

## DESIGN (persons and methods) of the Quantitative Study

### **DESIGN**

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This is a descriptive field study with a co-relational design and analytical components.

### **PROCEDURE**

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After establishing the aims of the study, and after defining and identifying the variables to be examined, we proceeded, according to such aims, to either identify or create adequate questionnaires for the purpose of measuring the above mentioned variables, adapting them to the study, and translating them into and adapting them to Spanish population groups, if necessary. Subsequently, all resulting questionnaires were used to create one general questionnaire.

Experts were consulted in order to construct the first version of the questionnaire (Q YouthsVIP v.1).

This first version was applied to a pilot study for its validation through a 200-test sampling carried out on a population which was similar to that of the final study.

From the analysis of the results, and a second consultation with experts, the second and final version (Q YouthsVIP v.2.) was created, which was used in the study.

A test-retest was carried out with the aim of testing the reliability and inner validity of the questionnaire and each one of its sections.

## **SUBJECTS: SAMPLE AND POPULATION GROUP SUBMITTED TO STUDY**

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The sample group for our research is made up of students from Spanish secondary schools and their counterparts from the rest of the countries involved.

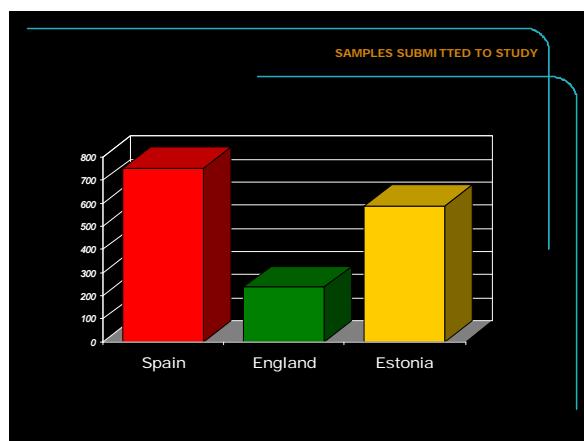
In the case of the Spanish study, all subjects were studying in Schools of Secondary Education (SSE) from the province of Alicante, and composed a finite population group of 26,689 students, as distributed among the 104 SSE's existing in this province.

### *Determination of the sampling*

The formula which was used to calculate the sampling scope was defined on the basis of the most unfavourable situation ( $p/q=50/50$ ). Having selected a  $\pm 3$  margin of error and a degree of reliability of 95.5%, the total number of questionnaires that were to be administered for the sample to be representative enough amounted to 680, plus a reserve of 68 (10%), all of which added up to 748 questionnaires.

A random sampling by conglomerates was proposed with a previous stratification based on the socioeconomic level, the definition -in three levels- of which was made by a group of professors belonging to an association called *Timoneda*, which also is collaborating in the programme. This was done according to the characteristics of the district where the school was located and the overall socioeconomic status of its students.

### *Sample for the study*



The overall final sample consisted of **1,575** questionnaires that were properly administered and filled in, in three different countries and in a total of 29 educational institutions involved in the sampling. This, according to a pre-estimate, guaranteed an  $\alpha \leq 0.05$  for calculating prevalence and an  $\alpha \leq 0.05$  and  $1-\beta \geq 0.80$  for contrasting the hypothesis,

for the purpose of the overall study and with respect to two out of the three sub-samples obtained.

The overall sample from Estonia consisted of **588** questionnaires that were administered in 9 educational institutions; the sample from England was made up of **236** questionnaires obtained in 4 educational institutions. In order to obtain the Spanish sample, a random sampling by conglomerates was conducted that included 16 SSE's, all of which had been previously stratified according to their socioeconomic level. In these SSE's, a sample made up of **751** valid questionnaires was obtained with the following composition:

- I) Intermediate-low/low socioeconomic level:  
Number of SSE's: 4      Total number of valid questionnaires: 188.
- II) Intermediate socioeconomic level:  
Number of SSE's: 6      Total number of valid questionnaires: 300.
- III) Intermediate-high socioeconomic level:  
Number of SSE's: 6      Total number of valid questionnaires: 263.

## INSTRUMENTS AND VARIABLES

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Firstly, on the basis of the above explained aims, the target concepts to be addressed in the questionnaire were selected: demographic characteristics, sexual roles, perceived health, family dysfunctions, identity and preferences.

Secondly, those items or questionnaires that could contain such information were selected. The following are their main characteristics, as well as the technical details of the standardised instruments:

Demographic characteristics	<b>Developed by us.</b> <b>Data from previous studies.</b>	Country, town, educational institution, age, gender, country of origin, culture, family structure, standing on the labour market and parent's level of education.
Sexual roles	<b>Maekus &amp; cols. (1982)</b>	Sexual role depending on gender
Perceived health	<b>National Health Survey</b>	Physical and psychic health
Family function	<b>Family APGAR</b> (Smilkestein).	Family dysfunction
Identity	<b>Questionnaire for evaluation of identity</b> (Cheek, 1994)	Personal identity Social identity Collective identity

Preferences	<b>Developed by ourselves /2002.</b>	Preferences
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Finally, all of the above elements were integrated into one general questionnaire.

A **pre-test** was performed ( $n=200$ ) in order to determine the feasibility of the study and detect potential problems concerning the administering of the questionnaire, its structure or contents, as well as its operational capacity.

