functional one; “a person is functionally literate when he has acquired the knowledge and skills in reading and writing which enable him to engage effectively in all those activities in which literacy is normally assumed in his culture or group” (UNESCO, 2000, p. 30).

A slightly different version of the definition of functional literacy from UNESCO came in 1962; "a person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his/her group and community and also for enabling him/her to continue to use reading, writing and calculation for his/her own and the community's development" (Bhola, 1995, p. 8). The distinguishing characteristic of this definition from the earlier definitions is the emphasis on the relationship between literacy and progress.

The World Conference of Ministers of Education on the Eradication of Illiteracy met in Tehran in 1965 to consider, in particular, the way that the eradication of illiteracy would contribute to the social and economic progress of nations. This conference indicated a major shift in the international definition of literacy. The main focus was not only the individuals' literacy but the relationship between the literacy status of individuals and their places in the socioeconomic development of their country.

Rather than an end in itself, (functional) literacy should be regarded as a way of preparing man for social, civic and economic role that goes far beyond the limits of rudimentary literacy training consisting merely in the teaching of reading and writing. The very process of learning to read and write should be made an opportunity for acquiring information that can immediately be used to improve living standards; reading and writing should not only lead to elementary general knowledge but to training for work, increased productivity, a greater participation in civil life and a better understanding of the surrounding world, and should ultimately open the way to basic human culture. (cited in UNESCO, 1976 p. 10)

Although the term functional literacy was very popular with UNESCO at the time of the Tehran conference, it has been criticized by many since then. Bhola (1995) points out that "In the mid-1960s, in trying to cope with the development hopes of Third World nations, *economic functionality* came to be center stage, though lip-service was paid also to social, and cultural needs of human beings" (p. 6). According to this view, in a way, the Teheran Conference of 1965 attempted to establish functional

literacy as the main guide of literacy efforts world-wide and economic motivations were to be at the core of literacy programming.

Definitions of functional literacy in Literacy Dictionary (1995) give an idea about the common criticism regarding the concept; it is defined as: “A level of reading and writing sufficient for everyday life but not for completely autonomous activity” (p. 106). This definition suggests that functional literacy is limited to promoting a functional economic role of individuals in society rather than providing the necessary skills to be independent members of society. The second definition provided underlines the relationship between functional literacy and the workplace; “The application of skills and knowledge or reading and writing to adult or near adult responsibilities in the work place” (p.106).

Another issue surrounding the term functional literacy is the difficulty of determining what should be the components of a functional literacy curriculum. Valentine (1986) suggests that the specification of those common literacy demands which are applicable on the societal level is not a possible task considering the diversity of adults living in different environments. It cannot be identified for sure which literacy demands are appropriate and meaningful for different individuals. He further suggests that the development of a valid and uniform national curriculum for functional literacy is equally impossible.

Yet, functional literacy is still a term that is being used very commonly around the world. In Turkey, for instance, the term has been used by MOCEF to describe the level I literacy course that they have been offering to adult learners for nearly a decade. The program was prepared by Durgunoğlu, Öney and Kuşçul in 1996 and it was named Functional Adult Literacy Program (FALP). Examining the relationship

between functional literacy and the empowerment of women, Kağıtçıbaşı, Gökse, and Gülgöz (2005) describe functional literacy in the following manner:

Functional literacy is not just a skill or knowledge, and its acquisition encompasses more than learning a number of technical skills. Being functionally literate is more than simply decoding script, or producing essays; it is also taking on the identities associated with these practices. Functional literacy is an emancipatory practice that requires people to read, speak and understand a language. In this sense, functional literacy is a competence that goes beyond grammar and semantics rooted in everyday exchanges. Such conceptualization emphasizes the linkages between reading, writing, culture, economy and political system. (p. 472-473)

This recent Turkish definition is an example of how the same term, functional literacy, has been defined differently in different time periods and in different cultures. The fact that the above definition refers to emancipation of adult learners as an outcome of functional literacy, and yet this aspect has not been pointed out in any of the definitions of functional literacy mentioned earlier in this paper indicates the different perceptions of the concept. In short, it seems that it is impossible to talk about a single understanding of the term.

Holme (2004) lists three core assumptions that functional literacy is based on, and states that whether functional literacy is of any value depends heavily on whether these assumptions are valid themselves in the first place. These assumptions are: “(a) Literacy has an economic impact; (b) literacy can be measured according to what it allows us to do; (c) a literacy shaped by the socio-economic opportunities that it affords us is a necessary and sufficient educational goal” (p. 33). Examining the available research scrutinizing the interaction between literacy and education, he criticizes that although literacy rates and economic growth rates exist in a complex and mutually supporting relationship, it is not possible to talk about a direct cause-effect relationship at all. Moreover, he adds that “it (functional literacy) treats the society in which we exist as an order that is not open to challenge, preparing us for the

efficient but uncritical consumption of the texts that this social order produced” (p. 34).

Holme’s criticism concerning uncritical consumption of the texts is, indeed, one of the points that Brazilian educator, Paulo Freire, had pointed out earlier about the failures of the liberal understanding of literacy education. Contrary to functionalists, Paulo Freire (1970, 1987) argued that literacy is a form of critical consciousness, which enables the marginalized to modify or recreate the power dynamics of the country in which they are living in their favor. In *Pedagogy of the Oppressed*, Freire (1970) pointed out the integral role that literacy education can play in reproducing or overcoming oppression. Instead of seeing reading and writing skills as mere preparation for work and further education, Freire understood the learner’s relation to literacy as the origin of genuine dialogue and active participation in communication. Genuine dialogue requires the *word* or *praxis*, which in Freire’s terms has two aspects; reflection and action. Freire argues that to transform the world one needs to speak “true word” which should have both of these dimensions as otherwise reflection without action is only verbalism, and action without reflection is activism (p. 75).

According to Freire conscientization is another key characteristic of the kind of literacy education that would liberate new literates rather than keep them in the constraints of the existing socioeconomic structure. The term actually comes from the Portuguese term conscientização which refers to “learning to perceive social, political, and economic contradictions--developing a critical awareness--so that individuals can take action against the oppressive elements of reality” (Freire, 1970, p. 19, translator's note). Conscientization comes into existence by critical reflection and, in the teaching/learning process of literacy education, learners should be helped to reach

conscientization. In *Pedagogy of the Oppressed* (1970), Friere disapproved of what he called the banking concept of education, in which the student is viewed as an empty account to be filled by the teacher. On the contrary, he believes that for literacy education to be successful in liberating the oppressed, the student should be allowed to participate in the process to reflect upon the realities of his own life. Hence, in Freire's literacy classroom, the teacher starts with the realities of the students' daily life to introduce the lesson.

Freire underlined the political nature of education in his work, as well, and particularly focused on the role of liberal literacy education in creating the existing social structures over and over again rather than 'emancipating' the individual. The existing social structures Freire refers to are "collective experiences that function in the interest of the dominant groups, rather than in the interests of the oppressed groups that are the object of its policies" (Freire and Macedo, 1987, p. 142). Hence, emancipating participants, in Freire's terms, implies helping them to transform themselves and the world around them in order to become the subject of their lives to act upon but not mere objects to be acted upon (Freire, 1970). Friere's definition of literacy summarizes his perception of emancipatory literacy:

Reading does not consist merely of decoding written word or language; rather, it is preceded by and intertwined with knowledge of the world. Language and reality are dynamically interconnected. The understanding attained by critical reading of a text implies perceiving the relationship between text and context. (Freire and Macedo, 1987, p.29)

New definitions of literacy are still being produced, especially for the purposes of literacy research. The International Adult Literacy Survey (IALS) is the first multi-country and multi-language assessment of adult literacy. IALS has developed scales of literacy performance so that literacy among people with a wide range of abilities can be compared across cultures and languages. The first survey was conducted in

1994 in seven countries: Canada, Germany, the Netherlands, Poland, Sweden, Switzerland, and the United States. Since then, five more countries, Australia, Belgium (Flanders), Ireland, New Zealand and the United Kingdom, have joined the survey, increasing the total number of countries in IALS to twelve. In the final report of the most recent IALS (OECD, 1997), it was stated that literacy cannot be narrowly defined as a single skill that enables people to deal with all types of text. People in industrialized countries face many different kinds of written material every day, and they require different skills to understand and use the information. To reflect this complexity, IALS differentiated between three categories of literacy:

Prose literacy – the knowledge and skills needed to understand and use information from texts, including editorials, news stories, poems and fiction;
Document literacy – the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables and graphics; and
Quantitative literacy – the knowledge and skills required to apply arithmetic operations, either alone or sequentially, to numbers embedded in printed materials, such as balancing a cheque-book, figuring out a tip, completing an order form, or determining the amount of interest on a loan from an advertisement
(OECD, 1997, P. 14)

When UNESCO's early definition of literacy, "a person is literate who can both read and write a short simple statement on his or her everyday life" (UNESCO, 2004, p.12), is compared with OECD's (1997) definition for IALS, the constantly changing nature of literacy, in time and across cultures, can be illustrated. The UNESCO definition is an international one and it meant to be extensive enough to include developing and developed countries at the same time. However, the above OECD definition focuses more on the life of an individual living in an industrialized society.

UNESCO is currently advocating a new "plural definition" of literacy. A proposed operational definition for measurement purposes was formulated during an international expert meeting in June 2003 at UNESCO. It states:

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. (UNESCO, 2004, p. 13)

The above plural definition of literacy puts value on the contexts of literacy and emphasizes the changing nature of these contexts. However, it still needs to be determined how to make policy that reflects the changing literacy realities of a knowledge age, accurately identifies literacy needs, and determines the successes and failures of policy solutions attempting to meet those needs.

Moreover, none of the above definitions or any definitions of literacy are without problems. Bhola (1995) mentions three major problems about definitions of literacy and their implications for real life practice; first, the concepts in the definitions have been difficult to operationalize for real-life literacy activities; second, it has not been always possible to integrate the multiple streams of literacy, functionality and awareness in one integrated curriculum, and to find teachers who could teach all the three components with confidence and competence; and third, these definitions do not give us the criteria needed for measurement of literacy.

In spite of the difficulty of coming up with an effective definition that would be meaningful for most societies in the world, or even for most of the individuals in a given society, it seems that the attempts to define literacy will continue, as it would not be possible to design and implement a literacy course without identifying the characteristics of a literate person first. The evolution of the term “literacy” over the years is an indication that new challenges presented by the modern way of life will keep modifying the definition of the term in the future as well.

2.1.2 Adult Literacy: Considerations for Adult Learners

The term adult literacy might mean the education of people who have an interest in wanting to be able to read and write better, or it might also mean the education of people who cannot read and write at all. It is generally assumed that while majority of adults participate in literacy courses to improve their literacy skills in developed countries, in developing countries the main purpose of literacy education has been the teaching of basic reading and writing skills. Hence, the understanding or meaning of adult literacy as a concept also varies from culture to culture.

The characteristics that define adult literacy, differentiating it from children's literacy, need to be known before planning an adult literacy activity. Although there is ample research regarding the social, motivational and methodological aspects of adult literacy education, there is less research available related to cognitive skills (Abadzi, 2003; Durgunoğlu & Öney, 2002). For reasons that are uncertain, adult neo-literates may remain slow readers who read letter by letter, whereas children usually increase their reading speed and become automatic readers (Abadzi, 2003). Brain imaging studies show three regions activated in the brain during reading; two slower analytical neural pathways that are used by beginning readers and an express, instant word recognition pathway used by skilled readers. As a result, beginner readers, who must make conscious decisions about letters, can only read shorter sentences and may have to read a sentence more than once to be able to comprehend its meaning (Abadzi, 2000). She adds that the difference between adults and children regarding the outcomes of literacy education stems from the fact that "the instant word recognition pathway is not activated in adults as easily as it is in children" (p. 34).

In order for adults to actually utilize their literacy skills in life, reading needs to become automatic, implying that it needs to be fast, accurate, and effortless for

them to decipher words and letters. The short term memory (working memory) of an adult is extremely brief. During the reading process, short term memory is used to store the deciphered material. Educated people have a short-term memory of about 12 seconds and they can hold about 7 lexical items. Illiterates have an even briefer short-term memory (Abadzi, 2003). This means that if a low-literate adult takes 4 seconds to decipher a word, he or she can only read a three-word sentence successfully. However, when the sentence gets longer, it becomes impossible for new literates to make meaning out of letters and words as they forget what they have read at the beginning.

The reading speed of new literates in Burkina Faso was studied by means of recording their reading into a computer. It was found that most literacy graduates need 2.2 seconds to read a word and they are correct only 80-87 percent of the time (Abadzi, 2003). If it is very important to read as fast as possible so that valuable and limited short term memory is not going to be filled with incomprehensible data, what should be the goal at the beginning of the literacy courses regarding the reading speed of the learners then? Abadzi (2003) responds that learners should read a word in about 1-1.5 seconds with about 95 percent accuracy. At this rate, they decipher many script features automatically, and automatic readers do not normally lapse back into illiteracy.

Yet another aspect of the difference between children's literacy and adult literacy has to do with the nature of instruction in terms of learning environment and time available. While children acquire literacy in an extended period of time, adults are expected to acquire complex literacy skills in a much shorter time. Furthermore, children are in a school setting that asks for continued practicing of the acquired

skills, however adults usually return to settings in which the practice of literacy skills is rarely encouraged having finished the program (Durgunoğlu et al., 2003).

Children and adults have socio-cultural differences and life histories that make them quite different from each other and these differences are also reflected in the literacy education for these two different groups (Durgunoğlu & Öney, 2002). In a sense, this statement is valid not only for teaching literacy to adults but also teaching adult learners in general. Educators working with adults, more than those working with children, have to consider what the participants bring from their own personal experiences (Cross, 1981).

Lastly, Abadzi (1994) conducted a meta-analysis on the topic of literacy in general and cognitive correlations of age and performance. She concluded that, although there are differences in terms of life experiences between children and adults, based on available research no one is ever too old to learn sound letter correspondences or acquire basic literacy skills. However, “it is possible that functional literacy becomes increasingly difficult to acquire with age. The skill becomes permanent when its use is automatic, and adults may require much more practice to reach that state” (p. 7).

Another consideration is that educating adults is usually less effective and more costly than educating children (Durgunoğlu et al., 2003). This is not because educating an individual adult is more costly than educating a child, but problems like high drop-out rate and poor outcomes of literacy courses increase the cost per new literate at the end. Whether or not limited resources should be channeled from adult to child education is a decision that is left to individual governments and, in response to this dilemma, the influence of literacy on the social and economic life of a society will be briefly discussed in the next section.

2.1.3 *Why Literacy?*

It is very easy for an educated member of the society to assume that everyone must want literacy, and that illiterates should feel bad. However, in real life the situation is not that simple at all. There is not a huge demand for the widely available free-of-charge courses offered by state-funded PECs and NGOs. Therefore, it seems that learning how to read and write, or improving one's literacy skills, is a more complex phenomenon than could be described by a simple story of the illiterate achieving their life's ambition to become literate and living happily ever after.

Before carrying on with the relationship between adult literacy and the social and economic goals of a society, let's examine the influence of schooling, or literacy in particular, on the human mind. There is an affective aspect to being literate or illiterate. However, beyond the emotional connotations of the literacy status of an individual, there are also certain cognitive differences that come with being literate:

Learning a specific skill, such as reading and writing during childhood, creates profound changes in brain architecture. So, the difference between literates and illiterates does not just consist of a reading skill. Schooled people have neural networks that the unschooled lack. These are related to memory, attention span, data use, and ultimately decision making (Abadzi, 2003, p. 17).

It seems that the effect of schooling even presents itself in former drop-outs who decide to improve their literacy skills by participating in a literacy course. Having examined the correlation between previous schooling experiences of adult participants and their performances at the level I functional literacy courses offered by MOCEF, Durgunoğlu et al. (2003) concluded that schooling does have a large impact on the cognitive processing of individuals. Individuals in FALP, who had no, or limited, school experience, were more likely to rely on their own experiences rather than on what was in the text, even when they were discussing the text.

They further stated that schooling facilitates symbolic thinking. FALP participants initially had a lot of difficulty in representing concepts using a symbol like a simple drawing. However, this claim may or may not hold true as other testimony by FALP is of questionable validity. For example, the way they describe those participants of the course with no previous educational experiences is open to controversy; “The participants were also, as a group, insecure about their cognitive abilities and very quick to belittle their mental capabilities. These insecurities made some practices; such as ability grouping and comparing students with each other, counterproductive” (p. 34).

As for the positive effects of literacy on people’s social and economic lives, there are at least two different approaches to the issue. While one group of researchers and analysts stresses the key role that literacy plays in the lives of individuals as well as in the economic development of countries, some argue that the power of literacy to positively influence people and societies is exaggerated.

The report on the IALS (1997) argues on the basis of survey data that the benefits of literacy include, but are not limited to, employment, high income and the capacity to participate fully in society. It is stated that OECD countries receive measurable and substantial positive economic returns as a result of strong literacy skills and “data clearly show the percentage of people with relatively high incomes mounts with increasing levels of literacy proficiency” (p.41). The report also indicates that employment and unemployment are strongly related to levels of literacy proficiency. People who are more literate are likely to have better jobs, have higher levels of productivity and earnings, and are less vulnerable to long-term unemployment. Conversely, low levels of literacy can be equated with lower wages and more frequent periods of unemployment, thus contributing to poverty. In fact, the

IALS report points out that a high percentage of people on public assistance and in prisons have lower than average basic literacy skills.

Another conclusion of the report is the relationship between literacy and health. People with higher literacy skills may maintain better health through their ability to understand and interpret health information. They may also be better able to exercise preventive health practices and detect problems so that they can be treated earlier, or make appropriate choices amongst health care options. In fact, other studies also showed that illiteracy might be a barrier for adults to make use of health information (Williams et al., 1998)

The report concludes that high literacy levels are not enough to result in positive changes on issues like employment or health education; it is also important that the goal of increased literacy skills reaches across a broad range of other policy areas such as those related to youth, seniors, employment, human resource development, health, social welfare and crime prevention. This report focuses on the influence of literacy in general, not specifically adult literacy. Therefore it is important to understand that the figures mentioned above are not necessarily the same with the social and economic outcomes that can be achieved with adult literacy education.

Beder (1999) examined sixty-eight national and state-level literacy studies in the US which fell into three categories: workplace literacy, welfare, and family literacy. All of these studies included an outcome component so as to study the outcomes of adult literacy education on individual and national levels. He concluded that, at least in the short-term, adult literacy education does produce employment-related benefits, although the extent to which the jobs newly-acquired by completers are good jobs is still not clear. In the same vein, Beder also revealed that the evidence

suggests adult literacy education has a positive short-term impact on earnings; but long-term gains need to be investigated as there was not available data concerning the influence of literacy on employment and earnings in the long run.

Kağıtçıbaşı et al. (2005) studied the effect of level I FALP courses offered by the MOCEF by means of a pre-test/post-test research design that aimed to identify what women participants gained by participating in the course. After the completion of the program, the post-test given revealed that there were significant positive changes in the levels of social participation, family cohesion, value of children and self concept. The attitude change of participants towards having a smaller family is stressed as one of the major outcomes of participation in the course and suggests that literacy courses might assume a role in family planning.

An interesting result of the study is an increase in the recall of news stories as an outcome of the course. At the beginning and ending of the course, participants were shown a fabricated news story and asked about the details of the story. The comprehension and recalling of the news story in this study was how the researchers operationalized the cognitive gains that can be achieved through literacy education, and the significant difference in terms of better memory and comprehension skills between pre-test and post-test substantiates Abadzi's (2003) findings. Kağıtçıbaşı et al. (2005), in fact, argued that an improvement in one's ability to recall news stories might even imply more social participation. However, this argument needs to be further verified.

As a follow up to the study, the participants were interviewed a year later to assess the possible changes that taking part in a functional literacy course brings to women. Different from the findings mentioned so far, Kağıtçıbaşı et al. (2005) found out that participation in the courses did not result in employment for the women

interviewed. The researchers concluded that this finding is due to the cultural differences between western societies and Turkey, which make it more difficult for Turkish women to be a part of the labor market. Some of the interviewees pointed to their lack of skills while most of them mentioned reasons that can be related to the cultural perception of men and women. For example, one of the most common reasons women stated for their not getting a job was not receiving permission from their husband. The fact that some of the women stated that, although they are literate after the completion of the course, they still do not possess the necessary skills to obtain a job illustrates the difficulty in drawing a cause-and-effect relationship between literacy and employment.

In conclusion, although there does not seem to be a consensus regarding what the outcomes of participating in a literacy course are, at the individual level higher self esteem (Kağıtçıbaşı et al., 2005) and a more positive self-image (Beder, 1999) are among the most important. In terms of the social and economic influence of literacy, increased employment levels and increased earnings (Beder, 1999; OECD, 1997) are mentioned. Moreover, the effect of literacy acquisition on development cognitive skills is also emphasized (Abadzi, 2003; Kağıtçıbaşı et al., 2005).

All these positive outcomes can be used by practitioners to modify available literacy courses according to the specific needs of adult learners. They can also push policy makers to channel more funding towards the education of adults.

2.1.4 Literacy Education for Adults in Turkey

2.1.4.1 A Brief History

Although Turkey is a relatively young country, the first efforts to teach adults literacy skills go back to Ottoman Empire. For the Ottomans, the aim of literacy

education was to teach Arabic scripts, which were the alphabet for Turkish language. Literacy courses for adults were first offered when Cemiyet-i Tedrisiye-i Islamiye (Society of Islamic Teaching) opened two apprenticeship schools to teach reading, writing, arithmetic, and religion to working people in 1865 (Okçabol, 1990). However, public education in general, and literacy courses for adults in specific, were only offered in big cities, and mostly in Istanbul, which was the capital of the Empire.

In 1923, a new country, the Turkish Republic, emerged out of the ashes of the collapsed Ottoman Empire under the leadership of Mustafa Kemal Atatürk. He believed in the key role of education to mobilize the war-tired masses and create a sense of identity as a nation. As a result, the push to eradicate illiteracy in Turkey was started in the early days of the Turkish Republic and has continued to the present. Despite the presence of the new Republic, adult literacy education remained the same as it was under the Ottoman Empire, in some ways, for the first five years. For instance, Okçabol (1990) stated that, although these two apprenticeship schools opened in 1865 to teach adults and were closed in 1874, they were later reopened in the service of the adult population until November of 1928.

There were also some new initiatives in the educational arena, the first of which was the foundation of Ministry of Education in 1920, right after the first meeting of the Grand National Assembly in the middle of the war. In 1922, People's Schools (Halk Mektepleri) and Night Courses (Gece Dersleri) were commenced to provide literacy education to adults (Okçabol, 1990). In 1925, People's Classes (Halk Dershaneleri) were established as a result of the effort of Mustafa Necati, the senator from the city of Izmir. Mustafa Necati became the minister of education that year and, with his increased support to the program, 26,000 people participated in literacy courses offered in People's Classes in a year's time.

Mustafa Kemal Atatürk, the founder of the Turkish Republic, made many reforms in order to bring Turkey to the level of contemporary civilizations. Among the most significant changes that were introduced was the abandonment of the Arabic scripts in favor of a modified Latin alphabet for writing in Turkish. This reform was made out of the belief that it would broaden the window of intellectual communication with the West. A census taken in 1927 showed that less than 9% of the population knew how to read the Arabic characters (Ulusavaş, 1994). Hence, the reform was also intended to let the people of the young country learn reading and writing more quickly and easily than they would using the old scripts. In fact, it was a very wise educational decision. Abadzi (2003) stated that the Arabic scripts are not appropriate for Turkish language and make it more difficult for adult learners to master reading skills.

