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THE AGE AND CONTEXT OF ACQUISITION OF
EUSKERA AND CASTILIAN:
A MATTER OF THE BILINGUAL EDUCATION AND
POLITICS OF THE BASQUE LANGUAGE

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Abstract

In the Basque region of Spain, there are no monolingual speakers of Euskera, the native Basque language. Furthermore, during the Franco years, it was a policy of the Spanish government to actively discourage use of Euskera (and other languages such as Gallego and Catalan). To counteract the effects of these influences, the government of the Basque region (hereafter referred to by its official name, the Basque Autonomous Community) has fostered a wide variety of efforts to revitalize use of Euskera. Here, we report on one of these efforts -- the development of a scale to measure and assess acquisition and use of Euskera (Balluerka & Gorostiaga, 1995). The instrument is composed of different sections assessing use of Euskera with both family and other people, level of exposure to Euskera during different stages of language acquisition, and use of the mass media presented in Euskera. A reliability and validity study conducted with a sample of Euskera-Castilian bilingual students from the Basque region of Spain indicated the scale possesses acceptable psychometric characteristics.

Introduction

In the Basque region of Spain, about 600,000 people speak Euskera (sometimes spelled Euskara), the native language of the Basque, and Castilian, generally called the Spanish language. There are no monolingual speakers of Euskera. Historically, there has been minimal commitment to fostering formal educational settings in which the speaking, reading, and writing in Euskera occurred. Most recently, during the 36 years of the dictatorship of Francisco Franco, it was official policy of the Spanish government to actively discourage use of Euskera, as well as Gallego and Catalan - all so-called minority languages of the peninsula. With the death of Franco, and based on the acceptance of a new constitution and other accords in 1978, the Basque region and some other regions achieved a high degree of autonomy. Since achieving autonomy, it has been a high priority of the Basque Autonomous Community to revitalize the use of Euskera.

The many efforts to nurture the unique linguistic status of Euskera, which has no known links to other languages, has highlighted a need for accurate data about the acquisition and use of Euskera. Such data could be used to make informed choices among the different instructional or educational models that might be used to facilitate the acquisition, use, and continued existence of Euskera. To obtain these data, it is necessary to have scales that allow reliable estimates to be made of how well members of the community learn and speak Euskera. Until now, there simply has not been any adequate instrument for doing so. In this article, we report on the development and psychometric assessment of a scale for estimating how people learn Euskera. The scale, which is called the Developmental Acquisition of Euskera scale (Balluerka & Gorostiaga, 1995), may also be used to estimate speakers' fluency in Euskera, as well as their use of the language. Below, we briefly describe the theoretical background for the development of this scale.

In language acquisition, it is axiomatic that the age and context in which languages are acquired greatly impact the linguistic capacities of the bilingual person (Breathnach, 1993; Carroll, 1979; Ervin & Osgood, 1954; Genesee, Hamers, Lambert, Mononen, Seitz, & Starck, 1978; Palić, 1990; Starck, Genesee, Lambert, & Seitz, 1977; Vaid & Lambert, 1979; Willemin, Richardson, & Lynch, 1994). For example, Ervin and

Osgood (1954) classified bilingual subjects into two groups: compound bilinguals, those who have two linguistic codes for the same cognitive representation, and coordinate bilinguals, those who have slightly different cognitive units which express the same concept in two different languages. Ervin and Osgood concluded that persons of these bilingual types show a different pattern of cognitive functioning as a result of the differences in age and the circumstances in which they acquired both languages.

In related work, Hamers and Blanc (1989) differentiated early bilinguals, those who acquire both languages in a common family context, from late bilinguals or those who acquire the first language in their family context and a second language in school. This differentiation is extensively accepted in the realm of bilingual studies (Chengappa, 1984; Genesee, 1980, 1989; Genesee, Nicoladis, & Paradis, 1995; Harley, Hart, & Lapkin, 1986; Liu, Bates, & Li, 1992; Mack, 1986; Matsumi, 1994; Vaid & Lambert, 1979). Early bilinguals can be further differentiated into categories of simultaneous and consecutive bilinguals. Persons in the former category simultaneously acquire equivalent skills in both languages, whereas those in the latter category acquire the second language after the first, but with acquisition still taking place during childhood. Various authors have stated that early and late bilinguals use different strategies when performing similar tasks (Genesee, Hamers, Lambert, Mononen, Seitz, & Starck, 1978; Lambert, 1969; Lambert & Rawlings, 1969; Lui, Bates, & Li, 1992; Vaid & Lambert, 1979; Willemin, Richardson, & Lynch, 1994). For example, Genesee et al. (1978) found that in a language recognition task late bilinguals seemed to rely more on a gestalt-like or melodic strategy while early bilinguals relied more on a semantic or analytic type of strategy.

