

VALUES AND THEIR INFLUENCE ON THE LIFE SATISFACTION OF ADOLESCENTS AGED 12 TO 16: A STUDY OF SOME CORRELATES¹

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In this research we explore several aspects of quality of life in young people, working with factors such as self-esteem, locus of control, perceived social support, values, and so on. We examine the correlations among factors that influence the values and life satisfaction of adolescents aged 12-16. Furthermore, we analyze the data obtained from the children, on the one hand, and their parents, on the other, we explore the relationships between the factors and we consider the agreements and discrepancies between the responses of parents and their offspring.

En esta investigación profundizamos en algunos aspectos de la calidad de vida entre los jóvenes a partir de factores como la autoestima, la percepción de control, el apoyo social percibido, los valores, etc. Se analizan las correlaciones entre factores que influyen en los valores y la satisfacción vital de los adolescentes entre los 12 y los 16 años. Se realiza un análisis exhaustivo de los datos obtenidos de los chicos y chicas por una parte, y de sus progenitores por otra, y se exploran las relaciones entre los factores y se analizan las concordancias y discrepancias de las respuestas de unos y otros.

The concept of *quality of life*, as it is currently understood within the social sciences, emerges from the idea that positive social changes are formed not only by material or observable elements of social reality, but also by psychosocial elements, that is, by people's perceptions, judgements, aspirations and expectations (Casas, 1996) and of communities (Ayuste, Romañá, Salinas, Trilla, 2001).

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With the aim of examining more closely some aspects of quality of life among young people, some of the members of the XCIII (Xarxa Catalana Interdisciplinària de Investigadors sobre los Derechos de los niños y niñas y su Calidad de Vida, Catalan Interdisciplinary Network of Researchers on Children's Rights and Quality of Life) drew up the M.A.R. (Modelo de Aspiraciones y Realizaciones, Model of Aspirations and Accomplishments), which served as a guide for the design of the present research. We set out from the assumption that adolescents and young people anticipate their own future in various domains in accordance with a series of factors, some of the most important being: self-esteem, perceived control, perceived social support, values, past experiences, and social influence of one's peer group, as well as other perceptions, opinions, attitudes, representations and evaluations related to diverse domains of their life (school and/or professional/employment life, family life, leisure activities, social relations network, etc.).

We shall continue by discussing, in a summarized fashion, some of the concepts which we have mentioned in order to examine the interrelations between them, first of all at a theoretical level, and subsequently with reference to the data obtained.

Our conceptual framework is in line with the traditio-

nal paradigm in studies on quality of life (Diener, 1984, 1994; Michalos, 1995; Cummins, 1996, 1998; Veenhoven, 1994), one of the fundamental components of which is psychological well-being, also referred to as subjective well-being, or by other authors, subjective quality of life (Cummins & Nistico, 2002). Psychological well-being is closely linked to both satisfaction with different life domains, as well as to a more holistic assessment, so-called global satisfaction with life, or simply life satisfaction.

Given the absence of a broad consensus on the nature of psychological well-being and on the dimensions comprising it, Diener, in his 1984 review, proposed three principles that should guide the study of psychological well-being in the future. These are as follows:

1. The consideration of psychological well-being as based on individuals' own experience, and their perceptions and evaluations in relation to this experience.
2. The inclusion of positive measures in the study of psychological well-being, which should not focus merely on the absence of negative aspects.
3. The incorporation of some type of global evaluation of the person's whole life, generally referred to as life satisfaction.

The last of these, *life satisfaction*, has been defined as a cognitive judgement on the quality of one's own life based on the criteria of comparison selected by each individual (Shin & Johnson, 1978). Currently, many authors understand it as a global assessment of a person's life that is considered as "something more" than the sum of satisfactions experienced in relation to the different specific domains that make up our lives (Veenhoven, 1994), such as satisfaction with learning, with interpersonal relations or with one's use of time (Casas, Figuer, González & Coenders, 2003; Casas, González, Figuer & Coenders, 2003).

Numerous studies have provided evidence of the relationship between life satisfaction in particular and, on the one hand, psychological well-being in general (in adults, adolescents and children) (Huebner, 1991; Huebner & Dew, 1993), and on the other, self-esteem, perceived control and perceived social support. More recently, other researchers have provided evidence of its indirect relationship with some values (Casas et al., 2003).