The Arabic script was originally developed for a Semitic language, in which vowels are predictable from the consonant configurations. Its use spread to Indo-European languages, such as Urdu, Persian, Pashtu, and Kurdish, and in earlier years to others as well (such as Shikomori of the Comoros islands, Bahasa Indonesia, Wolof, Pulaar, and Ottoman Turkish). All these languages have unpredictable vowels and need to differentiate between e, i, o, u. Minor adjustments have been made to consonants, but vowels are usually written according to Arabic conventions. Thus, in daily writing, only consonants and the existence of long vowels are indicated; short vowels (for which special signs exist) and the exact pronunciation of long vowels are omitted, and it is impossible to differentiate between a and e, o and u. In all languages, the Arabic letters only approximately represent the sounds. In effect, one needs to know the meaning of a word before one can read it. It is, therefore, impossible to read words letter by letter. Readers must scan a whole sentence, go through more grammar decoding, and employ guessing strategies before arriving at the correct interpretation of the words. This places considerable stress on the working memory, which must hold all the alternatives while decisions are made about the meaning of the text. (p. 42)

At the very beginning, naturally, the reform made almost everybody illiterate. To teach the people how to read and write using the Latin alphabet, a large-scale literacy campaign was launched in 1928. It was a significant effort as all the resources that were available at the time were used. Special schools named Millet Mektepleri

(National Schools) were formed out of the Night Courses, People's Classes and People's Schools. Every single person between the ages of 16 and 45 were, by law, made to participate in the courses offered. It was optional for those older than 45 to participate. There were two levels of courses offered. A level courses were for complete illiterates and B level courses were to further educate those people who were able to complete A level courses or who had attained basic literacy skills on their own (Okçabol, 1990). National schools were also categorized as either stationary or mobile. The schools that were opened in regular school buildings were called "stationery" and those that operated in villages without any established schools were called "mobile" (Ulusavaş, 1993). In the year 1928-29 alone, more than 20,000 courses were opened, attendance ran to more than 1 million and nearly half a million people received certificates (Ulusavaş, 1994). This campaign resulted in a substantial increase in the literacy rate. In 1927 the literacy rate was 10.7% and by 1935 it had gone up to 19.2% (Kirazoğlu, 2003). In less than a decade, the literacy rate almost doubled. Moreover, the literacy rate was a lot higher in big cities. For example, in the city of Istanbul, 68% of males and 49.9% females were literate in 1935 (ISI, 2005). From 1928 to 1950 a total of 66,150 A level courses were in service and 1,416,029 people received certificates (Okçabol, 1990).

Three more literacy campaigns were initiated in 1969, 1973 and 1981. The total number of people who were certificated after the literacy campaigns between 1928 and 1989 was 6,535,425. In all these literacy campaigns, women in rural areas had first priority to attend the courses offered (Ulusavaş, 1994).

2.1.4.2 The Current Situation

The Ministry of National Education (MONE) is currently the main provider and quality controller of the adult literacy courses in Turkey. As a result, the number one institution for illiterate adults to learn how to read and write is the government-funded People's Education Centers (PECs). However, the available literacy courses are not only offered at the facilities of PECs since PECs have also cooperated with other state institutions such as the Turkish Armed Forces and Ministry of Justice over the years to reach more people. The cooperation is not only limited to government institutions; NGO's such as the Mother-Child Education Foundation (MOCEF), Rotary Club and Association for Supporting Contemporary Life (ASCL) are cooperating with PECs to provide literacy courses to the public and, moreover, the MOCEF and the Rotary Club have also been given permission to create their own curricula (Nohl & Sayılan, 2004).

There are two levels of literacy courses offered by PECs. While level I courses aim to enable the participants to read, write and perform basic arithmetic, level II courses, on the other hand, educate low-literate adults towards a certificate that indicates that the participants have gone through the first five years of compulsory basic education. In fact, before 1997 compulsory education was five years in Turkey. In August 1997 the Turkish parliament passed a new Basic Education Law (4306), which extended the duration of compulsory schooling from five to eight years. Starting with the 1997-98 school year, primary school was combined with what used to be called junior high school (Tertemiz, 1999). Before this change, successful completers of level II literacy courses were awarded primary school diplomas. However, as the government also introduced an open basic education program, using distance learning methods, to provide core basic education skills to adults who had

dropped out of basic education, level II literacy courses serve as a liaison between level I literacy courses and open basic education.

Right now, a certificate is given at the end of the level II literacy course. If the completers wish to get the basic education diploma, they have to attend open schooling (açık öğretim) to do three more years worth of schooling. In a way, the fact that successfully finishing a level II course does not automatically result in acquiring a basic education diploma might have decreased the attractiveness of these courses. Yet, the only way to receive a basic education diploma is to get this certificate first.

2.1.4.2.1 Level I Literacy Course. In this program, adult participants are taught basic literacy and arithmetic skills, assuming they possess no prior knowledge. The course involves 90 class hours, but it might be extended to 120 hours in order to meet the needs of the participants. The objectives of the program include, (a) to teach adult participants how to read and write; (b) to make them more proficient in written and spoken Turkish; (c) to teach them basic arithmetic; (d) to help them acquire basic knowledge, skills and behaviors to survive in their daily lives (Nohl & Sayılan, 2004).

These courses might be given in any place that is considered appropriate by the local PEC. They are free of charge and the teaching/learning materials are also provided for free. In order to participate, an individual only needs to apply to the local PEC or to one of the NGOs that is cooperating with the MONE. For other programs offered in PECs, there must be at least 15 people who want to take part in the course as students to start a program. On the contrary, level I literacy courses can be offered to less than 15 people. Upon successful completion of the program, the participants are granted certificates that they can use towards their basic education diploma if they choose to complete the level II literacy course and go on with open schooling.

Individuals who have acquired literacy skills by means of self-directed learning can also get this certificate after passing an exam given by the PEC that assesses their literacy skills.

The MOCEF is one of the two NGOs that is allowed to develop and implement a level I literacy course by the MONE. The MOCEF's FALP is taught by volunteer instructors and focuses on individuals with little or no schooling. Two evaluation studies of the first three cohorts of the program indicated that FALP was significantly more effective than the existing literacy programs (Durgunoğlu et al, 2003). However, they also reported that the longevity of the gains depended upon the initial literacy levels of the participants and the extent of literacy use after the course was over, which, in a way, stresses the crucial role participating in a level II literacy course might play.

The MOCEF's FALP is different from the MONE's literacy course offered at PECs in certain ways. First of all, the level I literacy course offered at local PECs are usually taught by retired primary school teachers who have no previous training in teaching adults (Durgunoğlu et al, 2003; Nohl & Sayılan, 2004). On the other hand, FALP courses offered by the MOCEF are taught by volunteer teachers who do not necessarily have any teaching experience, but who have, at least, completed high school. Experienced and inexperienced teachers alike who volunteer their services to the MOCEF are expected to participate in the three-week orientation/training program that is designed to familiarize the volunteers with the challenges and demands of teaching adults (Durgunoğlu et al, 2003). The two courses also differ in terms of the way that they teach literacy. The MONE's level I literacy curriculum is derived from the curriculum that is designed for children at primary school level, and starts with teaching whole sentences that are almost memorized and introduces sound letter

correspondences at the very end of the process, while the MOCEF's FALP starts with identification and sounds of letters and carries on with syllables and words before sentences. The practice of syllabification is also integrated in the curriculum to be used when all the letters are learned.

The Rotary Club is the second NGO that has been allowed to employ a special curriculum that differs from the MONE's. It also employs volunteer teachers. The program, which was started in 2002, mainly aims at providing literacy courses in southeastern Turkey (Nohl & Sayılan, 2004). In Turkish, the course is called Simplified Reading and Writing Education (Kolaylaştırılmış Okuma Yazma Eğitimi) but, in fact, it is an adaptation of the Concentrated Language Encounters (CLE) method, which was first created, tested and implemented by a research team under the guidance of Richard Walker in Australia. In fact, all Rotary-sponsored literacy programs, like the one in Turkey, have been built from the CLE techniques that Brian Gray first developed in the late 1970's while working with Aboriginal children in a school in Alice Springs. He was then a researcher within a literacy centre that Richard Walker headed, and Walker was the one who made the method well-known (Sisavanh, 1997).

No matter who provides the materials or the curriculum, only PECs offer the certificates after the course has finished. This means that, in a sense, PECs are responsible for the quality control of the learning process; however in practice this does not seem to be happening for two reasons. First, teachers or administrators from PECs do not necessarily visit classes at NGOs to observe classroom practices. Moreover, the exam given at the end of the course changes even from one PEC to another. So it is hard to talk about standard assessment techniques in level I literacy courses.

The researcher has not had the opportunity to observe any of the level I literacy courses offered by the NGOs the MOCEF and the Rotary Club, but was able to observe a course offered by the Beşiktaş PEC once a week in the Spring of 2005 before undertaking the adaptation of the Education Participation Scale (EPS). The MONE level I literacy curriculum is supported by books containing reading passages, comprehension questions and writing exercises as well as exercises designed to help the participants acquire basic arithmetic skills. The main course book consists of 45 reading-writing units that come with detailed lesson plans to guide the teacher. The behaviorist approach of the MONE program, stressing the target behaviors in great detail and building one unit onto another, is criticized as it is limiting the creativity of the teachers and the participants (Nohl & Sayılan, 2004). These books, as well as any learning/teaching materials that the teacher brings into the classroom, are published by the MONE. Despite any criticism, PECs that employ the MONE's curriculum remain the major provider of literacy courses for people with no or little prior schooling in Turkey.

2.1.4.2.2 Level II Literacy Course. Different from level I courses, level II courses are only offered at PECs by teachers who are appointed by the MONE. In terms of their literacy skills or schooling background, there are three kinds of students who can attend a level II literacy course. First, there are some who have successfully finished a level I literacy course and have decided to carry on with level II. Second, there are former primary school drop-outs who had finished at least the first three years of schooling when they left school (they actually need to prove this situation with an official document from the school in question). Finally, there are participants who passed the literacy and basic math skills test given by the PEC at the very beginning of the course.

The course includes 180 hours of classes. The curriculum is an adapted version of the primary school curriculum for children, as is the level I literacy course. The program lasts 36 days with five-hour classes each day. There are different choices of schedule in order to accommodate different adult groups. Although the options may change from institution to institution depending on the availability of instructors and the number of students, at Avcılar PEC for instance, there were two groups of classes offered for the summer session in 2006. There was a fast-paced weekday option, with thirty hours per week, for people who do not have a job. It is possible to finish the course in five weeks this way, although it is quite a challenge. There was also a weekend course available for working adults with a total of ten hours of classes divided over two days for four-and-a-half months.

The curriculum consists of 54 hours of Turkish, 54 hours of basic social sciences, 36 hours of science and technology and 36 hours of mathematics. The MONE suggests its own books and teaching materials to be used in the class, however based on the observations during the data collection process, it appears that the teachers are integrating materials that they prepared themselves or simply buy materials that they find relevant.

As for the teaching staff at these courses, as pointed out earlier, one criticism about the quality of instruction of both level I and level II literacy courses at PECs is that the classes are primarily taught by former primary school teachers who have no previous training in the teaching of adults (Durgunoğlu et al, 2003; Nohl & Sayılan, 2004; Okçabol, 1990). The fact that almost all the teachers in the classes visited by the researcher were retired or currently in-service primary school teachers indicates that the situation has not changed at all. Only one teacher the researcher met had a

BA degree from the Department of Modern Languages, and he had not had any experience teaching adults before getting employed by the Avcilar PEC, either.

There need to be at least ten adult participants to start a level II literacy course at PECs, however when the required number of adults is reached, the course is offered for free. If there are not a total of ten students waiting for a class to open, the applicants are either asked to wait till the number is reached or they are directed to one of the close by PECs offering the course at the time of the application. However, this does not seem to be enough to convince the masses to attend literacy courses. In the next chapter, participation behavior with specific reference to literacy education will be discussed to shed light onto this matter.

2.2 Educational Participation

One of the differences between children's education and adult education, or to put it more directly, one of the defining characteristics of the education of adults, is that participation in the courses available is a voluntary activity (Courtney, 1991; Cross, 1981; Darkenwald & Merriam, 1982). Adult education institutions, whether they are government-funded PECs or private language centers, must attract enough people for the courses that they offer in order to survive. It is, therefore, understandable that researchers, practitioners and policy makers from a variety of fields have devoted a great deal of time and effort to understand the various dimensions of educational participation phenomenon. As a result, participation is one of the most studied aspects of adult education (Houle, 1961; Beder & Valentine, 1990; Merriam & Caferralla 1999). Yet, it is still a challenge for adult educators to design outreach messages for adults to take part in available educational activities. Referring to the frustration of adult educators regarding the lack of participants in adult educational activities, Cross (1981) stated that "if only we could only require that people be motivated to learn voluntarily, most of our problems would be solved".

There are a vast variety of different views in the literature regarding participation and ways to attract more learners. For example Houle (1961) stated that every adult education program has usually been developed in terms of more or less explicit conditions which limit its clientele. According to this view, the way that an educational institution is designed in the first place is an important factor to attract or deter potential participants. There are other researchers that point to the dominance of the middle-class in educational decisions, which leads to adults from less favorable backgrounds being excluded from the limited opportunities (London, 1970). Nevertheless, despite the large volume of research in the area, there does not seem to

be a consensus regarding the reasons that adults have to participate in education activities or the most effective ways to attract more learners.

In the following chapter, research on educational participation, especially the line of survey research inspired by Houle (1961) that influenced the development of the EPS by Boshier (1971) will be presented in order to trace back the origins of the instrument.

2.2.1 The Meaning of Educational Participation

The meaning of the term participation changes based upon the specific context in which it is used. Although educational participation might mean being an active learner or taking part in the activities carried out in the classroom, for the purposes of this study the concept will refer to mere enrollment in or attendance of an educational activity. As long as the student signs up for the activity at the beginning, assuming it is some kind of a formal adult education setting, of course, and attends it on a somewhat regular basis, he or she would be considered a participant. If the students are physically in the classroom, whether they are actively participating in the class activities or not, is beyond the scope of this thesis.

Douglas (1970), having examined participation research, and emphasizing the commonalities of the descriptions used, defined the properties of participation in the following manner:

1. The act of participation is both a group and individual phenomenon. It is a group phenomenon when it takes place within a group setting such as an adult education class or voluntary organization; it is an individual phenomenon when a person decides to act individually without direct association with a group. Examples of this latter form of participation would be the adult who decides to pursue an educational experience through self study, or the conscientious citizen who keeps himself

informed on political matters through selective exposure to mass media and never misses voting in an election.

2. There is a quantitative dimension to participation. This could be the number of clubs an adult belongs to, the number of classes he attends, or the number of elections he has voted in.
 3. There is a qualitative dimension to participation. This could be operationalized in such terms as the type of the activity an adult participates in, or the nature of contributions one makes to the achievement of individual or group goals.
 4. The act of participation usually a means toward an end. It is an instrument for satisfying individual or group goals, which are perceived to be desirable by participants. For example, participation in adult education activities could be used as a mean of achieving a variety of goals, one of which maybe learning.
- (P. 90-91)

Indeed, it is this last assumption that has initiated a great deal of research in the area of adult education. The last property of the participation phenomenon mentioned above basically implies that, although participants of a learning activity are sharing the same atmosphere during the time that they spend in the classroom, they might actually have different aims or “ends” in mind. Researchers like Houle (1961), Boshier (1971) and more recently Beder and Valentine (1990) all started from this assumption and attempted to figure out what that “end” the participants are trying to reach might be.

2.2.2 Who Participates? Demographic Characteristics of Participants vs. Non-Participants

The majority of research on participation in adult education has focused on describing the characteristics of participants in various educational programs as compared to non-participants. One of the landmark examinations of adult participants was by Johnstone and Rivera in 1962 (cited in Merriam & Caferralla, 1999). Nearly 24,000 adults throughout the US were interviewed to obtain information on their educational activities. Based on that information, it was estimated that approximately 25 million adults in US had been engaged in one form of educational activity or

another. A great deal of that activity, nearly one-third, was in self-directed or independent study of some nature. About one-third of the educational activities were of a vocational nature and another one-fifth recreational. Based on the survey data, they described the typical participant as:

The adult education participant is just as often a woman as a man, is typically under forty, has completed high school or more, enjoys an above average income, works full time and most often in a white collar occupation, is married and has children, and is found in all parts of the country, but more frequently in the West than in other regions (Johnstone and Rivera 1965, 8; quoted in Merriam and Cafferella 1999).

London (1970) aimed to ascertain the parts of the population that are most likely to participate in adult education programs, and the barriers that keep individuals from participating, by administering a survey to matched samples of male middle class and working class participants and non-participants, in a middle sized city. He was especially interested in the differences between higher and lower level socio-economic groups.

He found out that the level of education was the best single indicator of participation in adult education compared to other variables like occupation, income, place of residence or race. That is to say, the more education one has, the more likely one is to participate. Having liked school during formal schooling and having wanted to continue schooling were also positively linked with participation. Those who are more educated might participate more as a result of their previous educational experience or because of the nature of the jobs that they get after graduation according to London's (1970) view.

In addition, London suggested that adult education courses might be designed to appeal primarily to the middle class. After interviewing teachers and administrators in adult education centers, he concluded that some of them had a negative attitude

about the capacity, ability and potential of blue-collar workers in educational activities. London (1970) added that adult educators are mostly middle class in orientation and less knowledgeable about working class values and interests. This situation might result in feelings of insecurity on the part of the learners and prevent them from participating. Moreover, he stated that “the evidence suggests that lack of past achievement and limited opportunities tend to create a system of values and beliefs which negates efforts to improve one’s social and economic position” (p. 147).

Based on the comparisons between participants and non-participants, London (1970) pointed out that knowledge about the opportunities of adult education activities is also related to social class. While people with lower socio-economic status tend to use their friends to learn about the available courses in the local area, people with higher socio-economic status tend to use mass media to do so. This means that using mass media might not be the best way to reach out people who are coming from a lower social class as this technique would actually favor middle-class individuals. This study pre-dates the Internet, therefore many relatively newer forms of media did not exist, and one would need a more up-to-date research to fully understand the current situation.

Burgess (1971) studied the motivational orientations of adults. The composition of his sample gives clues about the typical adult education participant. Adult students attending fifty-four different courses, classes or activities constituted the sample. Out of 1098 responses, 1046 were usable. As for the demographic characteristics of the participants in the sample, Burgess reported that half of the respondents were men and approximately half were women. The respondents completed more years of education than the average individual, were typically

younger than the total population, were employed in white collar occupations, and were married.

Aslanian and Brickell (1980) presented a profile of participants comparing them to non-participants. When 744 participants are compared with 775 non-participants, people in the first group were younger and better educated; also they had higher incomes, were white, were employed, lived in urbanized areas, were engaged in professional or technical work, and were single or divorced.

Examining the participation national statistics in adult education in the US, Cross (1981) stated that “Every time a new educational opportunity presents itself, it is the already well-educated who rush to take advantage of it” (page 33). Many other researchers have arrived at essentially the same conclusions; there is a relatively high correlation between the level of education and participation.

Unfortunately, there are not many studies regarding the demographic characteristics of the participants gives an idea about the “typical” adult education participant in Turkey. Okçabol (1993) assessed the skill training courses for adults in the city of Istanbul. These courses were a part of the national project supported by the Ministries of State called the “Skill Training Project” and they aimed to provide participants with the skills that are desired by business and industry. The project was initiated in 1985 and offered courses in many parts of the country. It was assumed that these courses would help the unemployed participants get jobs in the market or start their own business. Okçabol (1993) reported that in 1989 participants to these courses were single (92%), born in big cities (71%), younger than 20 years of age (58%), female (55%), in the middle income level (71%), and from families with 4-6 people (70%). They also had educational levels above the Turkish average (38% general high school, 21% vocational high school, 6% higher education), were housewife mothers,

small businessmen or retired fathers (28%). About half of them had some prior non-formal educational experiences and about one third of them were there right after their formal education. In the former group, 41% had attended other skill type courses before and they constituted almost 20% of the total number of participants. However, almost 40% actually did not complete these skill type courses. Moreover, most of the completers could not find a job for a long time.

As there is less research available concerning the demographic characteristics of participants in adult education activities in Turkey, enrollment numbers of literacy courses in Turkey by the State Institute of Statistics (SIS) were examined. Literacy courses were given special attention as adult low-literates are the intended audience of the translated Turkish version of the EPS. Available data regarding the demographic characteristics of the participants were limited to age group and gender, as seen in table 2.1, yet the analysis of the data reveals some interesting trends in the participation behavior of Turkish adults in literacy courses.

Table 2.1

Enrollment Numbers to Level I and Level II Literacy Courses by Gender and Age Group for 2000/01 School Year

Kind of Course	15-44 age group			45+ age group	
	Total	Male	Female	Male	Female
Total	122,661	63,661	48,002	3,925	7,073
I. Level	88,679	42,586	38,405	1,761	5,927
II. Level	33,982	21,075	9,597	2,164	1,146

Source: State Institute of Statistics, Prime Ministry. (2001).

According to the enrollment numbers presented in table 2.1, comparisons were made between genders and age group to ascertain the characteristics of typical participants. First of all, although illiteracy is more common among women, there seem to be more men participating in literacy courses than women. The number of men enrolled in level I and level II literacy courses as a percentage of the total number of individuals enrolled in these courses is 55.10 %. This statistic indicates that literacy courses are not helpful in closing the gap between the two genders in terms of literacy.

More interestingly, the number of men enrolled in level I literacy courses as a percentage of the total number of individuals enrolled in the same level courses is only 50.01 %. It appears that men are as likely to participate in level I courses as women. On the other hand, men are a lot more probable to be enrolled in a level II course; the number of men enrolled in level II literacy courses as a percentage of the total number of individuals enrolled in at the same level is 68.39%. Although it is hard to draw conclusions on the basis of this figure, that more men tend to participate in level II courses than women might be because men are more diploma-oriented than women, as the certificate that is awarded at the end of level II courses is the only way to go on with open schooling to obtain the basic education diploma at the end.

In addition, the age of the participants seems to be an important variable. In fact, mostly younger male adults appear to be attending level II literacy courses; 62% of all the individuals who were enrolled in level II literacy courses in 2000/01 school year were male participants between the ages of 15-44. To put in another way, young males are more likely to be found in a level II literacy course than young females or than older adults in general.

Lastly, older women are more probable to participate in literacy courses than men of the same age group, especially in level I literacy courses. While the number of women enrolled in level I literacy courses as a percentage of the total number of individuals enrolled in at the same level is 49.99 %, the number of women aged 45 and above in level I literacy courses as a percentage of the total number of individuals at the same age group enrolled in level I literacy courses is 77.09 %.

In conclusion, according to SIS enrollment numbers to literacy courses, (2001), it appears that men and women differ in terms of their participation in literacy courses. There are more men than women in literacy classes, especially in level II. Moreover, young males are more likely to attend level II literacy courses than are young females or older adults in general. Women are likely to be in level I literacy courses and older women are more likely to attend level I literacy courses than older men.

Most of the mentioned studies discussed the relationship between socio-demographic variables and participation behavior. Although some tendencies emerged, such as that the younger a participant is the more likely he/she is to be attending adult education activities, none of these variables explained much of the variation in the participation behavior (Beder & Valentine, 1990; Beder and Quigley, 1990; Hayes & Valentine, 1989; Hayes, 1988; Ural, 1993). The authors identified types of participants by subjecting the motivational factor scores to cluster analysis. The clusters were then described with respect to selected socio-demographic variables.

Although it might be helpful to know the demographic characteristics of the participants in order to modify the content and structure of the adult education courses offered, it is not enough to understand why some people participate in these courses

and why others choose not to. Therefore, the next section will be examining the studies related to the reasons of participation.

2.2.3 Why Do They Participate and Why Not?

Burgess (1971) stated that researchers had used at least four different approaches to determine the reasons why adults participate in educational activities:

1. Analyzing the kind of activities in which the adult student participates so that reasons can be inferred for those activities.
2. Asking the student to state in his own words why he participates in a given activity.
3. Asking him to check from a list of reasons why he participates in a given activity.
4. Concentrating on the adult's orientation toward education. (p.4)

Burgess (1971) was referring to the line of research that was started with Houle's (1961) book on motivational orientations of adults with the last item. Houle (1961) is an important figure with his parsimonious typology of adult learners. In fact, Boshier's first form of the EPS (1971) was partially inspired by Houle's work.