In addition to age of acquisition, a number of authors have convincingly argued that the context of acquisition profoundly influences the degree of independence and interdependence of the linguistic codes of the bilingual person (Breathnach, 1993; Ervin & Osgood, 1954; Jakobovits & Lambert, 1961, 1967; Lambert, Havelka, & Crosby, 1958; Lambert & Rawlings, 1969). For example, Lambert, Havelka, and Crosby (1958) found that bilinguals with acquisition experiences that occurred in separate contexts, relative to those whose

experiences occurred in fused contexts, showed significantly more associative independence among equivalent terms in the two languages.

The studies cited above establish that the age and context of the acquisition of two languages influence the cognitive functioning of the persons acquiring the languages. Thus, age and context are one basis for establishing different classifications of bilingual acquisition. In addition to the classifications cited earlier, we believe that a distinction between active and passive bilinguals is also important for predicting the level of proficiency in the languages acquired. In this sense, we agree with authors who have argued that having an accurate picture of the age and context in which two languages are acquired by bilingual individuals is a necessary precursor to further studies about situations in which the languages are in contact (Hamers & Blanc, 1989; McConnell, 1988). This is exactly the current situation in the Basque Autonomous Community. Not only are there a variety of patterns of acquiring Euskera and Castilian, but also there are a variety of formal educational models that emphasize one or the other language - all occurring in a social and political context in which a large majority of the mass media are in Castilian.

The primary goal of the present study was to develop a scale that researchers, educators, and policy makers could use to reliably estimate the age and context in which Euskera and Castilian are acquired. An important element of this goal was to create an instrument that could be used to classify persons as active or passive bilinguals. The scale was composed of several subscales, each concentrating on a different domain of language use and influence. We believe this scale will provide the basis for future research on the linguistic proficiency of people who speak both Euskera and Castilian, and on the effects of a variety of types of educational settings on the acquisition and use of both languages.

Method

Design and Participants

The study had two phases. During the initial phase, the two senior authors and nine different judges (three judges from each of the three provinces that comprise the Basque Autonomous Community) worked to develop the domains of the instrument. After the initial construction

and rational assessment of the instrument, a psychometric study was conducted. In this second phase of the investigation, 420 students (280 women and 140 men) between the ages of 17 and 20 responded to the items of the scale. Eighty-three percent of these students were third or fourth-year students from four different public high schools, and 17 percent were first-year students from a public college. All schools were located in the province of Guipuzcoa. The data were collected during the first three months of the academic term 1994-1995.

Scale Construction

After an initial section of items requesting demographic information, the Developmental Acquisition of Euskera (DAE) scale contains three sections that assess the: (a) use of Euskera with family members and other people, (b) history of acquisition of Euskera, and (c) use of TV, radio, and newspapers presented in Euskera. The choice of these domains was based on both an analysis of existing psycholinguistic theory conducted by the two senior authors, and on the specific information needs of educational policy makers in the Basque Autonomous Community. Furthermore, as a preliminary screening step, all potential items were examined and discussed by nine judges. Before being added to the DAE scale, eight of the nine judges had to agree on the fact that the item was objectively stated, otherwise the item was discarded.

Items in section (a) measured frequency and fluency in the use of Euskera with family and other persons. For example, one item asked the participant to identify family members and other persons who had spoken to him or her using Euskera during different developmental periods of his or her life. For each family member or other person so identified, the participant was asked to rate the degree to which that person had communicated in Euskera. The response format was a 3-point Likert scale (1-sometimes, 2-frequently, 3-always). The range of possible scores for section (a) was from 0 and 240.