When required, we were able to determine the feasibility and validity of those questionnaires that are part of the final instrument. In order to do so, we used a test/re-test correlation, Cronbach's  $\alpha$ , and a factorial analysis of main components with Varimax rotation.

- The scale of sexual roles

To examine individual variations in sexual roles, we used a scale developed by Markus and cols. (1982), who suggest its usefulness to study the role of certain schemes or stereotypes in the development of identity.

The scale contains 6 items that are to be marked by the subject involved from 1 to 10 using Likert's ordinal scale, and according to the level of identification with such items.

Correction of the scale: The authors suggest that those individuals who mark themselves very high (8-10) in two out of the three items that have been assigned an odd number, and who mark themselves moderately or low (1-7) concerning at least two even items, are highly feminine; those who mark themselves very high (8-10) in relation to two out of the three even items, and moderately or low (1-7) regarding at least two odd items, are highly masculine; those individuals who mark themselves in a similar way concerning both even and odd items are considered to be androgynous. According to the authors, there are two prototypes of androgynes: high androgynes are those individuals who mark themselves between 8 and 10 in relation to at least five out of the six items; low androgynes are those individuals who mark themselves between 1 and 7 concerning at least five items.

- The Family APGAR Questionnaire

The Family APGAR Questionnaire consists of five items that reflect family dysfunction as perceived by the subject involved, by means of five variables linked to the functioning of the family. There are data supporting the use of the Family APGAR Questionnaire as a reliable and useful instrument to measure the degree of satisfaction with the functioning of the family.

Through a categorisation from 0 to 2, subjects relay their perceptions of five dimensions of the functioning of their families: 1) Satisfaction with the help received from the family; 2) Satisfaction with the way in which the family discusses matters and shares things; 3) Belief that the family accepts and supports their wishes; 4) Feeling that they are loved by their family; 5) Satisfaction with the time that the family and the subjects spend together.

A "serious dysfunction" is considered to exist in a family when we obtain 0-3 after adding up the values of the five variables; it is considered that there is a "minor dysfunction" when the result of such adding-up lies between 4 and 6. The perception of the family is regarded to be functional when we obtain 7-10.

- Questionnaire for evaluation of identity

This questionnaire was designed to examine those features of an identity which were understood to belong to the fields of social and personal identity. The authors of the questionnaire, Cheek et al., created it relying on the first version that they developed of this same questionnaire in 1981. The version used in this study was the **AIQ - IIIx**, which was the latest published version at the time this study was conducted.

The final instrument contains 35+1 items which describe different aspects of the identity. They are marked from 1 to 5 by means of Lickert's scale, on the basis of the following utterances: 1= They are of no importance to me; 2= They are of little importance to me; 3= They are of some importance to me; 4= They are of great importance to me; 5= They are of the utmost importance to me.

The authors identify three dimensions of identity to be measured with this instrument: Personal Identity (PI) -through 10 items-, Social Identity (SI) -7 items-, and Collective Identity (CI) -8 items-, apart from 10 special items (11, in our case) that can be addressed separately.

**Reliability:** In the case of the English version, the inner reliability (Cronbach's  $\alpha$ ) of the sub-scales was: 0.84 (Personal Identity), 0.86 (Social Identity), and 0.68 (Collective Identity). In the Spanish version, the test-retest reliability of each sub-scale was 0.61, 0.62 and 0.74, respectively (PI, SI, CI). The statistical significance was in all cases  $p<0.01$ .

The inner reliability of each sub-scale was 0.94, 0.87 and 0.82, respectively.

**Validity:** The English version of the scale shows only apparent validity. The Spanish version developed for the purpose of this study shows apparent validity, validity of concept, and validity of construct.

- Questionnaire for evaluation of preferences

This questionnaire was designed for the purpose of the study to measure those values which young people preferred.

The final instrument contains 37 utterances which describe activities/conducts to be evaluated by means of Lickert's 1-to-5 scale, according to the preferences of the person being polled: 1- "I don't like it at all, I think it's a very bad thing to do"; 2- "I don't like it, I think it's wrong"; 3- "I neither like it nor dislike it"; 4- "I like it, I think it's right"; 5- "I like it very much, I think it is absolutely right".

By resorting to the technique of the nominal group, and after two sessions with a group formed by 6 experts and two moderators, a second version of the test was constructed that resulted in the test's being divided into 7 dimensions: Individual Leisure (6 items), Collective Leisure (7 items), Relations of Proximity (4 items), Differentiation / Autonomy (7 items), Negative Health (tobacco/alcohol/narcotics), "Social" (4 items) and Violence (5 items).

Reliability: Test-retest reliability was calculated, and a coefficient of 0.78 ( $p<0.01$ ) was obtained. Furthermore, a coefficient of Cronbach's alpha reliability of 0.91 was obtained.

Validity: The questionnaire shows apparent validity, validity of concept, and validity of construct.

## **GATHERING OF DATA**

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Data were gathered by applying and administering the questionnaire to subjects in a collective manner, in the classroom, by teachers, who had previously been instructed as to how to administer the questionnaire.

Data included the measurement of the above variables.

## **ANALYSIS OF DATA**

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In order to analyse the results, the statistical package SPSS for Windows v. 7.5 was used. In estimating parameters, intervals of reliability were calculated at 95%. For drawing comparisons between groups, Pearson's  $\chi^2$  test was applied in the case of qualitative variables, t of Student and ANOVA of one way were used in the case of quantitative variables, and Mann Whitney's U test was resorted to in the case of ordinal variables.

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