More than forty years ago, Houle proposed his well-known typology of adult learners. It received much attention, as it seemed to be a very parsimonious way of classifying adult learners. There have been many attempts to test the validity of his classification. According to Houle (1961), the main problem with the line of research that starts with looking into the characteristics of people participating in available courses at a specific adult education setting is its emphasis on the single actions of individuals rather than the whole pattern of their educational efforts. He stated "It is a mere description of what they do instead of what they think about what they do or why they do it" (p. 8).

Houle (1961) considered comprehending the nature, beliefs and the actions of the participants as a more illuminating way of determining participation motivations

than only scrutinizing the institution. He stated that the best way of understanding the participation phenomenon in continuing education is to understand the people who are most actively engaged in adult learning. So although his work focuses on the types of continuing learners, how they perceive themselves and the way that they think they are perceived by others, and the reasons that they state to be continuing learners, his sample was composed of people who took part in learning to the highest degree. He expected to see certain patterns in the group of people he interviewed in terms of their activities of learning. Transcriptions of Houle's interviews with 22 learners, who were identified by staff members at several adult education institutions as people who are rigorous learners, constituted the data.

The sample was made up of 12 men and ten women. They all lived within a radius of 70 miles of the city of Chicago in the US. They were from different age groups and socio-economic backgrounds. However, of the 22 interviewees, there was only one participant who was not Caucasian. As for educational background, 17 of the participants had done some college work before the study. As Houle himself acknowledged, this sample was too small to be considered as a statistical sample. The sample was also stated by later researchers as being too biased to draw conclusions about adult learners in general (Boshier, 1991; Cross, 1981). However, his study is one of the first attempts that dwells more upon the individuals rather than the institution that they attend.

Examining the interview data, Houle noted that participants of his study were basically very similar to each other. They all saw education as a central part of their lives. They were different, however, when it came to their views about the purposes and values of continuing education. These differences were in a certain pattern and Houle produced his often-referred to topology of adult learners based upon the three

subgroups that emerged. He states that “these are not pure types; the best way to represent them pictorially would be by three circles which overlap at their edges” (p. 16). However, he adds that the main focus of each subgroup is clearly distinct. Their differences are basically matters of emphasis.

1. The goal oriented: They are people who employ education as a means to reach definite objectives. The continuing education of the goal oriented is in cycles. It starts with the identification of a certain need, or realization of an interest. After the appearance of the need or the interest, they join a group, take a course, read a book, or go on a trip to satisfy it.
2. The activity oriented: They are people who find in the learning situation a meaning which has no necessary link and often no link at all, to the content or announced purposes of the activity. They tend to find something that they enjoy about the activity that is not necessarily related to the stated aims or essence of the course they are taking. Those included in this subgroup have different reasons from each other to be a part of the learning activity from hoping to find a spouse to escape from the boredom of their lives.
3. The learning oriented: They are people who look for knowledge for its own sake. Houle (1961) stated “Each particular educational experience of the learning oriented is an activity with a goal, but the continuity and the range of such experiences make the total pattern of participation far more than sum of its parts” (p. 24).

Houle admits that the classification is not necessarily valid for those who take part in learning activities less extensively. Moreover, this classification does not tell much about the relationship between the course and motivational orientations, as people from different subgroups might be in the same classroom having different objectives in mind.

There have been many attempts to test Houle’s typology. Using the Houle typology, Sheffield (cited in Boshier 1971) prepared a list of 58 reasons why adults state they are participating in adult education classes. The list contained 16 reasons that were judged to be representing each of Houle’s hypothesized orientations, plus ten reasons for which the judges could not agree on a category. He administered this 58-item questionnaire to 453 adult education participants in 20 continuing adult

education conferences in the United States. The respondents checked their answers on a five point scale from “very frequently important for me” to “never important for me” to indicate how often each of the reasons influenced them. Factor analysis of the data yielded five factors, which Sheffield called orientations. They were:

1. Learning orientation: Includes people seeking knowledge for its own sake.
2. Desire-activity orientation: Includes people taking part because in the learning situation they find an inter-personal or social meaning, which may have no necessary connection, and often no connection at all, with the content or announced purposes of the activity.
3. Personal-goal orientation: Includes people participating in education with fairly clear-cut personal objectives.
4. Societal-goal orientation: Includes people participating in education with clear-cut social and community centered objectives
5. Need-activity orientation: Includes people taking part because in the learning situation they find an introspective or intrapersonal meaning, which may have no necessary connection, and often no connection at all, with the content or announced purposes of the activity.

Burgess (1971) had a different way of studying the reasons given by adults for participating in educational activities. After examining Houle’s (1961), Boshier’s (1971) and Sheffield’s (cited in Boshier 1971) work, he hypothesized the reasons would factor into at least eight factors, although he did not argue that others would not be identified. He developed the instrument Reasons of Educational Participation (R.E.P.) for which the respondents circled one response on a seven point-scale (1=always; 7=never). The 70 items included on the scale were chosen from a list of 5,773 reasons secured from literature, from 300 adult educators and from 100 adult

students. He used judge's opinions and administration of these reasons with a two week interval to reduce the number of items.

After factor analysis, Burgess discarded 15 of 70 items as they did not load on any of the factors or they loaded more than one factor. The factor loadings of the remaining 55 items were satisfactory (more than .40). He reported seven factors:

1. The Desire to Know
2. The Desire to Reach a Personal Goal
3. The Desire to Reach a Social Goal
4. The Desire to Reach a Religious Goal
5. The Desire to Take Part in Social Activity
6. The Desire to Escape
7. The Desire to Meet Formal Requirements

The religious goal factor had not been identified by any of the previous studies. However, talking about this finding Boshier (1976) points out that the main reason behind the fact that Burgess (1971) identified the "religious goal" factor might have only been related to the items included at the beginning of the study. He states that because of the nature of factor analysis as a statistical technique, the items that are included at the beginning will be a strong determiner of the factors that will emerge at the end. That is to say, in a manner differing from that of other orientation researchers, Burgess added items related to religion and, as a result, the unique "religious goal" factor was identified by him. However, considering that Burgess secured the items from quite a big sample, 1,000 adult students at several adult education centers, the items included at the beginning might also demonstrate, as Burgess (1971) suggested, "the underlying theme that the respondents have a desire to learn in order to improve their spiritual well-being" (p.23).

The fact that two factors Burgess had predicted, The Desire to Comply with General Social Pressures and The Desire to Study Alone, did not emerge indicates that not all of the factors a researcher adds will appear even when the researcher is the one giving the final decision regarding the items to include in the study. Interestingly, Burgess had not actually predicted that “The Desire to Reach a Religious Goal” would be one of the factors attained.

Boshier (1971) aimed to develop an instrument to study the reasons of participation in a way that would allow cross-cultural and inter-institutional replication. He first asked open-ended questions to the participants in University Extension adult education courses to have an inventory of reasons for participation. Having examined Houle’s *The Inquiring Mind* (1961), he assembled a list of 48 items from his inventory, also including the highest loading items from Sheffield’s study. He administered this instrument that he called Education Participation Scale (EPS) to 233 randomly selected participants out of 2,436 enrolled in three different adult education institutions in New Zealand. Factor analysis resulted in 14 first-order factors accounting for 69.15% of the variation. He indicated that, among the fourteen primary factors, there were six factors that were socially oriented, two factors that were vocationally oriented, four factors that were specifically learning or education oriented and two factors that emerged because of the specificity of an item on the EPS. Then he looked into the inter-correlations of the first-order factors that led to seven second-order factors. He went on with the analysis of third-order factors to have a factor structure that would be more similar to Houle’s three factor typology. However, inter-correlations of seven second-order factors yielded four third-order factors instead of a three factor explanation. They were:

1. Other-directed advancement: Participants with clear-cut goals responding to some, probably vocational, environmental press.
2. Learning-oriented: Participants similar to those Houle (1961) identified as learning oriented except that learning is undertaken not as not as an end in itself but to prepare for some future, probably educational, activity.
3. Self versus other centeredness: Participants who are enrolled for self-centered or altruistic community-oriented reasons.
4. Social Contact: Participants seeking social contact to compensate for what they consider to be excessively narrow and deficient educational experiences in the past.

He stated that boiling down of the 14 first-order factors to 4 independent and uncorrelated third-order factors showed a structure that is similar to Houle's three factor typology. However, he also acknowledged, based on the results, that participation stems from motives more complex than those originally identified by Houle.

Pointing out the similarities between the factor analysis of the motives of attendance, and Maslow's motivational typology, Boshier asserted that participants in the sample, namely participants in non-credit liberal adult education classes, could be typed as "deficiency" or "growth" motivated. He stated that the first-order factors clustered into two groups, which could be explained by Maslow's hierarchy of needs and his distinction between "deficiency" and "growth" motivation. Borrowing the terms from Maslow, Boshier stated that deficiency oriented participants seek the remedy for their particular deficiency. They are forced by social and environmental pressures. They use educational activities to achieve gratification for lower basic needs. In the growth oriented person, on the other hand, as they have already satisfied

their lower basic needs, and that gratification increases motivation. However, he admitted that to be able to make distinctions between “deficiency” and “growth” motivated people, EPS factors needed to be re-analyzed with different factor analytic models. Moreover, he did not suggest that participants are entirely growth or deficiency oriented.

Boshier (1973) elaborated on “deficiency” and “growth” motivated participants to adult education so as to come up with a model of participation in his subsequent paper. He hypothesized that dropout is an extension of non-participation as they both stem from an interaction of internal psychological and external environmental variables. Setting up from the distinction between “growth” motivated and “deficiency” motivated people, he further stated that deficiency motivation is synonymous with intra-self incongruence (or self denial) which, in turn, leads to self-other incongruence and dissatisfaction with one’s educational environment. Growth motivation is associated with intra-self and thus self-other congruence and satisfaction with one’s educational environment. That is to say, Boshier argues that participants who enroll for deficiency reasons manifest significantly more intra-self (thus self-other) incongruence than participants enrolling for growth reasons. In this model, social/psychological and environmental variables only mediate between congruence and the dropout relationship, which means variables such as transport difficulties and class size trigger dropout or cause non-participation if intra-self and self-other incongruence has developed.

To test parts of the model, Boshier collected data using a sample of 2,436 participants enrolled in continuing liberal non-credit courses in New Zealand. After gathering socio-demographic information from this sample, he administered the EPS to a sub-sample of 233 participants.

To check the congruence part of the model, he used an instrument that he had developed earlier, the Personality and Education Environment Scale (PEES). He mailed the PEES to persisters and dropouts. This instrument was used to get discrepancy scores between the ratings of “Myself” and “Other Adult Education Students”, “Myself” and “Myself-as-I-would-like-to-be”, “Myself” and “My Adult Education Lecturer”. As hypothesized, dropouts’ discrepancy scores were significantly higher than those of persisters’. Having examined the discrepancy scores of persisters and dropouts on the scale, Boshier concluded that “congruence,” both within the participant and between the participant and his/her educational environment, determines participation/non-participation and dropout/persistence. Psychological and institutional variables typically studied in participation research are only mediators of the congruence/dropout relationship. However, in this study Boshier did not test the relationships between socio-demographic mediating variables with congruence/incongruence. Although he tested certain parts of the model, most of his hypotheses remained untested.

Morstain and Smart (1974) replicated Boshier’s (1971) study with 611 students enrolled in adult education courses at a college in the US. They modified the instrument EPS by casting the items on a nine-point scale (1=very little influence; 9=very much influence) instead of using the original four-point scale. They also aimed to determine if there were significant differences in expressed reasons when adult learners were categorized by sex-age groupings. They classified the participants into three age groups for each sex (20 or less, 21-40 and 41 and over).

After factor analysis, six orthogonally rotated factors accounted for 59% of the variance. Only items with loadings of $\pm .40$ or greater were included and each factor

was labeled based on the central meaning of the factors (which is customary to do after factor analysis). The factors were:

1. Social Relationships: These are individuals who state a need for developing or improving their social relationships and making new friends. One item in this factor is related to gaining insight into personal problems and another stresses being accepted by others.
2. External expectations: These are individuals with more extrinsic motivations than intrinsic needs or desires. They are seeking to fulfill the expectations of others.
3. Social Welfare: Individuals preparing for taking part in some sort of a community service are in this group. Their motivation seems to have a humanitarian dimension.
4. Professional Advancement: They aim to use their education to improve themselves in their current job or to advance within their profession. To these people, educational preparation is highly job or vocationally oriented.
5. Escape/Stimulation: Individuals who score high on this dimension seem to reflect a need for stimulation or a desire to get away from what might be perceived a dull or boring environment. Education is a chance to get rid of the boredom and responsibilities of a routine daily life for these people.
6. Cognitive Interest: These people learn for the sake of learning to satisfy their curiosity.

When the items under each factor are examined, it is seen that the EPS yielded similar factor patterns to the findings reported by Boshier (1971). Factors Social Welfare and Cognitive Interest were identical to two factors reported by Boshier. The other factors also were similar to Boshier's findings although items under each factor were not identical. Furthermore, in terms of the reliability of the six EPS scales, the

fairly high coefficient alphas for each factor (between .72 to point .86) derived in this study were the main evidence. This was consistent with the high item test/retest coefficients found in the New Zealand study.

Significant differences between age-sex groups were reported after a stepwise multiple-discriminate analysis was performed on group mean scores separately for men and women. Morstain and Smart (1974) pointed out that “younger adults scored relatively higher on the Social Relationships scale, men were somewhat more motivated by External Motivation reasons, and women scored relatively higher than did men on the Cognitive Interest scale. With respect to Social Welfare reasons, men had relatively similar scores at each level while scores for women tended to decline with increasing age” (p. 96).

Continuing the same line of motivational research, Boshier (1977) examined the relationships between some of the socio-demographic variables that he had hypothesized to have a mediating role between the congruence/incongruence and participation behavior. The model that he had suggested earlier (Boshier, 1971, 1973) put forward that social and psychological variables mediating the congruence/dropout relationship are also assumed to be associated with motives for participation. Instead of the terms “growth” and “deficiency” motivations that he had borrowed from Maslow, Boshier coined the terms “life-space” and “life chance” motivations. He stated that

Growth or life-space oriented people participate in adult education for expression rather than in an attempt to cope with some aspect of their life. Life chance or deficiency oriented people participate because of the need to survive and acquire utilitarian knowledge, attitudes or skills. Life chance motivated people are largely attempting to satisfy the lower order needs on Maslow’s hierarchy; life space motivated people have largely satisfied their lower order needs and are primarily enrolled to expand their life-space (p. 93).

He hypothesized that the presence of life-space motivation (as measured by the EPS factor scores) would be negatively correlated with age and marital status and would be positively correlated with educational attainment levels, occupation, social participation, previous participation in adult education and income. To test the hypotheses, he administered the EPS to 242 participants attending four different adult education centers. A sub-sample of 76 participants completed an additional questionnaire measuring the socio-demographic variables stated in the hypotheses.

Five factors emerged after the factor analysis process, and they were similar to Boshier's (1971) four-factor explanation. Examining the item contents of the factors, and based on the earlier factorings of the EPS Boshier stated that the first three factors, namely escape-stimulation, professional advancement, and external expectations could be associated with life-chance motivation, while the latter two, social welfare and cognitive interest were more related to life-space motivation:

1. Escape/Stimulation: to rectify deficiencies in their social life
2. Professional advancement: to acquire knowledge, attitudes or skills that will help with their job.
3. External Expectations: to act in accordance with the expectations of others.
4. Social Welfare: to acquire knowledge, attitudes or skills that will help them achieve social and community objectives.
5. Cognitive Interest: to learn for the sake of learning.

The attribution of life-chance and life-space labels to the EPS factors was concluded to be weak, as there needed to be more direct ways to investigate Maslow's constructs. However, hypothesized relationships between the EPS factors, age and indices of socio-economic status were confirmed. Although many parts of Boshier's

congruence model remain untested, it is one of the rare attempts to create a model of participation in adult education.

With a later study that employed data from Africa, Asia, New Zealand, Canada and the US, Boshier and Collins (1985) examined Houle's typology again by means of secondary analysis of the data that had been obtained with the EPS with a total sample of 13,442 learners. A total of 54 data files from different studies were used to constitute the master file. Cluster analysis was used to analyze the data and, although they stated that a three-cluster solution loosely isomorphic with Houle's typology was discernible, they preferred a six-cluster solution as the activity orientation turned out to be multifaceted, and composed of items formerly labeled Social Stimulation, Social Contact, External Expectations and Community Service. They concluded that, "when forced into a single activity orientation, this nominal activity orientation was more like a murky "fruit salad" composed of components whose clarity was obscured" (Boshier and Collins 1985, p. 126-127). Hence, they chose not to collapse Social Stimulation, Social Contact, External Expectations, and Community service into a single activity orientation. As a result, their findings showed that, although Houle's goal and learning orientations were reasonably clear, his activity orientation was more complicated than he had previously thought.

However, one should be careful reading the results of this study. As Boshier and Collins (1985) acknowledged, it was not a very big surprise to reach a factor structure that would be similar to Houle's original typology, since Boshier perused Houle's book in the process of coming up with items for the EPS. Therefore, the EPS had already contained elements of Houle's tripartite explanation of participation. However, secondary analysis of a large data base was very helpful to test Houle's parsimonious typology, which was only based on a total of 22 adults. It is worth

mentioning that Houle (1961) was able to reach two of the six factors that were pointed out with this study with his very small sample.

Beder and Valentine (1990) studied the reasons of low-literate adults for participating in Adult Basic Education (ABE) courses. They used a random sample of 323 learners enrolled in ABE programs in the US. Through factor analysis, they discovered ten factors that provided a conceptually meaningful framework for the diversity of motivations leading to participation in ABE. These ten factors were:

1. Self-Improvement. The items in this category were abstract and global, rather than concrete and specific. The motivation was of an intrinsic or psychological nature perhaps best expressed by the phrase "What I hope to be", e.g. "I want to be more important."
2. Family Responsibilities. The items in this category related to practical aspects of family life: to be a better parent, to help children with their homework, to be a better spouse.
3. Diversion. This appeared to be the classic activity-oriented category (Houle, 1961; Boshier and Collins, 1985) which suggests that social contact and escapism play a part in participation in ABE.
4. Literacy Development. Items in this category dealt with written and oral communication skills. It is interesting to note that one item "I need to be better at math" did not fall into this category, suggesting that the motivation to learn mathematics is somewhat apart from the other motivations. This has implications for those in the field who usually place math skills with the literacy skills.
5. Community/Church Involvement. This category depicted ABE students as people who want to play more active roles in their religious and lay organizations and as citizens.

6. Job Advancement. The items here included wanting to do a job better, wanting promotion, wanting to get a better job. This grouping really only applied to those already employed - usually a minority in ABE programs.
7. Launching. Items in this category seemed to cluster around expectations of imminent life changes - marriage, parenthood - which would demand a restructuring of the respondents' lives. Further analysis also revealed respondents with high scores in this category to be young – at the point of moving from adolescence to adulthood. This appears to be a new factor which has emerged in the motivational literature and is the only factor directly related to life-cycle phenomena.
8. Economic Need. Items here related to finding a job, wanting to get off welfare, wanting to earn more money.
9. Educational Advancement. Items here related to high school completion and to the aspiration for higher education.
10. Urging of Others. This factor depicted motivation as a response to external pressures to attend ABE. It was the only overtly extrinsic factor.

If the above ten factors are rearranged according to the highest mean item means obtained for each factor in this study, the ranking is as follows: Educational Advancement, Self-Improvement, Literacy Development, Community/Church Involvement, Economic Need, Family Responsibilities, Diversion and Job Advancement (tied in seventh place), Launching, and Urging of Others.

The authors then identified six types of ABE students by subjecting the motivational factor scores to cluster analysis. The clusters were then described with respect to selected socio-demographic variables. The six types of ABE students which

emerged from this study were: Mainstream Women, The Urged, Young Adults, The Climbers, Least Affluent, Least Employed and Low Ability Strivers.

This study reinforces the findings of others that motivation is multidimensional and that there are distinct subgroups of learners in the low-literate population. The motivational findings clearly show that there are many dimensions which go beyond the simple desire to improve basic skills, although Educational Advancement and Literacy Development emerged as high priorities. Five other factors, however, deal with the uses to which education will be put, rather than to education itself. Community/Church Involvement, Economic Need, Family Responsibilities, Job Advancement and Launching focus on the performance of adults in their social roles as family members, citizens and workers. The remaining factors relate to intrinsic motivation (Self-Improvement), to the social nature of classes (Diversion) and the role of external pressures in participation (Urging of Others).

Lastly, using “The Reasons for Educational Participation” developed by Burgess (1971) and revised by Grabowski (1972), Ural (1993) investigated the reasons for participating in adult education programs in Turkey considering motivational orientations. He adapted the instrument to the Turkish setting by means of a pilot study. The final version of the instrument and a demographic information questionnaire was used. People who were over the age of fifteen and out of school, and attending the courses of PECs were considered “adults” in this study. Five PECs were chosen using the convenience sampling technique. He determined eight clusters of factors that affected participation in the adult education programs. These factors were: 1. Inner-Directed Learning 2. Escape 3. Learning for Competition 4. Social Relations 5. Other-Directed Learning 6. Personal Improvement 7. Obedience to Authority and 8. Social and Economic Improvement.

Hayes (1988) points out that most of the literature on low participation in adult basic education is based on untested assumptions or descriptive studies of groups such as high school dropouts. Using empirical research methods, she confirmed the existence of numerous barriers to participation in Adult Basic Education (ABE). Her sample consisted of 160 ABE students in seven urban ABE programs in the US. These adults were asked to identify barriers that had prevented their participation prior to their enrolment in ABE. Thus, the sample used could not permit a typology to be developed of the entire low-literate population, but is representative of those most likely to participate in ABE. Hayes used the Deterrents to Participation Scale (DPS) developed specifically for use with low-literate adults. She found five factors to be the most conceptually meaningful representation of the data. These factors were:

1. Low Self-Confidence. Items under this factor reflected feelings of low self-esteem in general, and especially in relation to academic ability.
2. Social Disapproval. Items under this factor suggested the existence of a social environment, among family and friends, where education was not perceived to be important or useful.
3. Situational Barriers. Items under this factor were cost, lack of transportation and family problems.
4. Negative Attitude to Classes. Items under this category were related to dislike of schoolwork or classes, or to an act of participation in classes such as going to a school building. The items evidently represented personal evaluations rather than barriers erected by the institutions.
5. Low Personal Priority. Under this category, items reflected situations in which other activities took precedence over education.

Hayes and Valentine (1989), in their study of the functional literacy needs of low-literate ABE students, concluded that "the provision of functional literacy instruction is a complex task ... It is essential to recognize differences in types of literacy needs and types of learners" (p. 10). They stated that students learned most of what they needed least and least about what they needed most. A potential explanation for this finding was the mismatch between instructors' perceptions of the needs of the learners and the expressed needs of learners. The authors strongly urged continuous communication with learners.

Beder and Quigley (1990) in their study of 129 non-participants in ABE in Iowa found that, of 32 reasons for nonparticipation, five of the six most quoted reasons related to attitudes towards ABE or perceptions of ABE. Factor analysis in this study reduced the 32 reasons to four factors: Low Perception of Need, Perceived Effort, Dislike for School and Situational Barriers. There is an overlap of some of these factors with those discovered by Hayes (1988), cited above. Low perception of need was found to correlate with age. As adults age, their perception of need declined. Situational barriers correlated with marriage, number of children in the home and full-time employment.