Items in section (b) focused on four stages of language acquisition (0-5 years, 5-10 years, 10-16 years, and from 16 years onwards), and consisted of a set of common linguistic events, such as learning to count, and a set of typically Basque events. For example, attending regional dancing lessons is an event experienced more by children whose first

language is Euskera. For items in this section, we employed a 3-point Likert scale, on which a respondent indicated the degree to which each event took place in Euskera or in Castilian (1-always in Castilian, 2-equally in Euskera and Castilian, 3-always in Euskera). Two measures, one for common events and one for typically Basque events, were derived from items in section (b). The range of possible scores was 0 and 153 for common events, and 0 and 168 for typically Basque events.

Items in section (c) assessed the use of newspapers, radio, and television. For example, one of the items asked participants to state how frequently s/he watched the television station whose programs are presented entirely in Euskera. A 3-point Likert scale was used for all items in this section. Participants indicated the degree to which s/he received information in Euskera (1-never, 2-sometimes, 3-always). The range of possible scores for section (c) was from 21 to 63.

In all cases we assigned higher scale values (3) to responses that indicated more extensive use of or exposure to Euskera. We did this so that higher totals for summed scores indicate more use of Euskera. The range of possible scores on the total DAE scale was from 21 to 624. The entire instrument and instructions were written in Euskera. All participants completed this version of the scale.

Other Measures

In addition to the DAE scale described above, we obtained responses to three additional scales. These scales were used to make a number of validity comparisons. Participants answered the Attitude towards Euskera (AE) scale which is published by the Sociological Research Bureau of the Basque Autonomous Community (Eusko Jaurlaritzaren Gizarte Azterketarako Lantaldea, 1983). Scores on this scale can range from a low of - 176 to 176, with positive scores reflecting a more positive attitude toward Euskera.

Participants also responded to a scale measuring the Social Use of Euskera (SUE) (Gorostiaga, & Balluerka, 1995). The range of possible scores on the SUE is from 39 to 195, with higher scores indicating more social use of Euskera.

Finally, participants completed a short version of one of the Euskararen Gaitasun Agiria (EGA), a frequently used measure of proficiency in Euskera. The EGA is used to form linguistic profiles. To

obtain a variety of jobs in the Basque Autonomous Community, it is necessary to pass the EGA. Here we describe only the short version of this scale.

The EGA consists of five sections that assess listening, writing, re-expression, use of synonyms, and reading abilities, respectively. In section one, after listening to a tape recording of a text, participants complete five multiple-choice items about the content of the text. In section two, participants choose one of four writing tasks, each of which requires the production of a text of 75-80 words. In section three, participants rewrite ten sentences with the constraint that each re-expression must contain a specified key word or phrase. In section four, participants read a text containing ten underlined words for which they are required to generate synonyms. In the last section, participants read a newspaper passage and subsequently answer six questions about the content of the passage. The range of scores on the short version of the EGA is from 0 to 51, with higher scores indicating higher levels of proficiency in Euskera.

Procedure

All scales were handed out by one of the authors of this study to small groups of participants that ranged in size from 25 to 35 students. Data collection was coordinated by the Pedagogical Orientation Center of the Urola region which is in the province of Guipuzcoa. All students participated under conditions that assured that their responses were anonymous.

Results and Discussion

We first present and discuss the results that reveal the psychometric quality of the DAE scale. In doing so, we focus our attention on the reliability and validity of the scale and its elements. Item statistics and a variety of additional reliability information are presented in Table 1 (Appendix). Thereafter, we discuss how the scale can be usefully applied in the current bilingual education settings of the Basque Autonomous Community.

The Internal Consistency and Reliability of the DAE Scale

Responses given by the 420 participants were analyzed using the release 4 version of the SPSS package. The average item-total correlation was 0.38 ($SD = 0.08$). Correlations between each of the four principal subscales and the total DAE scale score were .53 (use of mass media), .74 (typically Basque events), .76 (common linguistic events), and .90 (family and others speaking Euskera). We believe that the relatively low correlation (.53) between the use of mass media presented in Euskera and the total score can be explained on the basis of the nature of the mass media in the Basque Autonomous Community. Only a few of the mass media are delivered in Euskera. Further, many of these have only recently been created. As a consequence, even bilinguals who are highly competent in Euskera do not use these media exclusively.