Self-esteem has been the object of study from various fields, and hence its diversity of meanings and comple-

xity, which have greatly hindered progress in research on this aspect and on its theoretical development.

This conceptual confusion can be appreciated in the proliferation of terms used by different authors, such as "self-awareness", "self-image", "self-perception", "self-representation", "self-concept" or "self-esteem". Some authors (Fleming & Courtney, 1984; Gecas, 1982; Hughes, 1984; Kernaleguen & Conrad, 1980; Rosenberg, 1979; Shavelson & cols., 1976; Wells & Marwell, 1976; Wylie, 1974) recognize the tendency for these to be used as synonyms; others (Beane & Lipka, 1980; Watkins & Dhawan, 1989), seeking to differentiate them, opt for restricting the term self-concept to cognitive or descriptive aspects of the self, and using the term self-esteem for evaluative/affective aspects. However, on the whole it is accepted that "self-concept" covers both aspects.

Given its brevity and ease of marking, for the present study we chose the self-esteem scale designed by Rosenberg (1965), who attempted to obtain a one-dimensional measure of self-esteem, using Guttman's scale method. In Rosenberg's conception, self-esteem is a variable that reflects the global attitude people maintain with respect to their own worth and importance (Salgado & Iglesias, 1995), so that his scale would only assess this global attitude, although later studies confirm that it measures two facets of self-esteem (one positive and another negative), independent of one another but related (Casas et al., 2003).

As regards another of the constructs explored in the present study, that of *perceived control*, a long tradition in psychosocial research has given rise to an extensive body of literature on the subject. At a general level, we can attribute our behaviours to external factors – external causality – or to internal factors – internal causality (Jones & Nisbett, 1971). In the first case, the person does not perceive him/herself as an active and influential subject in what happens: we are freed from responsibility, which is attributed to environmental and situational circumstances beyond our reach. On the other hand, we can think that we have an active role in events if we attribute them to internal causes, considering that our personal features (intelligence, character, skills, resources, etc.) intervene in a crucial way.

In accordance with the tradition of the study of perceptions of control (initially often referred to as *locus of control*), it seems obvious to hypothesize that whether perceived control is external or internal relates to passi-

ve or proactive attitudes in one's attempts to fulfil one's own aspirations. In fact, and in line with Skinner (1997), perceived control is no longer considered a stable personality factor, but rather a set of beliefs we have about how the real world works, and about our individual role in the production of desirable events in our own lives.

Social support is defined, according to Lin, Dean and Ensel (1986), as a set of expressive or instrumental provisions – perceived or received – supplied by the community, by social networks and by persons of trust. The concept of social support has been classified in different ways by different authors: instrumental and affective (Pattison, 1977), tangible, intangible, advisory and feedback-related (Tolsdorf, 1976), action environmental, problem-solving, emotional support, indirect influence (Gottlieb, 1983), and emotional support, cognitive orientation, tangible help, social reinforcement and socialization. Nevertheless, it is generally accepted that social support includes one of the following aspects: emotional support, instrumental help, information and/or advice.

Many and varied scales and questionnaires have been used in the evaluation of perceived social support. These instruments have displayed high reliability and validity, and many of them are easy to administer and mark, which explains why they are so widely used among social researchers (Gracia, Herrero & Musitu, 1995). We have based ourselves on the perceived social support scale of Vaux et al. (1986), considering that social support constitutes a good form of relating the social context with psychological well-being.

Another of the factors that we consider might influence a person's life satisfaction is their values. *Values* can be understood as enduring beliefs that specific modes of conduct or end-states of existence are personally or socially preferable to opposite or converse modes of conduct or end-states of existence (Rokeach, 1968); according to this same author, values constitute the driving force of human behaviour. Rokeach also distinguishes between instrumental values and terminal values. Instrumental values can be divided into: moral values – solidarity, justice, liberty, etc. – and competence-related values – abilities and knowledge; terminal values can be divided into personal values – sensitivity, pleasantness, material aspects – and social values – skills for interacting with people (people skills). Rokeach argues that each person has a system of values, an organization of his/her beliefs in relation to the forms

of behaviour he or she prefers, along a continuum according to their importance.