2.3 Issues of Measurement

According to Boshier (1973), an ideal motivational orientation study with a survey instrument employs a valid and reliable instrument with known psychometric properties, the resultant research report containing all relevant descriptions of criteria for factor scoring, factor analysis, rotation and scaling. After examining major survey instruments, most of which were developed after Houle's (1961) classification of adult learners that suggests that participants can be characterized as goal, learning or activity oriented, the EPS was chosen to adapt to the Turkish setting. The EPS was first developed by Boshier in 1971 and has been published commercially since 1982. The first form of the instrument aimed to test Houle's tripartite classification of adult learners, but it was revised by Boshier a couple of times and no longer reflects Houle's typology. The last revision was made in 1991 to make sure that items for the alternative (A) form of the EPS were derived from a heterogeneous population, and it was free from the effects of Houle's work, as the purpose of this new form is more general than testing Houle's typology (Boshier, 1991).

A determining factor in choosing the EPS to adapt was the simplicity and clarity of the EPS items. The EPS A-form was first developed to be used with the Adult Basic Education (ABE) population, but then became the only form of the instrument, for use with adult participants in general. However, the items remained very easy in terms of reading level.

The adaptation of the EPS was preferred by the researcher over developing a new instrument for various reasons. Firstly, the current researcher has not done any instrument development, thus it seemed more plausible to work with a psychometrically sound instrument rather than developing a new instrument.

Moreover, there is relatively more research done employing the EPS to determine the reasons for participation in adult education activities than any other survey instrument (Boshier, 1991), thus the results of this research might give some insight into the participation issue across cultures.

The EPS A-form is comprised of seven factors that measure motivational orientations. It is a 42 item, retrospective, paper and pencil scale, with a 4-point response category from “no influence” to “much influence” designed to identify motivation orientations towards continuing education activities. The scale does not have an overall score, but provides mean scores on the 7 sub-scales. Each sub-scale is comprised of six items. This makes it easier to compare sub-scale means of an individual as each factor has an equal number of items.

The first step in the process of developing the EPS A-form was producing the items. For this, after a brief discussion about why they had enrolled in their course, 120 participants in adult basic education and college preparatory classes at a community college in Canada were asked to write five reasons onto paper. A total of 400 reasons were acquired and they were put in a priori factors by the researcher and one of the instructors in the community college. Items that were judged redundant were dropped, and 10 items from the earlier version of the EPS were added which resulted in a list of 120 items. The items were cast on a four-point scale (No influence; Little influence; Moderate influence; Much influence), which was the same in the earlier version of the EPS as well. Questions to gather information about age, gender, mother tongue, country of birth and type of the class enrolled in were also included.

The 120-item instrument was then administered to a new sample consisting of 280 participants from the same community college. The researchers read the items

aloud and floated in the class to ensure that every participant understood the questions well. Responses to 257 usable questionnaires upon the administration were inter-correlated and subjected to factor analysis with an orthogonal (or varimax) rotation, which yielded the final version of the EPS-A with 42-items and seven factors (see Appendix B factor loadings of each item). According to Boshier (1991), this seven-factor solution was adopted as there were no passenger items, every factor was meaningful with an equal number of items and the factor loadings were more than .50. Factors were named and explained as the following based on the central meaning of the each factor:

1. Communication Improvement: This factor consisted of items that were related to improving verbal and written communication skills as well as learning the customs pertaining to communication.
2. Social Contact: This factor was concerned with meeting new people and making friends.
3. Educational Preparation: The items under this factor were related to the compensation of inadequate former education and preparation for some sort of further education.
4. Professional Advancement: This factor was comprised of items concerned with moving ahead in the current job or preparing to get a new or better job.
5. Family Togetherness: This factor did not exist in the early version of the EPS and was composed of items related to keeping up with the other family members and improving family relationships.
6. Social Stimulation: This factor was concerned with escaping unhappiness, loneliness and boredom.
7. Cognitive Interest: This factor was concerned with learning for its own sake.

2.3.1 Validity of the Instrument

Boshier (1991) checked the construct, concurrent and predictive validity of the A-form of the EPS. Based on the high factor loadings of the items, he concluded that the instrument is sound in terms of construct validity. The alpha coefficients of the factors that were between .76 to .91 were also pointed out as an indication of the construct validity of the instrument as they meant high internal consistency.

As for the concurrent validity that Boshier (1991) defined as “the extent to which the instrument yields the same scores as other instruments which, on a priori basis, should yield similar results” (p. 157), he used a sample of 23 Singaporeans who were given the new (A-form) and the old (F-form) of the EPS with a one-week interval between the forms. The A-form of the instrument was descendant of the F-form as there were a total of ten items in common in both forms and the items yielded similar factors other than “family togetherness” which appeared as a new factor in the new form. Inter-correlations of relevant factors, between $r = .52$ to $r = .71$, as well as a relatively high mean of logical inter-correlations, $r = .62$, constituted the data, which suggested that the new form had concurrent validity according to Boshier (1991).

Lastly, the predictive validity of the instrument was examined. Boshier (1991) defined the concept as “the extent to which the instrument predicts a criterion behavior” (p.157). For this purpose, nine immigrant subjects from different backgrounds were selected from the same community college with the earlier sample and an interviewer, who was not the researcher, then interviewed each of the nine subjects about their personal and family circumstances, their experiences as immigrants to Canada, and immediate and long term goals. Although the interviewees had already filled EPS A-form, they were given seven cards with the EPS-A factors on them and were asked to indicate their estimate of the extent to which they were

influenced by the factors on the cards to enroll in College Preparatory English courses. The interviewer took written notes, which were then used by the researcher to estimate the subjects' motivational orientation without seeing their responses to the EPS A-form. Therefore, there were three different factor scores: the researcher's estimate based on the interviewer's notes, the EPS scores and the participants' own estimates of the amount influence from each given factor, respectively. Various discrepancy scores were calculated. Boshier (1991) reported that, with the exception of one subject, the EPS yielded scores that were congruent with both the subjects' and the researcher's estimates concerning the extent to which each factor influenced the subjects to enroll.

2.3.2 Reliability of the Instrument

The reliability coefficients and scale scores were calculated by combining data gathered from a total of 845 subjects. The number included subjects that constituted the samples that Boshier (1991) used to develop the instrument and to secure data pertaining to validity. Scale scores were calculated by taking the sum of the responses to each of six items that compromised a factor. "No Influence" was scored 1, "little Influence" 2, "Moderate Influence" 3 and "Much Influence" scored 4. Hence, scale scores ranged between 6 and 24. It was easier to calculate scale scores because it was not necessary to derive mean scale scores using the A- form as all the factors has an equal number of scores. Scale scores and reliability coefficients are shown in table 2.2.

Two procedures were implemented to examine the reliability of the new form. The internal consistency of each factor was examined by calculating coefficient alpha

for each factor using the responses from 845 subjects in the first place. These were satisfactorily high as shown in table 2.2.

Table 2.2
EPS (A-form) Scale Score Means, Standard Deviations, and Reliability Coefficients

Scale	Mean	S.D.	Reliability (alpha)	Reliability (test/retest)
Communication Improvement	15.65	5.84	.89	.56
Social Contact	11.97	4.90	.91	.75
Educational Preparation	17.80	4.86	.80	.61
Professional Advancement	18.52	4.47	.80	.70
Family Togetherness	9.79	4.17	.82	.74
Social Stimulation	10.25	4.07	.80	.58
Cognitive Interest	16.81	4.11	.76	.60

Source: Boshier, (1991).

In a second procedure, the instrument was administered twice with a six-week interval to a total of 65 subjects in two grade 11 equivalency classes at a community college. Responses to each item, as well as scale scores, were correlated. The mean Pearson product-moment correlation for 42 items was .49; the mean stability-over-time coefficients are shown in table 2.2.

In conclusion, the EPS A-form measures motivational orientations and consists of seven 6-item factors comprised of items inductively derived from adult education participants. The final 42 items were those that survived processes designed to examine the reliability and construct validity of the scale. To investigate concurrent validity, the EPS A-form scores were correlated with the EPS F-form scores. Predictive validity was examined by relating interview data and "estimates" to actual EPS scores. Coefficient alphas ranged from .76 to .91; the mean scale test/retest

coefficient was .65. Based on the data presented, the EPS A-form appears to be psychometrically sound.

Fujita-Starck, (1996) studied the factor stability of the EPS A-form with the sample of 1,124 university students and found out that the overall reliability of the EPS scale was .92. The new version of the EPS is comprised of seven factors that measure motivational orientations. Reliabilities of the EPS factors one through seven were .87, .95, .75, .91, .77, .82, .83, respectively. Her findings were similar to Boshier's (1991) findings. These factors were:

1. Social Contact. People who score high on this factor participate because of the joy of learning with others. They like being part of a group.
2. Social Stimulation. People who score high on this factor are lonely or bored and participate in education to meet others and to cope with problems in their social life.
3. Professional Advancement. People who score high on this factor participate in education to consolidate their hold on their current job, or to position themselves to get a new job. For them, education is a way to advance professionally.
4. Community Service. People who score high on this factor are socially-motivated and committed to "doing good" in civil society. They are participators and joiners.
5. External Expectations. People who score high on this factor participate in educational events because of pressure from others at home or work.
6. Cognitive Interest. People who score high on this factor participate in education for its own sake.
7. Communication Improvement. People under this factor participate as they conceive educational activities as a chance to improve their communication skills.

In conclusion, Boshier's EPS is the most well-known instrument used in numerous studies in the area of participation research (Fujita-Starck, 1996; Merriam & Caferralla, 1999). Data concerning reliability of the EPS is satisfactory in both the Boshier (1991) and the Fujita-Starck (1995) studies.

3. METHOD

The methods used to adapt the EPS for adults participating to literacy courses included forward-translation of the instrument from English to Turkish followed by back-translation from Turkish to English and reconciliation sessions with experts. A test/re-test with the original English form and the translated form in Turkish was conducted to verify translational equivalency of the two versions of the instrument with the aid of statistical analysis. The Turkish form of the instrument was field-tested after test/re-test to check factor structure and internal consistency. A test/re-test of the Turkish version of the instrument was conducted at a level II literacy course, during field-testing with a two week interval, to establish that the new form is reliable across time.

3.1 The Translational Equivalence Study

There is a large volume of research on how to adapt an instrument into a new linguistic setting (Hambleton & Patsula, 1998; Hambleton & Patsula, 1999; Harkness, 2003), however Harkness (2003) suggests that, since the challenges of the translating or adapting an instrument from one culture to another changes from discipline to discipline, it would be more relevant to seek discipline-specific procedures in an effort to avoid possible problems. Thus, for the purposes of this study, the steps that Prieto (1992) proposed as guidelines for translation procedures for the adaptation of an adult education instrument into a new cultural setting were mainly followed.

In fact, the EPS has already been translated into Portuguese, Spanish, German, French and Chinese and has been printed commercially since 1982 (Boshier, 1991). Boshier did not control the Portuguese, Spanish or German versions, but ensured that the French and Chinese versions of the EPS went through these steps: (a) forward-

translation of the EPS into the target language; (b) back-translation of the target language version into English; (c) comparison of the original with the new English version (Prieto, 1992). After examining the factor analysis data from the Chinese and French versions, Boshier concluded that the factor structure of the A (Alternative) Form (which is the same form used in this study) would be better suited to non-English speaking populations as the factors are more universal than the previous F-Form, which was originally designed for use in New Zealand (cited in Prieto, 1992).

In fact, in the course of determining the details of the procedure to adapt the EPS into a Turkish setting, previous adaptations of the instrument were perused. In addition Boshier's own statements and suggestions on the translation and adaptation process of the EPS into new linguistic settings were examined to ensure that some consistency exists between the methods used in the earlier studies and the current one.

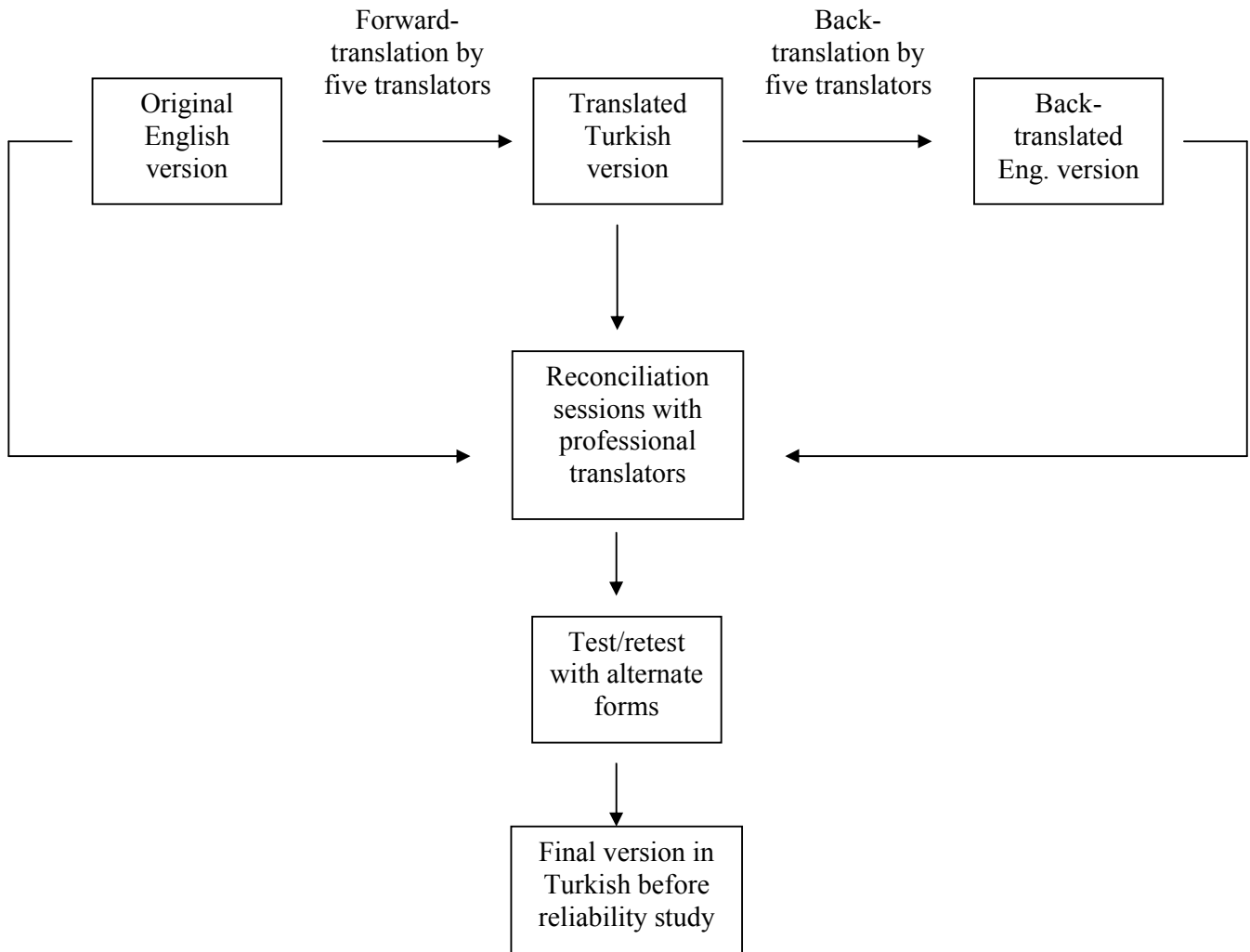
3.1.1 Procedure for the Translation

There were two goals of the translation process for the purposes of this study. The first was to create a translation that would be equivalent to the original form of the EPS both linguistically and conceptually. The second was to ensure that the adapted version of the instrument would be understood by the intended audience, namely adults participating in level II literacy courses at PECs in the city of Istanbul.

Before starting the translation process, Roger Boshier of University of British Columbia, the developer of the EPS, was contacted via e-mail to get his input regarding the intended procedure for the translational equivalence study. He was presented with the procedure for the translation process as well as the details of the reliability and validity studies after the initial translation. He found the methods chosen to create the Turkish version of the instrument for low-literates appropriate

(personal communication, December 06, 2005). The steps taken in the translation of the EPS were summarized in figure 3.1.

Figure 3.1. The procedure used during the translational equivalence study.



Instead of relying on only one translator for the whole translation process, multiple translators were consulted. Wrong personal interpretations and inevitable translator blind spots are handled well if several translators are involved and an exchange of versions and views is part of the review process (Hambleton & Patsula, 1999; Harkness, 2003). First, in order to select translators to put into two translating teams, forward-translation and back-translation, individuals fluent in both languages,

familiar with the cultures under study, and with some knowledge of test construction and the construct being measured were sought. Bilinguals who have studied adult education at the MA level were included in each of the translation teams to make certain that the translators were also aware of the challenges of the research questions in hand. A group of ten translators, who were known to the researcher as being bilingual, were decided upon at the end to comprise the two translation teams.

The translation from original language to the target language is called forward-translation (Prieto, 1992). Therefore, the first step was to form the forward-translation team. The teams were formed based on the mother tongue of the translators. The assumption was they would have an easier time translating into their native language. For this reason native speakers of Turkish, who are also very proficient in English, translated the original form of the EPS into Turkish.

A challenge was to combine the five translations that came from the forward-translation team into a single form before the back-translation process. The researcher compiled the translations by different translators and decided on the best version of every item by selecting whichever was most similarly translated by most of the translators. The fact that there were an odd number of translators proved to be very effective in this process. However, there was not an agreement among the team members on the translation of certain items.

To decide on the appropriate translation of those controversial items and to further verify the appropriateness of the forward-translation for the intended audience, a reconciliation session with the committee of professors supervising this research was held. All of the committee members were from the adult education program at Bogazici University. There were some modifications suggested and the resulting Turkish form was checked and revised again with the help of a professional translator,

bearing in mind the suggestions made by the professors on the research committee. The professional translator was a faculty member of the Bogazici University Department of Translation and Interpreting Studies, and did not participate in the forward-translation. However, he was informed about the purposes of the translation, research questions and characteristic of the adults for which the instrument was adapted.

To check for any possible conceptual or literal mistakes, the back-translation technique was employed. Back-translation operates on the assumption that what goes in ought to come out (Harkness, 2003). This time, three of the five translators were native speakers of English who are also proficient in Turkish and the remaining two were native in Turkish with a strong command of English. Although they were informed about the aim of the study, they had no previous exposure to the instrument. The researcher compiled all five back-translations and, using the same technique in the forward-translation phase, decided upon a single back-translated version after examining the five different versions submitted by the translators.

The two English versions of the EPS, the original version and the back-translated version, were then compared to determine their similarities and differences. In the back-translation technique, the back-translated text is taken as an indicator of the target language translation, which is not assessed itself (Harkness, 2003). Although it was not a verbatim translation, and some minor changes were present, there were no major connotative differences between the original English version and the back-translated version. The comparisons were made with a native speaker of English who did not participate in either the forward-translation or the back-translation process by means of asking her to read both of the forms item by item and decide if there is a conceptual or literal difference between the back-translated version

and the original version of the scale. She found the back-translation of the EPS to be a fair match to the original version of the instrument both linguistically and conceptually.

Before determining the final Turkish version of the scale, the expert opinion of another professional translator was secured. This translator, who was not the expert that had reviewed the forward translation, compared the original English version and the back-translated version. No changes were suggested by this second, and final, expert, who found the translation “appropriate for the aims of the study”.

To summarize, the final Turkish version was accepted after a total of twelve translators, a committee of three professors and a judge, who is a native speaker of English, worked on the quality of the translation in terms of conceptual and literal equivalence. They were all aware of the assumed language abilities of the intended audience of the adaptation.

Working with groups of translators, instead of individuals, as well as having recurring reconciliation sessions with professional translators blind to the forward-translation and back-translation process, proved to be very effective. Due to the instrument developed as a result of the process, the results obtained from this research project might give us a somewhat comparative insight regarding the concept of educational participation to educational activities in different cultures.

3.1.2 Test/Re-test Study with Alternate Forms

Achieving reliability between the original form of the EPS and the translated version in Turkish is a priority. Therefore, in order to further assess the equivalence of the translation, using statistical analysis, a test/re-test study was designed. This was to attain empirical evidence showing the equivalence between the original and translated

versions of the scale after forward-translation and back-translation techniques were used.

3.1.2.1 Subjects

The ideal subjects for this part of the study would be truly bilingual in English and Turkish and low-literates who participate in level II literacy courses at PECs in the city of Istanbul. However, although it is easy to formulate the group on paper, it was not possible to reach such a group for the study and it is unlikely that a single such individual even exists. Hence, the description of the subjects was modified to make it more probable to reach the necessary number of people for statistical analysis.

The researcher had two main criteria in forming the group of subjects that would take the survey instrument twice with a two-week interval: (a) the participants should be true bilinguals, if possible, or, if not, they should be a native speaker of one of the languages and an advanced level learner in the other, (b) they should be participating in some kind of an adult education activity, which may or may not be confined in the walls of a classroom as long as the participants to the course are there voluntarily. Having set these principles, the convenient sampling technique was used to reach the subjects; three adult education settings were decided on to administer alternate forms, original English form and translated Turkish form, of the scale to the same subjects.

The first setting was the Bogazici University Life-Long Learning Center (BULC). The BULC's function is similar to that of an extension school at an American University in the sense that any adult who is willing to participate in the available courses can do so by paying the course fee. The subjects that were selected for the study were participants in an advanced-level course of English as a foreign language. Because of the impossibility of exactly determining the proficiency of a

language learner, advanced level learners were chosen for the study, assuming that the level of the course in which they were taking part indicated their language skills.

The second educational setting was the Discover Language Center (DLC), which offers English language courses to both adults and youths in Bakırköy, İstanbul. The DLC is a private language center, which means that taking part in one of the offered courses is voluntary and requires payment of the necessary fees. There are two ways to be able to attend an advanced-level English as a second language course at DLC: (a) passing the proficiency exam at the beginning; (b) successfully completing the upper-intermediate course offered at the DLC. The subjects chosen for the test/re-test were advanced-level adult learners of English who were actually preparing for the Test of English as a Foreign Language (TOEFL) and were considered highly proficient in English by their teachers.

The third setting was the Boğaziçi University Alumni Association (BUAA), where former graduates of BU come together for a variety of adult education activities. Although the function of the BUAA is not limited to offering courses, the offering of courses constitutes one of its principal purposes by creating a learning-friendly atmosphere for graduates of the university to continue their educational endeavors. It is also possible to take part in the courses as a guest at BUAA, however it was ensured that all the subjects of the test/re-test actually graduated from BU as there was no way of assessing the English proficiency of the non-graduates. Because BU offers four year undergraduate degrees preceded by one year of English preparatory classes, and because the medium of instruction is English, the subjects completed at least four years of college level work in English even if they had passed the proficiency exam and had skipped the one-year preparatory English classes. Therefore, the graduates were considered bilinguals and were incorporated as subjects

of the study. Subjects of the study were drawn from personal development courses offered in spring 2006.

Though the group of subjects was composed of both male and female students, sex was not equally represented in the subjects of the study due to the limitations of the selection procedure. Therefore, the natural sex distribution of the sample was maintained. The composition of the sample is shown in table x.

Table 3.1

Composition of the Sample in the Translational Equivalence Study

Location	Males (N)	Females (N)	Total (N)
BULC	17	26	43
DLC	9	6	15
BUAA	19	19	38
Total	45	51	96

3.1.2.2 Instrument

Two different versions of the EPS, that is the original English form and the final version of the translated Turkish form, were the instruments used for the test/re-test study. The two forms were identical regarding structure, content and administration.

3.1.2.3 Procedure for the Test/Re-test Study

The two forms of the EPS were administered to groups of subjects in a counter-balancing design at all of the educational settings in order to control possible order bias of the forms. In other words, at each educational setting mentioned above, namely DLC, BULC and BUAA, approximately half of the subjects were given the

original English form first and the other half received the translated Turkish form first to eliminate any possible confounding variable resulting from initial receipt of either of the versions. The tests were administered to randomly selected classes of students, rather than to randomly selected individual students, because it was more pragmatic for the researcher.