Four additional scores were created by summing DAE items across sections a-c and within each of the four developmental stages. The correlations between these developmental stage scores and the total DAE scale score all were higher than 0.92.

In order to estimate the internal consistency of the entire scale, we calculated Cronbach's coefficient alpha (Cronbach, 1951) and obtained an estimate of 0.97, indicating high internal consistency. An examination of Table 1 reveals that the reliability of the scale remains high when any of the items is arbitrarily deleted. In addition, it may be seen that the coefficient alpha for the various subscales is quite high. As a consequence, we have concluded that the measure reliably distinguishes among persons with respect to exposure to Euskera at different developmental stages, in a variety of contexts, and in their use of mass media.

The Validity of the Scale

Assessment of the validity of the scale, or the degree to which the instrument measures acquisition and degree of use of Euskera, was performed by demonstrating that significant differences occur for a series of comparisons among groups for whom there is an a priori expectation of differences. We constructed five comparisons of this type.

Our first conjecture was that persons with positive attitudes about a language will engage more actively in learning and using it than persons

with neutral or unfavorable attitudes. In order to evaluate this hypothesis, we compared two subsamples of persons who differed in their attitude toward Euskera. Respectively, these two subsamples comprised 103 persons with positive attitudes toward Euskera (above 75th percentile on the AE scale) and 107 persons with neutral or negative attitudes toward Euskera (below the 25th percentile on the AE scale). A t -test revealed that these two groups differed significantly ($t = -2.77$, $p < 0.006$) on the total score for our instrument. In other words, persons with positive attitudes toward Euskera learn and use it more actively than persons with neutral or negative attitudes. Respectively, the means (standard deviations) in these two groups were 357.80 (37.41) and 321.81(27.92) on the DAE scale.

Next we postulated that people who actively learned and used Euskera as children (as measured by the DAE scale) would continue to use Euskera on a social basis more frequently than persons who more passively learned and used Euskera as children. To evaluate this hypothesis, we formed two subsamples, respectively comprising 104 persons with scores above the 75th percentile on the DAE scale and 105 persons below the 25th percentile on the DAE scale. These two subsamples were considered to have had "active" versus "passive" acquisition of Euskera. A F -test ($F = 13.13$, $p < 0.0001$) revealed the active group rated their social use of Euskera significantly higher (mean and SD of 180.13 and 23.58, respectively) on the SUE (Gorostiaga, & Balluerka, 1995) than did the passive group (mean and SD 122.75 and 34.87, respectively).

We note here that we also evaluated differences between groups of participants that were formed on the basis of SUE scores. Thus, a group of participants who were currently in social contact with other persons with high levels of understanding and use of Euskera had significantly higher DAE scores (meaning a more extensive developmental history) than a group of participants not in such contact. This was true whether the contact groups were socially close (parents and siblings) or more distant (other family members, friends, co-workers, co-students and neighbors). As these comparisons are partially redundant with information described in the preceding paragraph, here we refrain the presentation of further statistics.

Third, although there is some disagreement in current sociolinguistic circles on this issue (Furtado & Webster, 1991; Paradis, 1995), many authors believe that learning a given language at a young age fosters proficiency in that language (Breathnach, 1993; Genesee, 1980; Lenneberg, 1967; Palij, 1990; Wuillemin, Richardson, & Lynch, 1994). Following the ideas of these authors, it was reasonable to expect that persons who acquire Euskera at a younger age will use it more actively and frequently than those who acquire it at a later age. As predicted, a *t*-test ($t = 19.57, p < 0.0001$) revealed that the 358 persons who learned Euskera before the age of 6 had significantly higher DAE scores (mean = 351.76, $SD = 21.99$) than the 62 persons who acquired the language after they were 6 years old (mean = 153.08, $SD = 31.75$).