After two weeks, the alternate form was administered to the classes. Two weeks was chosen as the interval for two reasons. The first of these reasons is that two weeks is deemed long enough to ensure that students would forget their answers from the first administration of the instrument to the second. This is necessary because if the students had remembered their answers from the first administration, and responded similarly at the second administration for this reason, any high correlation observed between responses on the first and second administrations would have been artificial and reliability, therefore, would not have been measured. The second reason for the two week interval is that it is unlikely that the subjects would have changed their minds about their reasons for participation in the course in such a short amount of time. This is necessary because if the students had changed their minds about their reasons for participation between the first and second administrations, the correlation observed between responses on the first and second administrations would have been very low and would not, therefore, have reflected the purpose of the study, which was to determine if the items correspond well with one another on the two versions of the instrument.

The researcher was physically in the classroom to administer the test, mainly to ensure that, during the administration of the original English form, the classroom teachers did not step in to translate any items the subjects were having a hard time comprehending. In cases where the researcher was not able to administer the test, the

classroom teachers were instructed not to translate for their students, should any of them have asked for complete translations of any items during the administration.

The students were asked not to include their names on their forms; instead they were asked to give their birthdates and favorite food so that, while they enjoyed anonymity, it was possible for the researcher to locate the same subject the second time.

According to the order in which the forms were administered, two groups of subjects emerged at the end of the study, as seen in table x. Group I received the translated Turkish form first. Group II received the original English form first. Both groups had subjects from all three of the educational settings. The number of subjects in Group I was not equal to the number of subjects in Group II as the classes included in the former group were slightly larger. However, this was only a minor difference considering the total number of participants in the test/re-test study.

Table 3.2

The Composition of the Two Groups Administered the EPS and the Order of the Forms Given in the Test/Re-test Study

Group	Total (N)	Male (N)	Female (N)	First Testing Form	Second Testing Form
I	51	22	29	Turkish	English
II	45	23	22	English	Turkish

3.1.2.4 Statistical Analysis

The Spearman's rho was computed to examine the relationship between the scores from testing and re-testing. The same statistic was calculated for the two administrations to Group I and Group II to see if the order of administration of the test

(the original English form first, or the translated Turkish form first) made any difference in the correlation of the first score to the second.

3.1.2.5 Expectations

If the translated Turkish version of the instrument is an equivalent of the original English version, there should be a high correlation between the two scores that the same subject obtained from the original English version and the translated Turkish version. In the same vein, if the translated version of the EPS is reliable, there would be no significant differences between the mean scores of Group I and Group II.

3.2 The Reliability Study

The internal consistency reliability of the items in the Turkish version was tested by means of administering the instrument at level II literacy courses offered by PECs in Istanbul. The stability of the Turkish form of the EPS over time was checked by means of a test/re-test, using the Turkish version of the instrument with a sub-set of the sample used for the internal consistency reliability study. Factor analysis was used to compare the factor structure of the adapted version to the well-established factors of the original English EPS. Checking the internal consistency reliability and the test/re-test reliability of the instrument were the last steps to complete the adaptation process.

3.2.1 Internal Consistency Reliability

3.2.1.1 Sample

The multi-stage cluster sampling method was used to draw the sample for the reliability study from PECs in the province of Istanbul. This technique is preferred for

two reasons; (a) it is efficient for large numbers, (b) the names of all the individuals are not needed in this technique.

During the first stage area sampling, or geographical cluster sampling, was used to decide on the districts from which the sample would be drawn. There are a total of 32 districts in the province of Istanbul and each district has its own PEC offering level I and level II literacy courses. Of these 32 districts, 27 are under the control of the metropolitan municipality. Five of them are out of the main district area (SIS, 2005) but, as they are within the province borders, they were also included in the population of the study.

Next, the geographical areas were stratified according to the literacy rate and diploma holding status of the populations in them. To determine the literacy rate for each geographical area, the census data from the year 2000 was closely examined. The number of potential level II literacy course participants within each district was determined by adding the number of individuals who are illiterate and the number of individuals who stated that they are literate but have not completed primary school in each district (since level II literacy courses are the first step to get the basic education diploma, people who reported to be literate but had not completed primary school are included in the potential participants). The percentage of potential level II literacy course participants out of the total population was calculated next, and all the districts were ranked from the highest percentage of potential level II literacy course participants within a district to the lowest percentage of potential level II literacy course participants within a district. Table 3.3 presents the distribution of illiteracy in the districts of Istanbul.

Table 3.3

Literacy and Diploma-Holding Statistics of the Residents of the Districts of the Province of Istanbul

Districts	Population (N)	Number of Illiterates (N)	Number of Literates without a School Diploma (N)	*No Information	Number of Potential Level II Literacy Course Participants (Illiterates and Literates without a School Diploma) (N)	Percentage of Potential Level II Literacy Course Participants in the Population (%)
Sultanbeyli	147,428	18,155	40,666	3	58,821	39.90
Bağcılar	483,233	41,861	105,955	7	147,816	30.59
Gaziosmanpaşa	575,141	49,926	125,406	7	175,332	30.49
Esenler	329,312	26,684	71,886	4	98,570	29.93
Pendik	339,554	25,042	72,417	5	97,459	28.70
Tuzla	95,881	6,976	20,017	0	26,993	28.15
Ümraniye	389,730	27,703	81,640	16	109,343	28.06
Küçükçekmece	524,741	39,379	105,835	9	145,214	27.67
Zeytinburnu	221,409	16,697	43,436	11	60,133	27.16
Kağıthane	305,740	22,032	60,850	13	82,882	27.11
Beyoğlu	209,152	17,279	39,003	7	56,282	26.91
Eyüp	210,904	14,921	41,539	8	56,460	26.77
Silivri	39,899	2,523	7,948	0	10,471	26.24
Beykoz	155,085	10,158	30,164	5	40,322	26.00
Kartal	303,446	18,868	58,855	9	77,723	25.61
Çatalca	14,260	1,001	2,650	0	3,651	25.60
Bahçelievler	428,817	26,280	81,397	2	107,677	25.11
Güngören	244,850	13,850	47,199	9	61,049	24.93
Bayrampaşa	221,059	12,751	40,940	0	53,691	24.29
Fatih	370,559	23,017	63,809	17	86,826	23.43
Avcılar	211,368	10,942	38,254	4	49,196	23.28
Sarıyer	199,428	11,451	34,713	3	46,164	23.15
Üsküdar	450,052	22,845	78,660	31	101,505	22.55
Maltepe	324,159	17,335	54,573	22	71,908	22.18
Eminönü	52,830	4,230	6,774	4	11,004	20.83
Şişli	250,792	14,160	37,484	5	51,644	20.59
Büyükkçekmece	32,738	1,119	5,432	1	6,551	20.01
Şile	9,534	345	1,354	1	1,699	17.82
Kadıköy	619,101	22,925	85,642	13	108,567	17.54
Adalar	16,930	639	2,078	1	2,717	16.05
Bakırköy	197,251	5,277	24,104	11	29,381	14.90
Beşiktaş	181,179	4,248	19,821	2	24,069	13.28

*The number of people who did not report their literacy status in the year 2000

The list of districts was stratified according to the percentage of people in each district who are potential participants to level II literacy courses for two reasons: a) to ensure that the sampling procedure would produce enough subjects for the study; b) to give the PECs with a high illiteracy rate an equal chance of being included in the study.

Having contacted PECs in districts where literacy rate is relatively high (like the district of Beşiktaş, for instance), the researcher was aware that the number of participants in second level literacy courses in these districts was very limited (not more than one or two classes a year). Therefore, the researcher needed to ensure that the PECs selected for the study were not all located in districts like Beşiktaş, where illiteracy is not as severe.

After the stratification process, two groups were formed: a) districts where the percentage of potential participants is less than or equal to 25%; b) districts where the percentage of potential participants is more than 25%. It should be noted that 25% percent is an arbitrary cut-off point; the main purpose was to divide the districts into two groups of almost equal numbers. As a result, 17 districts were put into the Higher Potential Group (HPG) and the remaining 15 districts formed the Lower Potential Group (LPG). “Higher potential” refers to the fact that there are more people eligible for taking level II literacy courses, and “lower potential” refers to there being fewer eligible people.

Because it was not possible for the researcher to visit every PEC in the province of Istanbul, a total of 8 PECs were selected to include in the study. Therefore, at the next step of the multi-stage cluster sampling process, a simple random sampling technique was used to pick districts from each of the groups formed. More specifically, the lottery method was used. The names of the PECs were written

on separate pieces of paper and folded. Those in the HPG were put in a pile separate from those in the LPG. Each pile was mixed in a box. A name was drawn one at a time from each box, recorded, and discarded. The drawing process continued until a total of fourteen PECs were recorded, seven from the HPG and seven from the LPG. The first four PECs from each group constituted the sample. The other three PECs from each group were recorded in case of a problem like not being able to reach a level II literacy courses in any of the first four PECs.

For the last step of the multi-cluster sampling process, two classrooms of level II literacy course participants were selected at each PEC using a simple random sampling technique. In Kadikoy, there was only one class open at the time of the data collection. Therefore, only one class was included in the sample.

Table 3.4

The PECs Included in the Internal Consistency Reliability Study Sample

	<i>Name of the PEC</i>	<i>Male (N)</i>	<i>Female (N)</i>	<i>Total (N)</i>
<i>High Potential Group</i>	Küçükçekmece	15	15	30
	Beyoğlu	11	9	20
	Sultanbeyli	10	10	20
	Kağıthane	9	14	23
<i>Low Potential Group</i>	Fatih	11	15	26
	Bayrampaşa	11	10	21
	Kadıköy	5	6	11
	Avcılar	6	15	21
<i>Total</i>	Six PECs	78	94	172

3.2.1.2 Instrument

The Turkish version of the EPS developed from the forward-translation/back-translation and the test/re-test study with alternate forms, was used for the internal consistency reliability study (see Appendix C for the Turkish translation of the EPS A-form).

3.2.1.3 Procedure

Using Hayes' (1988) methodology, items on the inventory were read aloud by the researcher to groups of subjects. The participants were already literate, to some extent, as they either participated in the level I literacy course for 90-120 hours before registering into the level II literacy course or had learned basic literacy skills themselves. In fact, many of the participants turned out to be primary school drop-outs who had completed at least three years of formal schooling. Therefore, most of them did not have any difficulty reading the items on the instrument themselves. Yet, reading every single item on the instrument together with the subjects ensured better reliability for the data-collection process.

In order to ensure that any subject who was having trouble was given individual support, the researcher had an assistant present in the class at all times during the data collection process. There were three assistants involved in the study, all of whom were female MA students in the Adult Education Program at Boğaziçi University and who were informed about the research questions and the procedure to be followed before the administration of the instrument. When the researcher was reading the items aloud, the assistant available that day walked around the classroom aiming to spot subjects having difficulty in comprehending the items and offering them individual help. In addition, when there was more than one subject having a hard

time completing the instrument, a one-to-one session was done with this subject either by the researcher or the assistant after the completion of the administration to the group. It proved extremely beneficial to the researcher, who is male, to have female assistants present because, due to cultural circumstances, some female subjects were more comfortable being approached by a female than by a male.

3.2.1.4 Statistical Analysis

Cronbach's alpha, a function of the mean correlations of all the items with one another, was calculated to determine the internal consistency of the scale. Item total correlations for each item were also computed for the same purpose.

3.2.2 Test/Re-test Reliability: Stability over Time

3.2.2.1 Sample

The test/re-test reliability of the translated version of the EPS was checked using a sub-set of the sample that was employed for the internal consistency reliability study. That is to say, one of the PECs was visited twice to administer the Turkish form of the instrument. Although there were a total of eight PECs for the internal consistency reliability study, only one of those PECs, Küçükçekmece Halk Eğitim Merkezi, could be included in the sample for the test/re-test study, as all the other courses had already finished. This situation limited the number of subjects included in the sample. Moreover, although there were a total of thirty participants, in two classes, available for the first part of the study at the Küçükçekmece PEC, there were only twenty-seven available for the re-test study. Actually, the fact that there were only three students absent was unusual, as the researcher observed that many of the participants at literacy courses do not actually attend the classes regularly. However,

the second visit was a week before the final exam, which might have been the reason for most of the participants attending class that specific day.

Table 3.5

The Composition of the Sample for the Test/Re-test

	<i>Male (N)</i>	<i>Female (N)</i>	<i>Total (N)</i>
First Administration	15	15	30
Second Administration	12	15	27

3.2.2.2 Instrument

The instrument was the same with the internal consistency reliability study, namely, the Turkish version of the EPS developed from the forward-translation/back-translation and the test/re-test study with alternate forms.

3.2.2.3 Procedure

The translated Turkish version of the EPS was administered before and after a two-week interval to the same participants at the Küçükçekmece PEC. The procedures followed were the same with the internal consistency reliability study, in essence. At the first administration of the instrument, the subjects were not informed about the second visit. Their consent was sought before the second implementation. All the participants present in the classroom agreed to take the instrument for the second time.

3.2.2.4 Statistical Analysis

The Pearson correlation coefficient was computed to check the stability of the EPS over time.

3.3 Validity of the Instrument

The validity of the instrument was checked by factor analysis. According to factor loadings, passenger items and items that do not load on any factors significantly (less than .40) will be deleted. The results of the factor analysis will be compared to the results obtained from earlier studies done worldwide using the EPS, as the EPS has a factor structure that is established and verified cross-culturally.

4. FINDINGS

In this chapter, the findings of the study will be presented in two sections. In the first section, findings of the test/re-test study with alternate forms, which aimed to check translational equivalence of the original English and translated Turkish forms of the EPS, will be reviewed. In the second section, the findings from the field-testing of the translated version of the EPS in Turkish will be presented, as well as the statistics concerning the internal reliability and the factor structure of the adapted instrument.

4.1 Translational Equivalence Study: Test/Re-test with Alternate Forms

The test/re-test study was designed in order to check the equivalence of the translation using statistical analysis. There were two forms used: the original form of the EPS and the Turkish translation of the instrument. The forms were administered at three different adult education settings with a counterbalancing design to bilinguals (N=96). Approximately half of the subjects were given the original form first (N=45) while the other half was given the Turkish form first (N=51). At the end, the two groups had received both the original version of the EPS in English and the translated Turkish version.

Means and standard deviations for the items of the original form of the EPS in English obtained from the two groups of subjects are shown on Table 4.1. The means and standard deviations are calculated for every factor of the instrument rather than for every item. Remember that items on the EPS are scored from 1 (no influence) to 4 (much influence) and there are six items under each factor. Hence, subjects can receive a factor score that is between 6 and 24 on the instrument. The means given in Table 4.1 were calculated by dividing the factor means by six.

Table 4.1

Means and standard deviations for the items of the original form of the EPS obtained from the two groups of subjects

	Order of the Forms	N	Mean	Std. Deviation
Factor 1 Communication Improvement	Turkish-English	51	1.9216	.76329
	English-Turkish	45	2.2667	.98114
Factor 2 Social Contact	Turkish-English	51	2.4174	1.01734
	English-Turkish	45	2.5905	.86982
Factor 3 Educational Preparation	Turkish-English	51	1.7563	.58155
	English-Turkish	45	1.7810	.65720
Factor 4 Professional Advancement	Turkish-English	51	1.2471	.36351
	English-Turkish	45	1.2533	.44803
Factor 5 Family Togetherness	Turkish-English	51	2.3333	.64704
	English-Turkish	45	2.4933	.69361
Factor 6 Social Stimulation	Turkish-English	51	1.9137	.75922
	English-Turkish	45	1.9822	.63793
Factor 7 Cognitive Interest	Turkish-English	51	2.2353	.81907
	English-Turkish	45	2.4730	.65594
Total	Turkish-English	51	13.8246	2.89511
	English-Turkish	45	14.8400	2.82131

Table 4.1 demonstrates that means obtained from the group of subjects that took the English form first are slightly higher than the means obtained from the group that took the Turkish version of the instrument first. Means ranged from 1.2471 to 2.4174 for the group that took the Turkish form first, while the range of the means was between 1.2533 and 2.5905 for the group that took the original English form first.

Means and standard deviations for the items of the translated Turkish form of the EPS obtained from the two groups of subjects are shown on Table 4.2. The means obtained from the group of subjects that took the English form first are slightly higher than the means obtained from the group that took the Turkish version of the instrument for some of the factors while the reverse is true for the rest. Means ranged

from 1.2471 to 2.4588 for the group that took the Turkish form first, while the range of the means was between 1.2133 and 2.4921 for the group that took the original English form first.

Table 4.2

Means and standard deviations for the items of the translated Turkish form of the EPS obtained from the two groups of subjects

	Order of the Forms	N	Mean	Std. Deviation
Factor 1 Communication Improvement	Turkish-English	51	1.9673	.77747
	English-Turkish	45	2.1630	.99715
Factor 2 Social Contact	Turkish-English	51	2.4454	1.02645
	English-Turkish	45	2.4921	.84601
Factor 3 Educational Preparation	Turkish-English	51	1.7255	.59785
	English-Turkish	45	1.6317	.66134
Factor 4 Professional Advancement	Turkish-English	51	1.2471	.38281
	English-Turkish	45	1.2133	.38234
Factor 5 Family Togetherness	Turkish-English	51	2.4588	.66848
	English-Turkish	45	2.2711	.64548
Factor 6 Social Stimulation	Turkish-English	51	1.9569	.72478
	English-Turkish	45	1.9867	.71909
Factor 7 Cognitive Interest	Turkish-English	51	2.2857	.83983
	English-Turkish	45	2.4762	.68917
Total	Turkish-English	51	14.0866	2.82748
	English-Turkish	45	14.2341	2.85260

In order to assess the equivalence of the translation, Spearman's rho was calculated for every item in both forms. The correlation coefficients for the group of participants that received the original form first (N=45) ranged between .328 and .856 and all the correlations were significant at 0.01 level. The correlation coefficients for the group of participants that received the Turkish form of the instrument first ranged

between .443 and .998 and all the correlations were also significant at 0.01 level (see Appendix D for Correlations (Spearman's rho) between the alternate forms of the EPS).

Although the subjects spoke Turkish as their mother tongue and were advanced level learners in English, the researcher observed that some of the subjects were having a hard time understanding certain lexical items in English during data collection. Moreover, it seemed that the correlation coefficients (Spearman's rho) for the items were a little lower for the group that took the original version of the EPS first than the group that took the Turkish version. In order to check if there was a significant difference in the means of the two groups, a t-test for dependent (correlated data) was used. The results showed insignificant differences between the two groups.

Lastly, the Pearson product-moment correlation was calculated for each factor of the original form of the EPS and the translated form in Turkish. The correlations were satisfactorily high. The correlations for the seven factors of the instrument from factor one to seven were as follows: Communication Improvement $r = .942$; Social Contact $r = .916$; Educational Preparation $r = .848$; Professional Advancement $r = .724$; Family Togetherness $r = .740$; Social Stimulation $r = .781$; Cognitive Interest $r = .934$ (see Appendix E).

4.2 Internal Reliability and Factor Analysis

This section starts with the demographic characteristics of the subjects, a total of 172 participants at level II literacy courses, who took the Turkish form of the EPS. Next the factor structure of the Turkish form of the EPS is summarized focusing on the similarities and differences to the original EPS A-form, which is followed by data regarding the internal reliability of the Turkish form of the EPS. Finally, the stability-

over-time reliability of the Turkish form of the EPS will be examined based on the data gathered by a second administration of the instrument to sub-sample of 27 participants at Kucukcekmece PEC.

4.2.1 Demographic Characteristics of the Subjects

In the Turkish version of the EPS, questions about the demographic characteristics of the subjects included gender, birthplace, the number of years spent in Istanbul, year of birth, marital status and occupation. These were followed by two questions regarding the previous participation of the subjects in the courses offered at PECs.

Although both genders were represented in the study sample, there were more female participants than male participants; 45.3% of all the subjects (N= 172) were male (N=78) and the remaining 54.7% were female (N= 94). Most of the subjects in the study were relatively young (Appendix F). The mean of the age of the subjects was 27.46 years. The majority of the subjects were between the ages of 15 and 44 (N=151). This group is comprised of 93.6% of all the females and 83% of all the males. There were two participants who were younger than 15 years (both female). There were more females who were older than 44 (14.9% of all the females) than males (6.4% of all the males). Most of the subjects were single (Appendix F). While 36.2% of the females were married, only 26.9% of the males were married. There were four females who were divorced and one female who was widowed.

The sample represented 46 out of a total of 81 different provinces in Turkey (Appendix F), which constitutes a good sample seeing as not all participants were from one area. Out of 172 subjects, only 25 were born in Istanbul. The rest were immigrants who mainly come from eastern Turkey and the Black Sea Region. The three most represented provinces, after Istanbul, were Mardin, of which the sample

had 19 natives, Batman, of which the sample had 10 natives, and Sivas, of which the sample had 8 natives. Most of the participants have been living in Istanbul between 10 and 20 years (67.4% of the participants). The number of subjects who have lived in the city less than five years was equal to the number of subjects who have lived in Istanbul for more than 21 years and they constituted 32.6% of the sample together.

The subjects had mainly two occupations; they were either housekeepers or unskilled workers (Appendix F). All participants who defined themselves as housekeepers (N= 35) were female, and 37.2% of the females in the study were housekeepers. A larger percentage of women (40.4%) defined themselves as unskilled workers. Most males also identified themselves as unskilled workers as well (56.4%). Therefore, unskilled workers constituted 47.7% of the participants. Some subjects specified what they meant by “unskilled worker,” and the most common workplace mentioned was a textile workshop. When the housekeepers, the unemployed and the retired were excluded (a total of 58 participants), 66.3% of the subjects were wage-makers.

Subjects who never attended a level I literacy course as a percentage of the total number of subjects was 22.7%. This figure was very similar for both males and females; 23.1% of the males and 22.3% of the females did not attend the level I literacy course prior to level II (Appendix F). Similarly, the majority of the participants had never attended a non-literacy adult education course offered by PECs before starting the level II literacy course in which they were enrolled (Appendix F). There was not much difference between the two genders in terms of the answer that they gave to this question. 87.2% of male and 85.1% of the females have never attended a non-literacy adult education course offered at the PECs.

4.2.2 Factor Structure of the EPS: Results of the Factor Analysis

As a statistical technique, factor analysis begins with a large number of variables and then aims to reduce the interrelationships among the variables to a few small number of clusters, or factors. In this case, the variables that will be reduced into factors are the items of the Turkish form of the EPS. In fact, the EPS A-form has a well-established factor structure (Boshier, 1991; Fujita-Starck 1996). In this section, results of the factor analysis of the Turkish version of the EPS A-form will be explained with specific reference to the factor structure that Boshier (1991) reached.

The Statistical Package for the Social Sciences (SPSS) version 14 computer program was used in order to do the necessary calculations for the factor analysis, and for all the other statistics mentioned in this thesis for that matter. First, the correlation matrix showing the EPS inter-item correlations was produced for 172 adults who took the Turkish version of the EPS at eight different PECs in the province of Istanbul. Then, communalities were extracted. Before deciding on the final factor structure, different factor solutions were examined. A nine-factor solution and a six-factor solution were tried out, however there were many passenger items; it was not easy to see a meaningful relationship amongst the items in certain factors and factor score means were very low for some of the factors extracted.

After examining the six-factor and the nine-factor solution, the seven-factor solution, which is very similar to the factor structure that Boshier came up with in 1991, was finally adopted. The percent of total variance accounted for was 10.39% for the first factor after orthogonal rotation (varimax with Kaiser normalization). The rest of the factors accounted for the 9.00%, 8.63%, 8.36%, 7.57%, 6.66%, and 6.57% of the total variance, respectively. In total, the seven factors explained 57.14% of the

total variance as opposed to 51.19% in the original English form of the EPS (Appendix G for the factor structure of the Turkish form of the EPS).

The seven factor solution was chosen as almost all the items, other than one, loaded on a factor significantly. That means that the factor loadings were at least .40 or more. The mean factor loadings were also satisfactorily high. Most of the items migrated into 'their' factor as previously identified in Boshier's Vancouver study (1991). There was only one item, "To learn another language," item number 15, that did not load on any of the factors and was discarded from the Turkish version of the form. This was expected, as the sample used for this study was only comprised of participants of level II literacy courses. All of the subjects were very fluent in Turkish, therefore they were not attending the course to learn another language. It is not possible to say that they were all native in Turkish as there were not any questions specifically asking for that information, and there were many participants who were from the Eastern and South Eastern Regions of Turkey where there is a big Kurdish community. The internal reliability of the instrument (Cronbach's alpha) was calculated without this item.

4.2.2.1 Factor Loadings and Factor Contents

One of the challenges of factor analysis as a statistical technique is to come up with names that reflect the central meaning of the factors. It is a challenge as one needs to be careful picking up names as most of the times those are the names that are reported or referenced by future researchers in their papers. Therefore, it is necessary to find names that best reflect the nature of the items in that factor. The process of matching names with factors was relatively easier for the current researcher as the factor loadings of the items and the factors that they fell under in the Turkish version of the EPS were very similar to the original version in English. Therefore, the names

that were decided upon by Boshier (1991) were retained. Factor analysis of the data collected by the administration of the Turkish version of the EPS to 172 level II literacy course participants in the province of Istanbul resulted in some differences from the English version of the EPS in terms of the factor structure. Those differences did not seem to change the central meaning of the factor in question.

Social Contact. This factor is almost identical to Boshier’s (1991) Social Contact factor. In fact, on average the factor loadings of the items are higher than the factor loadings reported by Boshier (see Appendix B for factor loadings of the Boshier’s study in 1991). The factor loadings ranged between .479 to .814. The only difference is that the item “To learn about the usual customs here” was not under this factor according to results of Boshier’s 1991 study. Instead, this item appeared under a factor named Communication Improvement by Boshier (1991) who speculated that learning about the usual customs would help the participants to improve their communication skills in the community that they are living.

Table 4.3

The items in Social Contact (Factor 1) of the Turkish form of the EPS.

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
2. To become acquainted with friendly people	.695	.102	.166	.052	.078	-.070	.116
9. To have a good time with friends	.642	.047	.390	.042	-.001	-.029	.208
16. To meet different people	.664	.178	.125	.129	.135	.164	.167
23. To make friends	.784	.040	.254	.069	.046	-.026	.158
30. To make new friends	.814	.058	.263	.086	-.022	.031	.170
36. To learn about the usual customs here	.479	.042	.149	.244	-.155	.179	.347
37. To meet new people	.684	.121	.214	.062	.020	.081	.123

According to the results summarized in Table 4.3, it seems that Turkish participants perceived learning about the usual customs as a way to get in touch with new people. In a sense, if the individuals are aware of the customs of the place where they are living, it might be easier for them to relate to people that they get to meet. Considering that there were many immigrants in the sample, getting to learn about the usual customs of the community that they are living in might be one of the prerequisites of making friends. Therefore, having the item “To learn about the usual customs here” under the factor Social Contact makes sense when the target population of the Turkish version of the EPS, namely literacy course participants who are mostly immigrants, are considered in the sense that before feeling comfortable to meet people, they might want to feel more comfortable about where they are living by learning what the accepted customs are.

Professional Advancement. This factor in the Turkish version of the EPS is congruent with the factor structure of Boshier’s study (1991). In fact, the factor that appeared as Professional Advancement was also one of the emerging factors in this study with only one item difference; there is one item that is in this factor that was in Boshier’s Educational Preparation. The item “To make up for a narrow previous education” is one of the two items that is kept in the Turkish version of the EPS although the factor loading was lower than .40. The reason was the possibility that the subjects might have perceived making up for a narrow previous education as one of the ways that goes to professional advancement. In fact, this item differs from all the other items in Boshier’s Educational Preparation factor as it has the word “narrow” with negative connotations in it. Therefore, the subjects who received the instrument in Turkey might have associated this item with professional advancement

since making up for an inadequate previous education might very well be a prerequisite to advance in one's profession.

Table 4.4

The items in Professional Advancement (Factor 2) of the Turkish form of the EPS.

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
3. To make up for a narrow previous education	.243	.353	-.340	-.172	.306	.143	-.173
4. To secure professional advancement	.113	.804	.022	-.095	.127	.048	-.089
11. To achieve an occupational goal	.023	.809	.045	-.107	.095	-.012	.087
18. To prepare for getting a job	-.016	.599	.079	.030	.039	.293	.103
25. To give me higher status in my job	.144	.776	-.072	.103	-.152	.075	-.037
32. To get a better job	.046	.644	.040	.015	.070	.283	.042
39. To increase my job competence	.094	.690	.126	.074	-.104	.059	.024

As shown in Table 4.4, all the other items have very high factor loadings which suggest that this is a well-established factor. The factor loadings range between .353 and .804. The item that has the highest factor loading is also the item that gave the name to this factor.

Social Stimulation. It seems that the central meaning of this factor is one's desire to make a change in his/her life to get rid of unpleasant feelings like boredom, loneliness and frustration. These unpleasant feelings might stem from a relationship in a person's life, or by the monotony of daily life. An individual might be attending the educational activity, the level II literacy course in this case, to do something rather than nothing. All the items that fell under this factor are in Table 3. The factor loadings range between .428 and .752.

Table 4.5

The items in Social Stimulation (Factor 3) of the Turkish form of the EPS

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
6. To overcome the frustration of day to day living	.148	.026	.636	.039	.132	-.022	.112
13. To get away from loneliness	.307	.128	.686	.092	.062	-.003	.194
20. To get relief from boredom	.337	.041	.752	.007	.009	-.154	.016
27. To get a break in the routine of home or work	.192	.081	.727	.095	.004	.032	.001
28. To satisfy an enquiring mind	.303	-.155	.428	.173	.152	.088	.055
34. To do something rather than nothing	.235	-.115	.424	.314	.220	.054	-.022
41. To escape an unhappy relationship	.243	.206	.556	.246	.107	-.010	.093

Like the previous two factors, this factor is congruent with Boshier's factor of the same name. However, there is an item in the Turkish version that differs from the items in the original version of the instrument. The item "To satisfy an enquiring mind" was in the factor Cognitive Interest according to Boshier. Yet the translation of the item did not load on that factor, instead it loaded on the factor Social Stimulation. When we look at the English meaning of the item, it is not easy to understand this difference in the distribution of this item. However, this item was translated into Turkish as "Merakımı gidermek için" which can be roughly back-translated as "To satisfy my curiosity". Then it makes sense that the item loaded on this factor as satisfying curiosity might be a way of getting rid of boredom.

In fact, this was one of the items that both the original translators and professional translators had a hard time with. The final version of the item that is included in this Turkish version of the EPS may not be the best one, but it has been decided upon after a total of thirteen translators had conferred on it. The English

adjective “enquiring” does not seem to have a one-to-one correspondence into Turkish. Moreover, it is very interesting that Boshier actually kept this item in the EPS A-form. Boshier (1991) claims that the study in Vancouver got rid of the EPS’s connection with Houle’s seminal book *The Enquiring Mind* where he introduces his well-known typology of adult learners for the first time. However, “To satisfy an enquiring mind” is still one of the items. It appears that with the current wording of the translation, this item is best suited in the factor Social Stimulation.

Family Togetherness. Like all the previous factors, this factor is also in the same line with Boshier’s (1991) factors of the EPS A-form. The factor loadings are high, ranging between .550 and .855, which indicates that this is another well-established factor with items that are strongly associated with one another.

Table 4.6

The items in Family Togetherness (Factor 4) of the Turkish form of the EPS

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
12. To share a common interest with my spouse	.056	-.092	.216	.619	.070	-.104	.126
19. To keep up with others in my family	.026	.111	.249	.550	.189	.021	.332
26. To keep up with my children	.159	-.004	.037	.841	.042	-.143	-.109
33. To answer questions asked by my children	.073	.081	.042	.823	.098	.073	.043
40. To help me talk with my children	.109	-.047	.077	.855	.098	-.041	.147

Although Boshier’s (1991) Family Togetherness had six items in it, the Turkish version of the EPS A-form only has five items in it. The item “To get ready for changes in my family” migrated into Communication Improvement, leaving

Family Togetherness with the five remaining items. The implications of this will be dealt with in the discussion of Communication Improvement.

Cognitive Interest. The origin of this factor goes back to Houle’s (1961) learning orientation. According to Houle (1961) people who were attending a learning activity due to a learning orientation were there just for the sake of knowledge. They attended classes, participated in learning activities regularly although these activities were not even necessarily in a continuum. Boshier (1971) reported cognitive interest as one of the motivational orientations and so did Sheffield (cited in Boshier, 1971) and Burgess (1971). Learning orientation has been reported by many other researchers since then.

Table 4.7

The items in Cognitive Interest (Factor 5) of the Turkish form of the EPS

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
7. To get something meaningful out of life	.068	.197	.165	-.031	.676	-.012	.050
14. To acquire general knowledge	-.025	.004	.025	.076	.807	.045	.158
21. To learn just for the joy of learning	.059	-.007	.208	.144	.655	.233	.112
35. To seek knowledge for its own sake	.134	-.051	.164	.262	.593	.204	.062
42. To expand my mind	-.037	-.116	-.022	.166	.553	.215	.166

The factor Cognitive Interest in the Turkish form of the EPS is congruent with Boshier’s (1991) factor structure as well. Moreover, it appears to be one of the important reasons for adults to participate in level II literacy courses with items that are very inter-correlated. There is only one item, “To satisfy an enquiring mind”, that

is missing in the Turkish factor Cognitive Interest. However, all the other items that were in Boshier's factor are also here with factor loadings ranged from .553 to .807.

Educational Preparation. Similar to other factors mentioned, this factor resembles Boshier's (1991) original factor with the same name. The only difference is that the item "To make up for a narrow education" appeared under Professional Advancement in the Turkish factor distribution. One of the two items that has less than .40 loading is in this factor, which is "To get education I missed earlier in life". It was retained under this factor, as it seemed most meaningful to be a part of this factor than the factor Cognitive Interest. The other items have relatively high factor loadings, ranging between .463 and .820.

Table 4.8

The items in Educational Preparation (Factor 6) of the Turkish form of the EPS

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
10. To get education I missed earlier in life	.122	.213	-.292	-.036	.402	.319	-.283
17. To acquire knowledge to help with other educational courses	.237	.169	-.117	-.021	.138	.463	.328
24. To prepare for further education	.077	.166	-.011	-.105	.257	.704	-.087
31. To do courses needed for another school or college	-.025	.156	.008	.027	.119	.823	.001
38. To get entrance to another school or college	.014	.204	-.011	-.104	.079	.820	.076

The items in this factor reflect the adults' desire to close the gaps in their past education and to prepare for courses that they might take in the future. Whether it is to get into another school or college, this factor shows the adults' future plans regarding their educational advancement.

Communication Improvement. Although this factor has four of the six items that were in Boshier’s (1991) original factor, it seems that it was understood in a very different way by the Turkish participants. Not only did the Turkish version of the Communication Improvement factor lose the item “To learn about usual customs here,” but also it took the item “To get ready for changes in my family” which was in Family Togetherness factor in Boshier’s Study. It was relatively easier to explain why the Turkish participants preferred to associate the item “To learn about usual customs here” with other items in Social Contact factor. However, it does not seem to be as easy to explain why the item “To get ready for changes in my family” is in the factor Communication Improvement here. A possible explanation would be that getting ready for changes in one’s family might mean better communication opportunities amongst the family members. Yet this explanation is not enough to explain the complexity of this factor. Therefore, even though it has significantly high factor loadings, the items under this factor should be reevaluated in future studies.

Table 4.9

The items in Communication Improvement (Factor 7) of the Turkish form of the EPS

Items with Their Numbers As They Appear on the EPS	Factor Loadings						
	1	2	3	4	5	6	7
1. To improve language skills	.177	.047	.020	.013	.162	-.028	.719
5. To get ready for changes in my family	.101	.192	.195	.313	.390	-.293	.402
8. To speak better	.279	.059	.149	.007	.172	-.056	.692
22. To write better	.351	-.071	-.004	.235	.233	.116	.523
29. To help me understand what people are saying and writing	.268	-.097	.148	.178	.025	.102	.631

Another reason that makes this factor different from Boshier's (1991) original Communication Improvement factor is that it does not have the item "To learn another language". In fact, this is the only item that was deleted from the Turkish version of the EPS. Subjects in Boshier's Vancouver study were educational participants from diverse programs including ESL classes. However, it did not make much sense to have this item in the Turkish version of the EPS, which would be used with adults in literacy courses who were not a diverse group of people when compared to Boshier's sample. Factor analysis confirmed the expectation, and this item was deleted from the Turkish version of the EPS. In addition, deleting this item increased the internal reliability of the Turkish version of the EPS (Cronbach's alpha) .896 to .897. As shown in Table 4.9, the items had factor loadings that were between a low .401 and a high .719. Other than the item "To get ready for changes in my family," the central meaning of the items in this factor can very easily be summarized as one's interest in improving communication skills, as the name of the factor suggests.

4.2.2.2 Factor means and standard deviations of the Turkish version of the EPS

When the factor means and standard deviations of the scores of the 172 participants in level II literacy courses on the Turkish version of the EPS are examined, it is possible to see which factors were influential in these individuals' decisions to participate in a literacy course. Educational Preparation has the highest mean, followed by the factors Cognitive Interest and Professional Advancement. The participants who took the Turkish version of the EPS were adults participating in level II literacy courses. From this perspective, it is no surprise to see Educational Preparation as the factor with the highest mean. Although, the main aim of this thesis

is not to understand motivational orientations of the subjects who took the instrument, rather it is to adapt the EPS into Turkish setting, it is worth pointing out that the second factor with the highest mean is Cognitive Interest in the sample of the study.

Table 4.10

Factor means and standard deviations of the Turkish version of the EPS

Factors in the Turkish EPS	Minimum	Maximum	Mean	Std. Deviation
Factor 1 Social Contact	1.00	4.00	2.1492	.93937
Factor 2 Professional Advancement	1.00	4.00	2.9925	.86866
Factor 3 Social Stimulation	1.00	4.00	2.0424	.84747
Factor 4 Family Togetherness	1.00	4.00	2.3128	1.03645
Factor 5 Cognitive Interest	1.00	4.00	3.2093	.78935
Factor 6 Educational Preparation	1.00	4.00	3.3628	.70852
Factor 7 Communication Improvement	1.00	4.00	2.6944	.76664

4.2.3 Internal Reliability of the Adapted Version of the EPS

The internal reliability of the adapted version of the EPS was ascertained by calculating Cronbach's alpha. The internal reliability coefficients were .882 for Social Contact, .831 for Professional Advancement, .818 for Social Stimulation, .842 for Family Togetherness, .784 for Cognitive Interest, .771 for Educational Preparation and .748 for Communication Improvement. The overall internal consistency reliability of the instrument was .897, which is satisfactorily high. In the light of the statistical data regarding the internal consistency of the Turkish version of the EPS, it is possible to say that the Turkish form of the EPS has internal consistency both at the factor level and instrument level.

4.2.4 Test/Re-test Reliability: Stability over Time

The test/re-test reliability of the translated version of the EPS was checked using a sub-set of the sample that was employed for the internal consistency reliability study. The Turkish form of the instrument was administered twice with an interval of two-weeks. The sub-set of the sample only consisted of participants from Küçükçekmece PEC (N=27). While there were 30 participants who took the test the first time, only 27 of them could be reached for the second administration. At the first testing, exactly half of the subjects were male, but there were only 12 males who took the instrument the second time.

The Pearson product moment correlation was calculated for every single item, and the correlations ranged from .400 to .990 (Appendix H). Factor-by-factor correlations between the factor-scores obtained from the two administrations of the Turkish form of the EPS were also calculated and the correlations (Pearson's product-moment) were satisfactorily high (Appendix I). The correlation coefficients were .984 for Social Contact, .974 for Professional Advancement, .990 for Social Stimulation, .991 for Family Togetherness, .887 for Cognitive Interest, .893 for Educational Preparation and .981 for Communication Improvement. Due to the satisfactorily high correlation coefficients of the Turkish version of the EPS between testing and re-testing, it is possible to say that the Turkish form of the EPS is reliable with regard to stability over time.

5. DISCUSSION AND CONCLUSION

The last part of the thesis has three sections. The first section is the discussion of the findings. Since the aim of this study was to adapt the EPS A-form into the Turkish setting rather than doing research on the motivational orientations of the Turkish participants to literacy courses, this section simply summarizes the findings in relation to Boshier's (1991) study that was designed to develop the EPS A-form. The second section is comprised of two sub-sections which are the conclusion and implications for further research. In the last section, limitations of the study are presented.

5.1 Discussion of the Findings

The translation of a survey instrument by bilinguals who are aware of the assumed linguistic abilities of the intended audience of the instrument was an integral part of the instrument-development process, but it alone did not ensure that a culturally appropriate survey instrument would result. The adaptation of the EPS for low-literate adults required that the translated instrument was conceptually and technically equivalent to the source language, culturally competent and linguistically appropriate for the target population. To reach this aim, first the items in the original version of the EPS A-form were translated into English with the help of 10 initial translators who translated and back-translated the items in groups of five. Two professional translators and another native speaker of English, who were not in the translating teams, evaluated the quality of the translation. Moreover, a reconciliation meeting was held with the professors who supervised this thesis. Both professional

translators agreed that the translation was appropriate for the intended audience of the instrument, namely adult participants to level II literacy courses.

The original version of the EPS A-form and the final version of the Turkish translation were administered to the same sample of people, namely adult participants in a variety of educational courses at three different adult education institutions. The satisfactory correlations between the scores that the subjects received on the original version of the EPS and the scores that the subjects received on the translated version (ranging between .724 to .942) indicated the translational equivalence between the original EPS A-form and the Turkish version of the EPS A-form.

After securing translational equivalence, the factor structure of the Turkish version of the EPS was examined by field-testing the instrument with adults participating level II literacy courses in the province of Istanbul. There were 172 participants in the sample for this phase of the study from a total of eight different PECs. Factor analysis of the data obtained from the field-testing yielded factor structure with seven factors that was very similar to Boshier's factor solution in 1991. The factors were given the names that Boshier (1991) used, as the factors had items that were same with Boshier's 1991 factors in most cases. This finding confirms that the EPS A-form (Boshier (1991) has well established factors that seem to hold their item structures in different cultures (Fujita-Starck, 1996). The differences in terms of the distribution of the items to the factors may have stemmed from translational problems or the difference of the nature of the samples used in the current study and Boshier's (1991) study. In fact, one of the items, "To learn another language", was deleted as it did not load on any of the factors, indicating that it was not appropriate to be used with the intended audience of the Turkish version of the EPS.

Having decided upon the factor structure of the Turkish version of the EPS, the internal reliability of the instrument was checked. The results were satisfactorily high with Cronbach's alpha of .897 for the overall instrument. This statistic is an indication of the internal consistency of the items with one other and is congruent with the results that Boshier (1991) and Fujita-Starck (1996) reached.

The high correlations (Pearson product-moment) between the two administrations of the Turkish EPS A-form to the same sample indicate that the Turkish version is also stable over time. The sample was comprised of participants in a level II literacy course offered at the local PEC in Küçükçemece, Istanbul. The correlations ranged from .887 to .984 and were satisfactory.

As for the characteristics of the typical literacy education participant, based on the sample of this study (N=172), the most interesting finding is that older women are more probable to participate than older men. Either older males are not interested in obtaining a diploma as they consider it less useful after a certain age, or older women are simply more inclined to attend literacy courses. This is an interesting trend and it contradicts with the commonly cited findings regarding the positive relationship between being young and educational participation. During the data collection process, many female participants in literacy courses who were relatively older explained that they had less responsibility at home after their children moved out after marriage, or it was easier to get the permission from their husbands to attend the course than it was when they were younger. It seems that their decreasing amount of housework, resulting from their children moving away into their own adulthoods, combined with the extra freedom that women get from their husbands as they get older, might explain why there are more senior women than men of the same age in level I literacy courses.

Based on the demographic characteristics of the sample for this study, it is observed that both men and women are participating in level II literacy courses. Although there were more female participants than males in the study sample, it is not possible to generalize only looking at the limited number of the participants who took the Turkish version of the EPS. One interesting characteristic of the sample was that the majority of them were single (73% of the sample).

The most important finding was that 76.9% of the subjects who took the Turkish form of the EPS stated that they had not attended the level I literacy course before enrolling in the level II literacy course. This tells us that most of the participants to level I literacy courses never make their way to level II literacy courses to strengthen their literacy skills. This is a crucial finding as it may be an indication of the inability of the level I literacy courses to prepare their participants for the next level. Moreover, it may refer to the demoralizing effects of attending the level I literacy course, as only one out of every four subjects seem to be carrying on with level II according to the demographic characteristics of the study sample.

5.2 Conclusion and Implications for Further Research

The aim of this study was to adapt the EPS A-form into to the Turkish setting to provide the Turkish practitioners and researchers with a reliable instrument to do research on the motivational orientations of level II literacy course participants. The adaptation process was designed so that the outcome of the study would appeal to an intended audience, namely low-literate adults who are attending literacy courses. Therefore, this study only provides data regarding the suitability of the adapted version of the EPS in Turkish to be used with this intended audience. For this reason, researchers or practitioners who intend to use the EPS Turkish form need to consider

that this form has never been administered to participants who are attending more general adult education courses.

No matter how it is referred to in literature, motivational orientations or reasons for participation, it is crucial to understand the motives that people have to be taking part in educational activities despite their busy and demanding lives in order to be able to better meet the needs and wants of the future participants to adult education programs. The issue is even more important in terms of motivational orientations of literacy course participants in Turkey when the number of the illiterates in the society is considered. This study was a very modest attempt to better understand the motivations of adults to take part in literacy courses.

5.3 Limitations of the Study

One problem with adapting an instrument is slightly modifying the items during the translation process. It was inevitable that some minor changes needed to be made to ensure that the adapted Turkish version of the instrument would be fully functional in the Turkish context. However, small changes are not always the same as insignificant changes. Therefore, adapted questions should be treated as new questions and not automatically compared with original versions and their performance (Harkness et al, 2003). Therefore, direct comparisons of the results that will be obtained from this study and the previous research that used the EPS as the survey instrument is not possible.

After the translation process was done, it was necessary to find a way to assess the equivalence of the instrument using statistical analysis. To achieve this purpose, a group of bilinguals were administered the original version and adapted version of the EPS with a two week interval. It would have been better to include true-bilinguals for

this phase of the study, as the researcher felt that some of the subjects were having a hard time understanding certain items, not necessarily because those items were to difficult to comprehend but because the subjects simply were not proficient enough in English. However, because of practical reasons, it was not possible to reach truly-bilingual subjects.

One other limitation of the study is the limited number of subjects that were reached to collect data regarding the stability of the adapted version of the instrument over time (N=27). There were 172 subjects that took the instrument in the first place. However, only 27 participants from Küçükçekmece PEC could be reached again for the re-test since all the other level II courses at PECs in the study sample were finished before the second administration of the instrument. Therefore, high correlations between the two administrations should be assessed with caution.

In addition, the number of the subjects that were used for the factor analysis (N=172) could have been increased to reach more reliable results. However, there are only a definite number of level II literacy courses opened at a given time. Therefore, it was not possible for the researcher to reach more literacy courses than the ones included in the internal reliability and factor analysis of the Turkish form of the EPS study.

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APPENDICES

Appendix A

The Education Participation Scale (EPS) A-Form



EDUCATION PARTICIPATION SCALE

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A-Form

Published by Learningpress Ltd.,
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Vancouver, B.C. V6L 1Z5 Canada
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**WHAT EXTENT DID THESE REASONS INFLUENCE YOU TO ENROLL
IN YOUR ADULT EDUCATION CLASS?**

Think back to when you enrolled for your course and indicate the extent to which each of the reasons listed below influenced you to participate. **Circle** the category which best reflects the extent to which each reason influenced you to enrol. Circle **one** category for each reason. Be **frank**. There are no right or wrong answer.