Fourth, we were certain that the choice of one language of instruction over another in educational settings is highly related to DAE scores. To examine this belief we compared the responses of the 70 university students in our sample, all of whom receive the majority of their instruction in Euskera, to the responses of an independent sample of 30 bilingual university students, all of whom receive their instruction in Castilian. Confirming our hypothesis, the mean of DAE scores in the first group (mean = 305.81, $SD = 25.66$) was significantly higher ($t = 4.28, p < 0.0001$) than that of scores in the second group (mean = 219.57, $SD = 38.71$). This result clearly shows that choosing a specific educational model for college studies is closely linked to the degree of use and proficiency in the language.

Finally, we thought that participants with high, moderate, and low scores on the DAE scale would have corresponding scores on the EGA measure of literacy. An analysis of variance of EGA scores was conducted among three groups formed in the following manner. A high group consisted of 64 students who had scores above the 85th percentile on the DAE scale. A moderate group comprised 60 students with scores between 42nd and 57th percentiles, whereas a low group comprised 63 students with scores below 15th percentile. The analysis of variance confirmed that there were significant differences among these groups ($F = 26.12, p < 0.0001$). Respectively, the means (standard deviations) obtained by the high, moderate, and low groups on the EGA test of literacy were 33.92 (4.95), 30.98 (5.44), and 25 (5.58).

Norms

Currently, the validity of the DAE scale is limited to its normative group, that is, the population of third and fourth-year public high school and first-year public college students who reside in the province of Guipuzcoa. Nevertheless, a norm table, Table 2 (Appendix), and skew and kurtosis indexes were calculated for this distribution of scores. It appears that the distribution of scores is both symmetrical (skew = - 0.06) and uniform (kurtosis = 0.003). It is our belief that the current work on this scale represents an important first step toward a future classification of Euskera-Castilian bilinguals on the basis of their acquisition and use of Euskera.

Conclusion and Perspective

In summary, we judge that psychometric analysis of the DAE scale of acquisition of Euskera reveals a scale for which reliability is satisfactory and for which a moderate amount of validity has been demonstrated. Additional research employing different samples of Euskera-Castilian bilinguals as well as Euskera-French bilinguals should improve the quality of the estimates of reliability and would allow a more careful examination of the validity of the scale in different cultural contexts. Accordingly, if this finding could be replicated in other independent samples the scale may be a useful source of information for identifying and categorizing people with respect to their way of learning and the degree of use and proficiency in Euskera, and for moving on to the next phase of our goal: tracking and evaluating different models of bilingual instruction designed to rehabilitate the use of Euskera among the Basque people.

With regard to application of the DAE scale, we believe that the scale can help to identify and distinguish a variety of types of bilingual behavior, thereby providing classification opportunities that might replace those of previous investigators (e.g., the classifications of compound versus coordinate, early versus late, and simultaneous versus consecutive). We also think that the scale can differentiate persons for whom acquisition of Euskera has varied on a dimension of passive versus active participation. This latter dimension can be very important in educational settings because it provides a means of indexing linguistic

activity in Euskera at different stages of language acquisition. Having such an index would facilitate decision making with respect to the types of instructional interventions that are needed to counterbalance the influence of the Castilian language. As Castilian language influence is still disproportionately greater than Euskera language influence, methods of gauging and monitoring such influence before, during, and after a variety of educational, social, and political interventions are of critical importance.

Three different models of bilingual education are employed in the Basque Autonomous Community. In the first model, Castilian is the principal language of instruction, while Euskera is taught as an additional subject. In the second model, Euskera and Castilian are used equally in instruction. In the final model, the opposite of the first, Euskera is the principal language, while Castilian is taught as an additional subject. The latter two models are regarded as immersion programs. Studies have shown that students taught via the third model demonstrate more proficiency in Euskera than students taught via either of the other two models, whereas there are no significant differences among these students in proficiency in Castilian (Balluerka, Vergara, & Gorostiaga, 1994; Sierra & Olaziregi, 1993).

It has been demonstrated in Catalonia that immersion programs in educational settings have facilitated the revival of the Catalan language (Arnau, 1993; Artigal, 1993; Bel, 1993; Vila, 1993). Almost uniformly, the immersion programs of Catalonia have employed an educational model like that of the third model described above. The DAE scale could be employed to detect which pre-existing differences in the acquisition and use of Euskera foster or impede the development of proficiency in both languages following extended periods of instruction using the various educational models. Doing so would increase the likelihood that curricular changes that foster true bilingual proficiency are implemented in all three bilingual education models. Data derived using the DAE might also provide a means of evaluating which of the models is most appropriate for achieving the educational and political objectives of the Basque Autonomous Community.