1. To improve language skills	No influence	Little influence	Moderate influence	Much influence
2. To become acquainted with friendly people	No influence	Little influence	Moderate influence	Much influence
3. To make up for a narrow previous education	No influence	Little influence	Moderate influence	Much influence
4. To secure professional advancement	No influence	Little influence	Moderate influence	Much influence
5. To get ready for changes in my family	No influence	Little influence	Moderate influence	Much influence
6. To overcome the frustration of day to day living	No influence	Little influence	Moderate influence	Much influence
7. To get something meaningful out of life	No influence	Little influence	Moderate influence	Much influence
8. To speak better	No influence	Little influence	Moderate influence	Much influence
9. To have a good time with friends	No influence	Little influence	Moderate influence	Much influence
10. To get education I missed earlier in life	No influence	Little influence	Moderate influence	Much influence
11. To achieve an occupational goal	No influence	Little influence	Moderate influence	Much influence
12. To share a common interest with my spouse	No influence	Little influence	Moderate influence	Much influence
13. To get away from loneliness	No influence	Little influence	Moderate influence	Much influence
14. To acquire general knowledge	No influence	Little influence	Moderate influence	Much influence
15. To learn another language	No influence	Little influence	Moderate influence	Much influence
16. To meet different people	No influence	Little influence	Moderate influence	Much influence
17. To acquire knowledge to help with other educational courses	No influence	Little influence	Moderate influence	Much influence
18. To prepare for getting a job	No influence	Little influence	Moderate influence	Much influence

19. To keep up with others in my family	No influence	Little influence	Moderate influence	Much influence
20. To get relief from boredom	No influence	Little influence	Moderate influence	Much influence
21. To learn just for the joy of learning	No influence	Little influence	Moderate influence	Much influence
22. To write better	No influence	Little influence	Moderate influence	Much influence
23. To make friends	No influence	Little influence	Moderate influence	Much influence
24. To prepare for further education	No influence	Little influence	Moderate influence	Much influence
25. To give me higher status in my job	No influence	Little influence	Moderate influence	Much influence
26. To keep up with my children	No influence	Little influence	Moderate influence	Much influence
27. To get a break in the routine of home or work	No influence	Little influence	Moderate influence	Much influence
28. To satisfy an enquiring mind	No influence	Little influence	Moderate influence	Much influence
29. To help me understand what people are saying and writing	No influence	Little influence	Moderate influence	Much influence
30. To make new friends	No influence	Little influence	Moderate influence	Much influence
31. To do courses needed for another school or college	No influence	Little influence	Moderate influence	Much influence
32. To get a better job	No influence	Little influence	Moderate influence	Much influence
33. To answer questions asked by my children	No influence	Little influence	Moderate influence	Much influence
34. To do something rather than nothing	No influence	Little influence	Moderate influence	Much influence
35. To seek knowledge for its own sake	No influence	Little influence	Moderate influence	Much influence
36. To learn about the usual customs here	No influence	Little influence	Moderate influence	Much influence
37. To meet new people	No influence	Little influence	Moderate influence	Much influence
38. To get entrance to another school or college	No influence	Little influence	Moderate influence	Much influence
39. To increase my job competence	No influence	Little influence	Moderate influence	Much influence
40. To help me talk with my children	No influence	Little influence	Moderate influence	Much influence
41. To escape an unhappy relationship	No influence	Little influence	Moderate influence	Much influence
42. To expand my mind	No influence	Little influence	Moderate influence	Much influence

Please turn over



Thank you! Just a few questions about you. Remember no name required.

1. Are you a woman or a man? Woman Man
2. In what year were you born? 19____
3. Where were you born? _____
4. What is your occupation? _____

Your job (e.g. student at school, university student, tree-planter, secretary, teacher...)

Status (e.g. manager, worker, supervisor, apprentice, director...)

5. Please indicate your highest education qualification (please tick the highest one only)

Elementary High school post-secondary bachelor's Master's PhD post-doctoral

6. What is the course you are enrolled in? Or what is your major?

Courses (e.g. accounting, computer programming, ESL...)

Majors (e.g. education, law, medicine, engineering...)

7. What is your parents' occupation?

Your Mother	Your Father
<ul style="list-style-type: none">• Job (e.g. homemaker, secretary, teacher...)	<ul style="list-style-type: none">• Job (e.g. tree-planter, driver, teacher...)
<ul style="list-style-type: none">• Status (e.g. manager, worker, supervisor, apprentice, director...)	<ul style="list-style-type: none">• Status (e.g. manager, worker, supervisor, apprentice, director...)
_____	_____

MANY THANKS FOR YOUR COOPERATION!

Appendix B

Factor structure and item means of the Education Participation Scale (EPS) A-Form in
Boshier's (1991) study

Table B.1

Education Participation Scale (A-Form) Factor Structure and Item Means

Items (abbreviated)	Mean (n = 257)	S.D.	Factor Loadings						
			I	II	III	IV	V	VI	VII
Language improvement	1.81	1.27	.81	-.09	-.23	.04	-.14	.08	-.07
Speak better	2.95	1.25	.79	-.08	-.19	.05	.11	.06	-.07
Language Write better	2.19	1.25	.77	-.03	-.05	.12	-.04	.01	.05
Say and write	2.97	1.20	.74	-.12	-.28	.03	.13	-.01	-.21
Customs	2.79	1.22	.69	-.18	-.21	.04	.13	.17	-.14
Friendly people	1.91	1.07	.61	-.25	-.01	.02	-.30	.11	-.11
Good time	1.92	1.00	.19	-.53	-.19	-.09	-.21	.17	-.18
Different people	1.76	1.00	.33	-.66	-.05	-.04	-.18	.23	.05
Make friends	3.14	1.01	.10	-.73	-.03	-.02	-.03	.29	-.20
New friends	1.95	.98	.10	-.78	-.04	-.10	-.07	.18	-.14
New people	2.24	1.06	.07	-.81	-.06	-.08	-.07	.18	-.07
Supplement education	2.33	1.02	.04	-.83	-.02	-.08	-.13	.08	-.14
Earlier education	2.68	1.19	.08	-.04	-.53	-.16	-.13	.17	-.33
Acquire knowledge	2.69	1.23	.00	.07	-.59	-.08	-.23	.18	-.31
Further education	2.89	1.19	.31	.12	-.60	-.02	-.07	-.02	-.26
Another school	3.15	1.10	.11	.26	-.71	-.19	.04	-.00	-.16
Entrance	2.80	1.32	.22	-.04	-.79	-.13	-.07	.05	.01
Professional advancement	2.82	1.32	.15	-.01	-.80	-.08	-.02	.08	.03
Occupational goal	2.75	1.11	-.01	-.16	-.25	-.59	.07	-.01	-.10
Job preparation	3.40	.98	-.22	-.00	-.08	-.63	-.02	-.07	-.22
Job status	3.02	1.12	-.13	-.18	-.12	-.64	-.07	.23	-.04
Better job	2.75	1.21	.36	-.06	-.08	-.67	-.11	.07	-.00
Job competence	3.29	1.02	-.11	-.03	-.14	-.74	-.08	.11	-.02
Family change	2.99	1.12	-.05	-.00	-.06	-.81	-.09	.13	-.10
Common interest	1.82	1.10	-.03	.05	-.04	-.13	-.40	.25	-.26
Others in family	1.88	1.09	.26	-.29	-.14	-.18	-.40	.25	-.26
Keep up with children	1.70	1.00	.17	-.17	-.18	-.07	-.56	.22	-.08
Children's questions	1.52	1.00	.17	-.01	-.01	.02	-.82	-.03	-.04
Talk with children	1.50	.95	.11	-.18	-.02	-.03	-.83	.04	-.01
	1.57	1.02	.17	-.15	-.05	-.08	-.83	.02	-.03

Overcome frustration	1.79	.99	.05	-.19	-.13	-.23	-.02	.70	-.10
Loneliness	1.56	.92	.13	-.32	-.14	-.05	.03	.65	-.03
Relief from boredom	1.52	.87	.13	-.21	.03	-.03	-.09	.63	-.01
Break routine	1.47	.83	-.07	-.13	-.03	.00	-.11	.63	-.11
Do something	1.99	1.13	-.06	-.15	-.02	.00	.02	.61	-.26
Escape relationship	1.25	.71	-.07	-.06	-.07	-.11	-.05	.54	.14
Meaningful life	2.85	1.13	.12	-.07	-.24	-.27	-.08	-.08	-.57
General knowledge	3.13	.92	.29	-.12	-.20	-.15	-.00	-.12	-.58
Joy of learning	2.38	1.05	.07	-.04	.04	.27	-.10	.21	-.59
Enquiring mind	2.94	1.09	.02	-.08	.00	-.08	-.03	-.02	-.59
Seek knowledge	3.40	.98	.23	-.19	-.13	-.03	-.11	.03	-.60
Expand mind	3.14	1.01	.05	-.07	-.19	-.13	-.00	.14	-.63
Sum of squared factor loadings divided by sum of communalities			.17	.16	.14	.13	.12	.12	.12
Percent of total variance accounted for			23.23	9.05	7.74	5.63	4.89	4.08	3.54
Cumulative proportion of total variance			23.23	32.28	40.02	45.66	50.56	54.64	58.19

Source: Boshier, (1991)

Appendix C

The Turkish Translation of the EPS A-Form



EĞİTİM KATILIM ÖLÇEĞİ

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1982
Baskı, 1992
Baskı, 1995
Baskı, 2005

A-Formu

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BU SEBEPLER SİZİN YETİŞKİN EĞİTİMİ KURSUNA KAYIT OLMANIZI NE ÖLÇÜDE ETKİLEDİ?

Dersiniz için kaydolduğunuz zamanı düşünün ve aşağıda listelenen sebeplerden her birinin kaydolmanız için sizi ne kadar etkilediğini belirtin. Kaydolmanızı etkileyen her bir sebebin sizi ne kadar etkilediğini en iyi yansıtan seçeneği **yuvarlak içine alın**. Her sebep için yalnızca **bir** seçeneği yuvarlak içine alın. Lütfen **ıçtenlikle** cevaplayın. Doğru ya da yanlış cevap yok.

1. Dil becerilerimi geliřtirmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
2. Dost kazanmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
3. Yarım kalmıř eğitimimi tamamlamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
4. İřimde ilerleme sađlamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
5. Aile hayatımdaki deđiřikliklere uyum sađlamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
6. Günlük hayatın sıkıntısını üzerimden atmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
7. Hayatıma anlam katmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
8. Daha iyi konuřmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
9. Arkadařlarla hoř vakit geçirmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
10. Zamanında yapamadıđım eğitimimi tamamlamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
11. Mesleđimde bir yere gelmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
12. Eřimle ortak bir ilgiyi paylařmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
13. Yalnızlıktan kurtulmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
14. Kültürümü artırmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
15. Bařka bir dil öğrenmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
16. Farklı insanlarla tanışmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
17. Bařka eđitsel kurslara yardımcı olacak bilgi edinmek için..	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili

18.	Bir işe girmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
19.	Diğer aile fertlerine ayak uydurmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
20.	Can sıkıntısından kurtulmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
21.	Öğrenme zevkini tatmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
22.	Daha iyi yazmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
23.	Arkadaş edinmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
24.	Daha ileri seviyede bir eğitime temel olması için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
25.	İşimde daha yükselmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
26.	Çocuklarımdan geri kalmamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
27.	Evin veya işin tek düzeliğinden kurtulmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
28.	Merakımı gidermek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
29.	İnsanların ne söylediğini ve ne yazdığını anlamak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
30.	Yeni arkadaşlar edinmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
31.	Başka bir okul ya da yüksek okul için gereken dersleri almak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
32.	Daha iyi bir işe girmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
33.	Çocuklarımdan sorduğu soruları cevaplayabilmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
34.	Boş oturacağıma bir şeyler yapmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
35.	Sırf bilgi edinmiş olmak için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili
36.	Buranın örfünü âdetini öğrenmek için.....	Etkisi Yok	Çok Az Etkili	Biraz Etkili	Çok Etkili

Appendix D

Correlations (Spearman's rho) between the Alternate Forms of the EPS

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE1	QE2	QE3	QE4	QE5
QT1	Correlation Coefficient	.850(**)	.110	.416(**)	.549(**)	.043
	Sig. (2-tailed)	.000	.472	.004	.000	.777
QT2	Correlation Coefficient	-.078	.755(**)	-.294(*)	.002	.160
	Sig. (2-tailed)	.611	.000	.050	.992	.295
QT3	Correlation Coefficient	.267	-.272	.604(**)	.021	.284
	Sig. (2-tailed)	.077	.071	.000	.892	.059
QT4	Correlation Coefficient	.354(*)	-.049	.349(*)	.328(*)	.305(*)
	Sig. (2-tailed)	.017	.747	.019	.028	.042
QT5	Correlation Coefficient	-.015	.065	.132	.065	.364(*)
	Sig. (2-tailed)	.925	.673	.388	.673	.014

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE6	QE7	QE8	QE9	QE10
QT6	Correlation Coefficient	.725(**)	.588(**)	-.473(**)	.454(**)	-.027
	Sig. (2-tailed)	.000	.000	.001	.002	.858
QT7	Correlation Coefficient	.273	.647(**)	-.086	.392(**)	.212
	Sig. (2-tailed)	.069	.000	.576	.008	.162
QT8	Correlation Coefficient	-.275	-.029	.795(**)	-.093	.174
	Sig. (2-tailed)	.067	.852	.000	.545	.252
QT9	Correlation Coefficient	.025	.421(**)	-.110	.846(**)	-.008
	Sig. (2-tailed)	.872	.004	.473	.000	.958
QT10	Correlation Coefficient	-.153	-.207	.207	-.002	.527(**)
	Sig. (2-tailed)	.315	.172	.172	.991	.000

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE11	QE12	QE13	QE14	QE15
QT11	Correlation Coefficient	.464(**)	-.228	.093	.400(**)	.230
	Sig. (2-tailed)	.001	.132	.543	.007	.129
QT12	Correlation Coefficient	.234	.446(**)	.129	.005	-.122
	Sig. (2-tailed)	.123	.002	.399	.976	.425
QT13	Correlation Coefficient	.254	.290	.388(**)	-.093	.046
	Sig. (2-tailed)	.092	.054	.008	.542	.764
QT14	Correlation Coefficient	.369(*)	.097	-.034	.650(**)	.456(**)
	Sig. (2-tailed)	.013	.524	.827	.000	.002
QT15	Correlation Coefficient	.385(**)	-.261	-.069	.560(**)	.777(**)
	Sig. (2-tailed)	.009	.084	.654	.000	.000

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE16	QE17	QE18	QE19	QE20
QT16	Correlation Coefficient	.766(**)	.399(**)	.166	.027	.533(**)
	Sig. (2-tailed)	.000	.007	.275	.858	.000
QT17	Correlation Coefficient	.478(**)	.535(**)	.300(*)	.182	.203
	Sig. (2-tailed)	.001	.000	.045	.232	.180
QT18	Correlation Coefficient	.175	.247	.824(**)	-.178	-.243
	Sig. (2-tailed)	.251	.103	.000	.242	.108
QT19	Correlation Coefficient	.221	.061	.101	.403(**)	.155
	Sig. (2-tailed)	.144	.692	.510	.006	.308
QT20	Correlation Coefficient	.278	.038	-.366(*)	.450(**)	.634(**)
	Sig. (2-tailed)	.065	.803	.013	.002	.000

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE21	QE22	QE23	QE24	QE25
QT21	Correlation Coefficient	.734(**)	.065	.242	-.306(*)	-.322(*)
	Sig. (2-tailed)	.000	.670	.109	.041	.031
QT22	Correlation Coefficient	-.155	.746(**)	.125	.173	.415(**)
	Sig. (2-tailed)	.310	.000	.413	.255	.005
QT23	Correlation Coefficient	.306(*)	.036	.856(**)	-.051	.099
	Sig. (2-tailed)	.041	.812	.000	.740	.519
QT24	Correlation Coefficient	-.142	.162	.045	.787(**)	.498(**)
	Sig. (2-tailed)	.354	.288	.767	.000	.000
QT25	Correlation Coefficient	-.232	.403(**)	.133	.606(**)	.817(**)
	Sig. (2-tailed)	.125	.006	.385	.000	.000

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE26	QE27	QE28	QE29	QE30
QT26	Correlation Coefficient	.510(**)	.224	.171	.220	-.024
	Sig. (2-tailed)	.000	.139	.262	.147	.878
QT27	Correlation Coefficient	.324(*)	.778(**)	.436(**)	-.229	.444(**)
	Sig. (2-tailed)	.030	.000	.003	.130	.002
QT28	Correlation Coefficient	.297(*)	.419(**)	.603(**)	-.264	.362(*)
	Sig. (2-tailed)	.048	.004	.000	.079	.015
QT29	Correlation Coefficient	.169	-.329(*)	-.196	.719(**)	.161
	Sig. (2-tailed)	.267	.027	.197	.000	.291
QT30	Correlation Coefficient	-.006	.271	.003	.167	.767(**)
	Sig. (2-tailed)	.970	.071	.984	.274	.000

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE31	QE32	QE33	QE34	QE35	QE36
QT31	Correlation Coefficient	.500(**)	.424(**)	-.247	-.090	-.049	-.069
	Sig. (2-tailed)	.000	.004	.101	.556	.748	.650
QT32	Correlation Coefficient	.259	.699(**)	-.033	.130	-.510(**)	-.043
	Sig. (2-tailed)	.086	.000	.827	.396	.000	.777
QT33	Correlation Coefficient	.170	-.049	.391(**)	.201	-.064	.119
	Sig. (2-tailed)	.264	.751	.008	.186	.675	.437
QT34	Correlation Coefficient	.059	.187	.184	.501(**)	-.101	-.172
	Sig. (2-tailed)	.699	.219	.227	.000	.508	.260
QT35	Correlation Coefficient	.091	-.059	.061	.106	.376(*)	.269
	Sig. (2-tailed)	.554	.700	.692	.487	.011	.074
QT36	Correlation Coefficient	.113	-.111	.317(*)	.117	.110	.617(**)
	Sig. (2-tailed)	.458	.469	.034	.445	.470	.000

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

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

Table D.1

Correlations (Spearman's rho) between the alternate forms of the EPS: The original form in English is given before the Turkish form of the EPS

		QE37	QE38	QE39	QE40	QE41	QE42
QT37	Correlation Coefficient	.827(**)	.130	.085	.043	.267	.299(*)
	Sig. (2-tailed)	.000	.396	.577	.778	.077	.046
QT38	Correlation Coefficient	.192	.368(*)	.121	-.030	-.155	.242
	Sig. (2-tailed)	.207	.013	.428	.843	.309	.110
QT39	Correlation Coefficient	.194	.197	.709(**)	-.086	.154	.318(*)
	Sig. (2-tailed)	.203	.195	.000	.576	.312	.033
QT40	Correlation Coefficient	.122	-.134	.149	.426(**)	-.070	.154
	Sig. (2-tailed)	.426	.379	.330	.003	.649	.311
QT41	Correlation Coefficient	.241	.247	.164	.149	.680(**)	.209
	Sig. (2-tailed)	.111	.102	.283	.329	.000	.168
QT42	Correlation Coefficient	.376(*)	.410(**)	.297(*)	.197	.370(*)	.672(**)
	Sig. (2-tailed)	.011	.005	.048	.195	.012	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE1	QE2	QE3	QE4	QE5
QT1	Correlation Coefficient	.979(**)	-.080	.434(**)	.488(**)	-.045
	Sig. (2-tailed)	.000	.577	.001	.000	.754
QT2	Correlation Coefficient	-.082	.836(**)	.214	-.049	.086
	Sig. (2-tailed)	.566	.000	.132	.733	.550
QT3	Correlation Coefficient	.409(**)	.307(*)	.823(**)	.380(**)	.180
	Sig. (2-tailed)	.003	.028	.000	.006	.206
QT4	Correlation Coefficient	.596(**)	-.245	.374(**)	.775(**)	.104
	Sig. (2-tailed)	.000	.083	.007	.000	.470
QT5	Correlation Coefficient	.011	.202	.189	.106	.626(**)
	Sig. (2-tailed)	.936	.156	.185	.460	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

	QE6	QE7	QE8	QE9	QE10
QT6					
Correlation Coefficient	.855(**)	.616(**)	-.361(**)	.521(**)	.052
Sig. (2-tailed)	.000	.000	.009	.000	.719
QT7					
Correlation Coefficient	.549(**)	.790(**)	-.208	.257	.108
Sig. (2-tailed)	.000	.000	.143	.069	.451
QT8					
Correlation Coefficient	-.360(**)	-.281(*)	.883(**)	.075	.250
Sig. (2-tailed)	.010	.046	.000	.600	.077
QT9					
Correlation Coefficient	.454(**)	.345(*)	-.048	.817(**)	.086
Sig. (2-tailed)	.001	.013	.738	.000	.549
QT10					
Correlation Coefficient	-.051	-.015	.217	.170	.640(**)
Sig. (2-tailed)	.725	.914	.125	.234	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE11	QE12	QE13	QE14	QE15
QT11	Correlation Coefficient	.765(**)	.110	.007	.087	.602(**)
	Sig. (2-tailed)	.000	.441	.960	.543	.000
QT12	Correlation Coefficient	.139	.645(**)	.353(*)	.108	.065
	Sig. (2-tailed)	.332	.000	.011	.452	.650
QT13	Correlation Coefficient	-.133	.298(*)	.725(**)	.033	-.035
	Sig. (2-tailed)	.354	.034	.000	.818	.806
QT14	Correlation Coefficient	.128	.175	.125	.655(**)	-.017
	Sig. (2-tailed)	.370	.219	.381	.000	.906
QT15	Correlation Coefficient	.700(**)	.031	.061	.014	.799(**)
	Sig. (2-tailed)	.000	.829	.673	.924	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE16	QE17	QE18	QE19	QE20
QT16	Correlation Coefficient	.912(**)	.432(**)	.119	.000	.399(**)
	Sig. (2-tailed)	.000	.002	.406	1.000	.004
QT17	Correlation Coefficient	.373(**)	.683(**)	.245	.187	.000
	Sig. (2-tailed)	.007	.000	.083	.188	1.000
QT18	Correlation Coefficient	.265	.476(**)	.881(**)	-.042	-.223
	Sig. (2-tailed)	.060	.000	.000	.772	.116
QT19	Correlation Coefficient	-.094	.123	.043	.443(**)	.285(*)
	Sig. (2-tailed)	.514	.391	.764	.001	.042
QT20	Correlation Coefficient	.317(*)	-.217	-.342(*)	.245	.782(**)
	Sig. (2-tailed)	.023	.125	.014	.083	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE21	QE22	QE23	QE24	QE25
QT21	Correlation Coefficient	.672(**)	-.193	.144	-.135	-.352(*)
	Sig. (2-tailed)	.000	.175	.313	.345	.011
QT22	Correlation Coefficient	-.301(*)	.766(**)	-.099	.260	.477(**)
	Sig. (2-tailed)	.032	.000	.489	.066	.000
QT23	Correlation Coefficient	-.029	.105	.815(**)	.004	-.085
	Sig. (2-tailed)	.838	.464	.000	.976	.552
QT24	Correlation Coefficient	-.145	.518(**)	.040	.787(**)	.653(**)
	Sig. (2-tailed)	.311	.000	.779	.000	.000
QT25	Correlation Coefficient	-.296(*)	.445(**)	-.179	.507(**)	.876(**)
	Sig. (2-tailed)	.035	.001	.210	.000	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE26	QE27	QE28	QE29	QE30
QT26	Correlation Coefficient	.825(**)	.319(*)	.159	.132	.208
	Sig. (2-tailed)	.000	.023	.266	.354	.142
QT27	Correlation Coefficient	.250	.795(**)	.183	-.194	.462(**)
	Sig. (2-tailed)	.077	.000	.200	.172	.001
QT28	Correlation Coefficient	.087	.345(*)	.767(**)	-.347(*)	.066
	Sig. (2-tailed)	.542	.013	.000	.013	.648
QT29	Correlation Coefficient	.098	-.338(*)	-.290(*)	.716(**)	-.077
	Sig. (2-tailed)	.492	.015	.039	.000	.594
QT30	Correlation Coefficient	.128	.372(**)	-.066	.187	.912(**)
	Sig. (2-tailed)	.370	.007	.647	.188	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE31	QE32	QE33	QE34	QE35	QE36
QT31	Correlation Coefficient	.765(**)	.588(**)	.281(*)	.074	.369(**)	.415(**)
	Sig. (2-tailed)	.000	.000	.046	.604	.008	.002
QT32	Correlation Coefficient	.666(**)	.854(**)	.023	-.128	.169	.207
	Sig. (2-tailed)	.000	.000	.871	.369	.237	.146
QT33	Correlation Coefficient	.207	.197	.858(**)	.233	.144	.199
	Sig. (2-tailed)	.146	.166	.000	.099	.312	.161
QT34	Correlation Coefficient	-.093	-.083	.213	.673(**)	.071	.077
	Sig. (2-tailed)	.514	.561	.134	.000	.623	.590
QT35	Correlation Coefficient	-.083	-.221	.182	.189	.449(**)	-.056
	Sig. (2-tailed)	.565	.120	.201	.185	.001	.696
QT36	Correlation Coefficient	.263	.100	.317(*)	.004	.141	.536(**)
	Sig. (2-tailed)	.062	.486	.023	.975	.325	.000