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Appendix

Table 1: Individual Item Statistics, Subscale Correlations, and Estimates of Coefficient Alpha

Item	Mean	SD	Item to Total Correlation	Item	Mean	SD	Item to Total Correlation
1	2.37	1.14	.68	42	2.28	1.22	.64
2	2.23	1.24	.65	43	2.07	1.33	.53
3	2.04	1.34	.54	44	2.20	1.25	.59
4	2.20	1.24	.57	45	2.19	1.22	.70
5	2.21	1.17	.70	46	1.71	1.43	.59
6	1.68	1.42	.58	47	2.41	1.04	.59
7	2.35	1.07	.58	48	.86	1.27	.33
8	.78	1.19	.31	49	.82	1.31	.31
9	.79	1.29	.29	50	1.50	1.45	.24
10	1.53	1.45	.24	51	2.38	1.12	.68
11	2.34	1.13	.68	52	2.23	1.24	.64
12	2.22	1.24	.65	53	2.24	1.22	.57
13	2.24	1.22	.57	54	2.13	1.27	.60
14	2.14	1.27	.58	55	2.15	1.22	.70
15	2.20	1.18	.69	56	1.76	1.40	.59
16	1.73	1.40	.57	57	2.44	.93	.56
17	2.45	.92	.54	58	.87	1.25	.31
18	.78	1.17	.30	59	.86	1.32	.25
19	.85	1.31	.24	60	1.53	1.42	.20
20	1.55	1.41	.19	61	2.22	1.15	.71
21	2.22	1.15	.71	62	2.14	1.24	.64
22	2.13	1.25	.62	63	2.20	1.16	.58
23	2.21	1.16	.58	64	2.02	1.32	.59
24	2.01	1.32	.58	65	2.09	1.20	.70
25	2.14	1.15	.67	66	1.73	1.36	.58
26	1.66	1.36	.58	67	2.29	.88	.53
27	2.30	.86	.51	68	.80	1.17	.30
28	.75	1.11	.28	69	.88	1.30	.22
29	.82	1.27	.22	70	1.49	1.38	.15
30	1.52	1.37	.14	71	2.22	1.14	.70
31	2.21	1.14	.70	72	2.11	1.24	.63
32	2.11	1.25	.62	73	2.18	1.15	.56
33	2.20	1.15	.57	74	1.99	1.35	.59
34	1.98	1.32	.59	75	2.08	1.18	.67
35	2.07	1.16	.67	76	1.72	1.34	.57
36	1.64	1.34	.59	77	2.23	.88	.51
37	2.28	.84	.43	78	.79	1.15	.31
38	.76	1.11	.28	79	.86	1.30	.25
39	.84	1.28	.20	80	1.47	1.39	.15
40	1.49	1.38	.14	81	2.15	1.21	.27
41	2.41	2.41	.68	82	2.49	.87	.46