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

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

Table D.2

Correlations (Spearman's rho) between the alternate forms of the EPS: The Turkish form of the EPS is given before the original form in English

		QE37	QE38	QE39	QE40	QE41	QE42
QT37	Correlation Coefficient	.908(**)	-.063	.084	.306(*)	.238	.106
	Sig. (2-tailed)	.000	.660	.559	.029	.092	.461
QT38	Correlation Coefficient	.146	.740(**)	.547(**)	.336(*)	.145	.091
	Sig. (2-tailed)	.305	.000	.000	.016	.311	.525
QT39	Correlation Coefficient	-.044	.590(**)	.910(**)	-.033	-.059	-.161
	Sig. (2-tailed)	.758	.000	.000	.819	.682	.258
QT40	Correlation Coefficient	.387(**)	.246	.078	.998(**)	.198	.086
	Sig. (2-tailed)	.005	.082	.584	.000	.164	.546
QT41	Correlation Coefficient	.336(*)	.049	.033	.405(**)	.814(**)	.122
	Sig. (2-tailed)	.016	.734	.820	.003	.000	.396
QT42	Correlation Coefficient	-.140	.058	.007	-.041	.098	.680(**)
	Sig. (2-tailed)	.328	.686	.960	.777	.494	.000

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

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

Appendix E

Factor-by-factor correlations between the scores obtained with the original form of
the EPS in English and the Turkish form of the EPS

Table E.1

*Factor-by-factor correlations between the scores obtained with the original form of the EPS
in English and Turkish form of the EPS*

		Factor 1 English Items	Factor 2 English Items	Factor 3 English Items	Factor 4 English Items	Factor 5 English Items	Factor 6 English Items	Factor 7 English Items
Factor 1 Turkish items	Pearson Correlation	.942(**)	.098	.375(**)	.240(*)	.332(**)	.140	.128
	Sig. (2-tailed)	.000	.341	.000	.019	.001	.175	.214
Factor 2 Turkish items	Pearson Correlation	.008	.916(**)	-.326(**)	.022	-.080	.629(**)	.773(**)
	Sig. (2-tailed)	.935	.000	.001	.833	.438	.000	.000
Factor 3 Turkish items	Pearson Correlation	.433(**)	-.323(**)	.848(**)	.452(**)	.502(**)	-.098	-.317(**)
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.344	.002
Factor 4 Turkish items	Pearson Correlation	.304(**)	.149	.409(**)	.724(**)	.271(**)	.228(*)	.180
	Sig. (2-tailed)	.003	.147	.000	.000	.008	.025	.079
Factor 5 Turkish items	Pearson Correlation	.230(*)	-.093	.483(**)	.333(**)	.740(**)	.174	-.082
	Sig. (2-tailed)	.024	.368	.000	.001	.000	.089	.429
Factor 6 Turkish items	Pearson Correlation	.179	.649(**)	-.018	.225(*)	.146	.781(**)	.598(**)
	Sig. (2-tailed)	.081	.000	.860	.028	.157	.000	.000
Factor 7 Turkish items	Pearson Correlation	.094	.795(**)	-.275(**)	.132	-.113	.545(**)	.934(**)
	Sig. (2-tailed)	.362	.000	.007	.200	.272	.000	.000

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

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

Appendix F

Demographic Characteristics of the Subjects

Table F.1

Age Group of the Subjects by Gender

Age Group	Gender				Total	
	Male		Female		Frequency (N)	Percent (%)
	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)		
Less than 15	0	0.0	2	2.1	2	1.2
15-44	73	93.6	78	83.0	151	87.8
45+	5	6.4	14	14.9	19	11.0
Total	78	100.0	94	100.0	172	100.0

Table F.2

Marital Status of the Subjects by Gender

Marital Status	Gender				Total	
	Male		Female		Frequency (N)	Percent (%)
	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)		
Married	21	26.9	34	36.2	55	32.0
Single	57	73.1	55	58.5	112	65.1
Divorced	0	0.0	4	4.3	4	2.3
Widowed	0	0.0	1	1.1	1	0.6
Total	78	45.3	94	54.7	172	100.0

Table F.3

Birthplace of the Subjects

Province	Number of Subjects	Province	Number of Subjects
Adana	1	Karabuk	1
Adapazari	2	Kars	6
Adiyaman	2	Kastamonu	4
Agri	5	Kayseri	2
Amasya	2	Kirsehir	3
Ardahan	2	Malatya	2
Artvin	1	Mardin	19
Balikesir	1	Mersin	1
Batman	10	Mus	5
Bayburt	4	Nevsahir	2
Bingol	2	Ordu	2
Bitlis	4	Samsun	2
Bolu	1	Siirt	4
Corum	1	Sinop	3
Diyarbakir	6	Sirnak	1
Elazig	2	Sivas	8
Erzincan	1	Tokat	5
Erzurum	4	Trabzon	3
Gaziantep	1	Tunceli	1
Giresun	1	Urfa	6
Hatay	3	Van	4
Igdir	4	Yalova	1
İstanbul	25	Zonguldak	2

Table F.4

Number of Years Spent in İstanbul by Age Group

Number of Years in İstanbul	Frequency (N)	Percent (%)
0-5	28	16.3
6-10	41	23.8
11-15	33	19.2
16-20	42	24.4
21+	28	16.3
Total	172	100.0

Table F.5

Occupation of the Subjects by Gender

Occupation	Gender				Total	
	Male		Female		Frequency (N)	Percent (%)
	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)		
Housekeeper	0	0.0	35	37.2	35	20.3
Unskilled Worker	44	56.4	38	40.4	82	47.7
Civil Servant	0	0.0	0	0.0	0	0.0
Shopkeeper	16	20.5	1	1.1	17	9.9
Tradesman	1	1.3	0	0.0	1	0.6
Retired	1	1.3	2	2.1	3	1.7
Unemployed	6	7.7	14	14.9	20	11.6
Other	10	12.8	4	4.3	14	8.1
Total	78	100.0	94	100.0	172	100.0

Table F.6

Previous Participation in a Level I Literacy Course by Gender

Previous Participation in a Level I Literacy Course	Gender				Total	
	Male		Female		Frequency (N)	Percent (%)
	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)		
Yes	18	23.1	21	22.3	39	22.7
No	60	76.9	73	77.7	133	77.3
Total	78	100.0	94	100.0	172	100.0

Table F.7

Previous Participation in a Non-Literacy PEC Adult Education Course by Gender

Previous Participation in a Non- Literacy PEC Course	Gender				Total	
	Male		Female		Frequency (N)	Percent (%)
	Frequency (N)	Percent (%)	Frequency (N)	Percent (%)		
Yes	10	12.8	14	14.9	24	14.0
No	68	87.2	80	85.1	148	86.0
Total	78	45.3	94	54.7	172	100.0

Appendix G

Factor structure and item means of the Turkish version of the Education Participation

Scale (EPS) A-Form

Table G.1

*Turkish version of the Education Participation Scale (A-Form): Factor Structure and Item**Means*

Items (abbreviated)	Mean (N = 172)	S.D.	Factor Loadings						
			I	II	III	IV	V	VI	VII
Language improvement	3.05	1.161	.177	.047	.020	.013	.162	-.028	.719
Family change	2.70	1.271	.101	.192	.195	.313	.390	-.293	.402
Speak better	3.13	1.137	.279	.059	.149	.007	.172	-.056	.692
Write better	3.13	1.168	.351	-.071	-.004	.235	.233	.116	.523
Say and write	2.84	1.277	.268	-.097	.148	.178	.025	.102	.631
Friendly people	2.25	1.238	.695	.102	.166	.052	.078	-.070	.116
Good time	2.14	1.201	.642	.047	.390	.042	-.001	-.029	.208
Different people	2.36	1.208	.664	.178	.125	.129	.135	.164	.167
Make friends	2.03	1.139	.784	.040	.254	.069	.046	-.026	.158
New friends	2.00	1.145	.814	.058	.263	.086	-.022	.031	.170
Customs	2.13	1.247	.479	.042	.149	.244	-.155	.179	.347
New people	2.11	1.172	.684	.121	.214	.062	.020	.081	.123
Earlier education	3.69	.730	.122	.213	-.292	-.036	.402	.319	-.283
Acquire knowledge	3.05	1.110	.237	.169	-.117	-.021	.138	.463	.328
Further education	3.51	.895	.077	.166	-.011	-.105	.257	.704	-.087
Another school	3.27	1.075	-.025	.156	.008	.027	.119	.823	.001
Entrance	3.30	1.043	.014	.204	-.011	-.104	.079	.820	.076
Supplement education	3.62	.873	.243	.353	-.340	-.172	.306	.143	-.173
Professional advancement	3.19	1.155	.113	.804	.022	-.095	.127	.048	-.089
Occupational goal	3.06	1.251	.023	.809	.045	-.107	.095	-.012	.087

Job preparation	2.72	1.314	-.016	.599	.079	.030	.039	.293	.103
Job status	2.78	1.327	.144	.776	-.072	.103	-.152	.075	-.037
Better job	2.84	1.317	.046	.644	.040	.015	.070	.283	.042
Job competence	2.74	1.327	.094	.690	.126	.074	-.104	.059	.024
Common interest	2.16	1.301	.056	-.092	.216	.619	.070	-.104	.126
Others in family	2.46	1.254	.026	.111	.249	.550	.189	.021	.332
Keep up with children	2.31	1.400	.159	-.004	.037	.841	.042	-.143	-.109
Children's questions	2.50	1.366	.073	.081	.042	.823	.098	.073	.043
Talk with children	2.13	1.296	.109	-.047	.077	.855	.098	-.041	.147
Overcome frustration	2.28	1.253	.148	.026	.636	.039	.132	-.022	.112
Loneliness	1.87	1.173	.307	.128	.686	.092	.062	-.003	.194
Relief from boredom	1.83	1.140	.337	.041	.752	.007	.009	-.154	.016
Break routine	2.00	1.209	.192	.081	.727	.095	.004	.032	.001
Enquiring mind	2.02	1.242	.303	-.155	.428	.173	.152	.088	.055
Do something	2.58	1.381	.235	-.115	.424	.314	.220	.054	-.022
Escape relationship	1.72	1.167	.243	.206	.556	.246	.107	-.010	.093
Meaningful life	3.03	1.149	.068	.197	.165	-.031	.676	-.012	.050
General knowledge	3.46	.987	-.025	.004	.025	.076	.807	.045	.158
Joy of learning	3.21	1.141	.059	-.007	.208	.144	.655	.233	.112
Seek knowledge	2.99	1.142	.134	-.051	.164	.262	.593	.204	.062
Expand mind	3.35	.952	-.037	-.116	-.022	.166	.553	.215	.166
Sum of squared factor loadings divided by sum of communalities			.17	.16	.14	.13	.12	.12	.12
Percent of total variance accounted for			10.389	8.995	8.626	8.355	7.561	6.659	6.561
Cumulative proportion of total variance			10.389	19.385	28.011	36.366	43.927	50.586	57.147

Appendix H

Item-by-item correlations between the scores obtained from the two administrations
of the Turkish form of the EPS

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ1	RTQ2	RTQ3	RTQ4	RTQ5	RTQ6	RTQ7
TQ1	Pearson Correlation	.809(**)	.239	-.008	.266	.135	.287	.368
	Sig. (2-tailed)	.000	.230	.968	.179	.503	.146	.059
TQ2	Pearson Correlation	.232	.889(**)	.138	.209	-.019	.151	-.001
	Sig. (2-tailed)	.244	.000	.492	.296	.927	.453	.994
TQ3	Pearson Correlation	-.189	.096	.869(**)	.543(**)	.169	-.249	.251
	Sig. (2-tailed)	.345	.635	.000	.003	.401	.209	.206
TQ4	Pearson Correlation	.251	.266	.603(**)	.941(**)	.246	-.146	.527(**)
	Sig. (2-tailed)	.207	.180	.001	.000	.216	.468	.005
TQ5	Pearson Correlation	.074	-.233	.224	.121	.958(**)	.269	.455(*)
	Sig. (2-tailed)	.713	.242	.262	.548	.000	.174	.017
TQ6	Pearson Correlation	.379	.120	-.196	-.061	.062	.930(**)	.216
	Sig. (2-tailed)	.051	.551	.327	.762	.757	.000	.280
TQ7	Pearson Correlation	.306	.038	.263	.398(*)	.199	.266	.867(**)
	Sig. (2-tailed)	.121	.851	.185	.040	.319	.180	.000

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

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

TQ = First administration RTQ = Second administration (Re-test)

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ8	RTQ9	RTQ10	RTQ11	RTQ12	RTQ13	RTQ14
TQ8	Pearson Correlation	.976(**)	.460(*)	-.153	.401(*)	.222	.612(**)	-.128
	Sig. (2-tailed)	.000	.016	.447	.038	.265	.001	.523
TQ9	Pearson Correlation	.481(*)	.943(**)	.126	-.132	.737(**)	.571(**)	.190
	Sig. (2-tailed)	.011	.000	.533	.511	.000	.002	.344
TQ10	Pearson Correlation	-.085	.108	.681(**)	-.040	.145	.171	.317
	Sig. (2-tailed)	.675	.592	.000	.842	.472	.395	.107
TQ11	Pearson Correlation	.319	-.089	-.162	.909(**)	-.350	.221	.009
	Sig. (2-tailed)	.105	.660	.420	.000	.073	.268	.965
TQ12	Pearson Correlation	.188	.673(**)	.328	-.312	.977(**)	.428(*)	.289
	Sig. (2-tailed)	.347	.000	.094	.113	.000	.026	.143
TQ13	Pearson Correlation	.530(**)	.488(**)	.211	.222	.383(*)	.944(**)	.260
	Sig. (2-tailed)	.004	.010	.290	.265	.049	.000	.190
TQ14	Pearson Correlation	.060	.264	.090	.194	.281	.248	.595(**)
	Sig. (2-tailed)	.766	.184	.657	.331	.155	.213	.001

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

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

TQ = First administration RTQ = Second administration (Re-test)

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ15	RTQ16	RTQ17	RTQ18	RTQ19	RTQ20	RTQ21
TQ15	Pearson Correlation	.960(**)	.092	.338	-.054	.133	.083	.255
	Sig. (2-tailed)	.000	.647	.085	.790	.509	.682	.198
TQ16	Pearson Correlation	.160	.927(**)	.690(**)	.182	.323	.005	-.005
	Sig. (2-tailed)	.425	.000	.000	.364	.100	.979	.978
TQ17	Pearson Correlation	.194	.604(**)	.814(**)	-.054	.110	-.190	-.027
	Sig. (2-tailed)	.333	.001	.000	.790	.584	.344	.896
TQ18	Pearson Correlation	.000	.149	-.152	.941(**)	.274	.171	.238
	Sig. (2-tailed)	1.000	.458	.449	.000	.166	.395	.232
TQ19	Pearson Correlation	.160	.313	.201	.312	.951(**)	.535(**)	.250
	Sig. (2-tailed)	.424	.112	.316	.113	.000	.004	.209
TQ20	Pearson Correlation	.046	.019	.036	.262	.521(**)	.895(**)	.332
	Sig. (2-tailed)	.820	.926	.859	.188	.005	.000	.091
TQ21	Pearson Correlation	.291	-.064	.116	.158	.357	.345	.880(**)
	Sig. (2-tailed)	.141	.752	.565	.430	.067	.078	.000

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

TQ = First administration RTQ = Second administration (Re-test)

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ22	RTQ23	RTQ24	RTQ25	RTQ26	RTQ27	RTQ28
TQ22	Pearson Correlation	.914(**)	.408(*)	.429(*)	.211	.449(*)	.249	.231
	Sig. (2-tailed)	.000	.035	.026	.290	.019	.210	.247
TQ23	Pearson Correlation	.329	.968(**)	.126	.140	.434(*)	.450(*)	.606(**)
	Sig. (2-tailed)	.094	.000	.530	.486	.024	.018	.001
TQ24	Pearson Correlation	.083	.010	.400(*)	.080	.251	-.039	.018
	Sig. (2-tailed)	.681	.960	.039	.690	.206	.848	.930
TQ25	Pearson Correlation	.230	.202	.125	.965(**)	.145	.363	.329
	Sig. (2-tailed)	.249	.312	.534	.000	.471	.063	.094
TQ26	Pearson Correlation	.396(*)	.279	.281	.181	.963(**)	.392(*)	.465(*)
	Sig. (2-tailed)	.041	.159	.155	.367	.000	.043	.014
TQ27	Pearson Correlation	.252	.512(**)	.320	.336	.334	.967(**)	.844(**)
	Sig. (2-tailed)	.205	.006	.104	.087	.088	.000	.000
TQ28	Pearson Correlation	.120	.494(**)	.183	.346	.408(*)	.781(**)	.962(**)
	Sig. (2-tailed)	.550	.009	.360	.077	.035	.000	.000

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

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

TQ = First administration RTQ = Second administration (Re-test)

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ29	RTQ30	RTQ31	RTQ32	RTQ33	RTQ34	RTQ35
TQ29	Pearson Correlation	.911(**)	.180	.098	.086	.231	.271	.259
	Sig. (2-tailed)	.000	.369	.627	.670	.246	.171	.192
TQ30	Pearson Correlation	.225	.948(**)	.048	.203	.462(*)	.415(*)	.387(*)
	Sig. (2-tailed)	.259	.000	.813	.310	.015	.031	.046
TQ31	Pearson Correlation	.275	.018	.840(**)	-.026	.296	.235	.005
	Sig. (2-tailed)	.166	.929	.000	.898	.134	.237	.980
TQ32	Pearson Correlation	.221	.042	.185	.957(**)	-.235	-.097	.171
	Sig. (2-tailed)	.268	.834	.357	.000	.238	.630	.395
TQ33	Pearson Correlation	.335	.503(**)	.309	-.156	.955(**)	.619(**)	.123
	Sig. (2-tailed)	.088	.008	.117	.436	.000	.001	.541
TQ34	Pearson Correlation	.323	.399(*)	.267	-.066	.558(**)	.974(**)	.278
	Sig. (2-tailed)	.101	.039	.177	.745	.002	.000	.160
TQ35	Pearson Correlation	.491(**)	.310	-.096	.094	-.036	.337	.903(**)
	Sig. (2-tailed)	.009	.116	.635	.640	.858	.086	.000

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

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

Table H.1

Item-by-item correlations between the Two Administrations of the Turkish Version of the EPS

		RTQ36	RTQ37	RTQ38	RTQ39	RTQ40	RTQ41	RTQ42
TQ36	Pearson Correlation	.964(**)	.457(*)	.291	.138	.507(**)	.102	.464(*)
	Sig. (2-tailed)	.000	.016	.141	.493	.007	.614	.015
TQ37	Pearson Correlation	.543(**)	.917(**)	.300	.293	.432(*)	.326	.259
	Sig. (2-tailed)	.003	.000	.129	.139	.024	.097	.192
TQ38	Pearson Correlation	.267	-.002	.835(**)	-.058	.000	-.104	-.044
	Sig. (2-tailed)	.179	.992	.000	.772	1.000	.605	.829
TQ39	Pearson Correlation	.221	.239	.105	.912(**)	.126	.111	-.076
	Sig. (2-tailed)	.269	.230	.602	.000	.532	.580	.707
TQ40	Pearson Correlation	.607(**)	.428(*)	.158	.231	.938(**)	.433(*)	.516(**)
	Sig. (2-tailed)	.001	.026	.432	.246	.000	.024	.006
TQ41	Pearson Correlation	.164	.376	.054	.224	.462(*)	.990(**)	.406(*)
	Sig. (2-tailed)	.413	.053	.789	.261	.015	.000	.036
TQ42	Pearson Correlation	.383(*)	.183	-.024	-.084	.351	.224	.784(**)
	Sig. (2-tailed)	.049	.362	.907	.677	.072	.262	.000

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

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

TQ = First administration RTQ = Second administration (Re-test)

Appendix I

Factor-by-factor correlations between the factor scores obtained from the two administrations of the Turkish form of the EPS

Table I.1

Factor-by-factor correlations between the factor scores obtained from the two administrations of the Turkish form of the EPS

		Factor 1 Re-test	Factor 2 Re-test	Factor 3 Re-test	Factor 4 Re-test	Factor 5 Re-test	Factor 6 Re-test	Factor 7 Re-test	Re-Test Total
Factor 1 Test	Pearson Correlation	.984(**)	.303	.686(**)	.669(**)	.605(**)	.324	.532(**)	.835(**)
	Sig. (2- tailed)	.000	.124	.000	.000	.001	.099	.004	.000
Factor 2 Test	Pearson Correlation	.257	.974(**)	.147	-.047	.300	.147	.226	.354
	Sig. (2- tailed)	.196	.000	.464	.817	.129	.466	.256	.070
Factor 3 Test	Pearson Correlation	.726(**)	.247	.990(**)	.631(**)	.704(**)	.248	.545(**)	.835(**)
	Sig. (2- tailed)	.000	.215	.000	.000	.000	.212	.003	.000
Factor 4 Test	Pearson Correlation	.653(**)	.008	.670(**)	.991(**)	.521(**)	.397(*)	.534(**)	.795(**)
	Sig. (2- tailed)	.000	.969	.000	.000	.005	.040	.004	.000
Factor 5 Test	Pearson Correlation	.486(*)	.318	.608(**)	.502(**)	.887(**)	.353	.441(*)	.692(**)
	Sig. (2- tailed)	.010	.106	.001	.008	.000	.071	.021	.000
Factor 6 Test	Pearson Correlation	.130	.050	.186	.243	.219	.893(**)	.137	.328
	Sig. (2- tailed)	.517	.805	.353	.222	.273	.000	.496	.095
Factor 7 Test	Pearson Correlation	.567(**)	.261	.560(**)	.482(*)	.451(*)	.260	.981(**)	.708(**)
	Sig. (2- tailed)	.002	.189	.002	.011	.018	.190	.000	.000
Test Total	Pearson Correlation	.859(**)	.430(*)	.859(**)	.803(**)	.771(**)	.504(**)	.744(**)	.995(**)
	Sig. (2- tailed)	.000	.025	.000	.000	.000	.007	.000	.000

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

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