Item	Mean	SD	Item to Total Correlation	Item	Mean	SD	Item to Total Correlation
83	2.58	.86	.43	129	.58	1.08	.27
84	2.58	.86	.33	130	.04	.34	.03
85	2.50	.93	.37	131	.03	.24	.12
86	2.56	.86	.49	132	.32	.90	.11
87	2.39	.97	.53	133	.19	.71	.15
88	1.44	1.00	.26	134	.36	.95	.25
89	2.28	1.20	.29	135	.97	1.35	.28
90	2.34	1.12	.43	136	1.09	1.39	.33
91	2.42	.96	.32	137	.62	1.19	.32
92	2.48	.81	.39	138	.72	1.25	.24
93	2.50	.74	.41	139	1.14	1.36	.24
94	2.37	.99	.28	140	1.04	1.29	.32
95	2.37	.99	.33	141	1.22	1.43	.31
96	2.67	.69	.53	142	2.04	1.27	.41
97	2.65	.65	.38	143	.97	1.40	.29
98	2.43	.92	.30	144	2.46	1.09	.38
99	2.41	.99	.38	145	2.09	1.26	.37
100	2.45	.78	.57	146	1.15	1.42	.39
101	1.88	.75	.23	147	1.63	1.42	.32
102	1.55	1.26	.20	148	1.29	1.44	.30
103	2.24	1.15	.31	149	1.20	1.42	.34
104	2.60	.87	.30	150	1.11	1.41	.28
105	2.61	.81	.45	151	1.26	1.36	.28
105	2.43	.76	.50	152	1.06	1.28	.32
107	2.28	.79	.51	153	1.14	1.41	.31
108	2.01	.43	.17	154	2.22	1.08	.42
109	2.08	.81	.33	155	1.37	1.49	.37
110	1.83	.65	.17	156	1.85	1.43	.37
111	1.56	.75	.31	157	.61	1.17	.17
112	2.74	.58	.32	158	1.99	1.29	.40
113	2.58	.66	.54	159	1.75	1.39	.48
114	1.75	.88	.35	160	2.44	.90	.46
115	.52	1.03	.12	161	1.68	1.35	.32
116	.97	1.19	.18	162	1.49	1.40	.37
117	2.23	.95	.44	163	1.62	1.39	.36
118	2.19	.84	.43	164	.97	1.29	.36
119	1.94	.44	.14	165	.20	.71	.10
120	2.14	.74	.30	166	1.61	1.43	.38
121	1.84	.56	.15	167	1.12	1.26	.32
122	1.69	.64	.24	168	.44	1.03	.27
123	2.68	.62	.32	169	.03	.28	.09
124	2.55	.66	.47	170	.78	1.22	.22
125	1.74	.84	.35	171	.53	1.06	.27
126	.79	1.18	.08	172	.69	1.22	.32
127	.18	.65	.01	173	1.75	1.28	.37
128	1.43	1.18	.27	174	.98	1.40	.36

Item	Mean	SD	Item to Total Correlation	Item	Mean	SD	Item to Total Correlation
175	1.27	1.44	.22	192	1.11	.36	.12
176	1.49	1.39	.32	193	1.08	.34	.10
177	1.73	1.38	.48	194	1.83	.73	.24
178	2.40	.88	.41	195	1.14	.42	.04
179	1.64	1.35	.35	196	1.14	.46	.08
180	1.71	1.35	.36	197	1.26	.52	.31
181	1.31	1.36	.35	198	1.22	.48	.18
182	1.04	1.30	.36	199	1.29	.51	.16
183	.24	.77	.12	200	1.42	.63	.35
184	1.46	1.43	.32	201	1.70	.66	.31
185	1.15	1.27	.35	203	1.88	.74	.22
186	.58	1.14	.22	204	1.27	.53	.28
187	.03	.30	.00	205	1.21	.49	.20
188	1.85	.67	.32	206	1.31	.50	.16
189	2.05	.41	.16	206	1.56	.68	.37
190	2.05	.39	.16	207	1.83	.63	.25
191	1.64	.71	.33	208	2.11	.69	.19
Sections			Mean	SD	Correlation of Section Score w/Total Score		Cronbach Alpha
a Family & other people			144.60	27.91	.90		.97
b1 Common events			101.73	17.97	.76		.90
b2 Typically Basque events			67.27	10.97	.74		.93
c. Mass media			31.94	5.18	.53		.79
Stages			Mean	STD DEV	Correlation of Stage Score w/Total Score		Cronbach Alpha
0 - 5			64.21	9.69	.92		.91
5 -10			91.98	12.22	.95		.91
10 -16			95.86	15.00	.97		.90
16 & over			93.56	12.00	.93		.89

Note. Coefficient alpha did not change from .97 when we recomputed alpha by deleting each item singly.

Table 2
Norm Table for High School and College Students; Province of
Guipuzcoa

Percentile	Value
99	510.1
95	470.0
90	452.0
85	437.5
80	421.0
75	411.5
70	396.0
65	385.5
60	378.0
55	365.5
50	355.0
45	346.0
40	335.0
35	325.0
30	314.0
25	300.5
20	280.0
15	248.5
10	211.0
5	163.0
1	114.1

Note. These norms are based on a sample of 420 high school and college students. The overall mean and standard deviation of the DAE total score were 345.30 and 44.32, respectively.