Throughout the processes of maturation and learning, children and adolescents construct a way of being in a world, a self-concept, a knowledge of that which surrounds them, a confidence in their possibilities of transforming the environment – self-efficacy – and their own way of relating to others – social skills. In these processes they gain knowledge, learn forms of behaviour, attitudes and values, and consolidate beliefs.

The different interpretations, perspectives and theories explaining these learning processes affirm that, as moral beings, we become who we are either because we learn values and reject counter-values or because we construct our values – or for both reasons at the same time. From our perspective, and in accordance with the ethical learning model (Buxarrais, Martínez, Puig & Trilla, 1995; Martínez, Buxarrais, Esteban, 2002), we understand that the person indeed learns at the confluence of values and counter-values, at the same time constructing a scale or matrix of values, in which he or she prioritizes certain values and identifies with some of them in particular. In this learning, the observation of models, and identification with characters from real life or the virtual world, and of the conditions surrounding the different spaces of socialization and education/upbringing, are factors that contribute to constructing this matrix and orienting moral development.

This dynamic, which characterizes the process of human development throughout life, is of particular importance in the period of childhood and adolescence, and is strongly influenced by the context in which we live. This life environment obviously includes the immediate physical context, but also more remote contexts to which we have access, and which generate our interest. In interaction with these, and also with all the people who shape our social networks, we construct ourselves throughout childhood and adolescence and advance towards adult life with values and counter-values.

In the present research we explore the relationships between certain values held by young people and their life satisfaction, their satisfaction with different domains of their life, their self-esteem, their perceived control, and their perceived social support. All within the general framework of their quality of life.

Given that very few researchers have gathered data on the values of parents and children with paired data, and

our conviction that the values of the former play a fundamental role in the shaping of those of those latter, at least in our culture, within the context of the different interactional dynamics involved in the socialization process, we decided to explore in detail the relationships between the values of the two groups.

METHOD

Sample

Our sample was deliberately selected from five medium-sized towns in Catalonia. In each, we chose at random schools whose student population could be considered representative, in its characteristics, of the majority of middle-class families living in that town.

We obtained data from 1,634 secondary-school pupils, 794 boys (48.5%) and 842 girls (51.5%). All were aged between 12 and 16 ($x = 14.12$; $SD = 1.13$).

We also obtained responses from 638 parents (corresponding to 39% of the children), of whom 307 were mothers (48.1% of the parents) and 111 were fathers (17.4%); in the other 34.5% of cases (220 families), the parents answered jointly.

Measurement instruments

The instruments used in the present research were two questionnaires employed previously in a more wide-ranging study, one for children and another for their parents, aimed at exploring systematically their activities, perceptions and evaluations in relation to different audiovisual appliances (television, computer and console) and to certain applications (educational CD-ROMs, Internet and games) (see Casas et al., 2000).

The object variables of the present work are as follows:

a) Questions included in both questionnaires:

1. *Values*: The adolescents were asked to rate ten values according to the degree to which they would like to be appreciated by others in relation to that value at the age of 21. These values are: intelligence, technical skills, social skills, knowledge about computers, profession, sensitivity, pleasantness, money, power and knowledge of the world. The instrument used is a 5-point Likert-type scale, on which 1 = *Not at all* and 5 = *A lot*.

A series of questions corresponding to these were included in the parents' questionnaire. In this case, parents were asked to indicate the extent to which they would like their children to be appreciated in the future in relation to the

same ten aspects.

b) Questions included only in the adolescents' questionnaire:

2. *Satisfaction with life on the whole and with different life domains*: Seven items aimed at exploring satisfaction with specific domains of life. These are: satisfaction with school results, with what they are learning, with use of time, with their entertainment, with their preparation for the future, with their family and with their friends. We also included an item on satisfaction with life on the whole. All of these variables were assessed by means of 5-point Likert-type scale, on which 1 = *Highly dissatisfied* and 5 = *Highly satisfied*.

3. *Self-esteem Scale*: Designed by Rosenberg in 1965 for the evaluation of this concept through 10 items. Score on this scale is from 1 to 4 according to the degree of agreement with each of the statements, where 1 corresponds to the response *Strongly disagree* and 4 to *Strongly agree*. Total response ranges from a minimum of 10 to a maximum of 40.

4. *Perceived Control Scale*: Pearly and Schooler's (1978) *Mastery Scale* was used as an indicator of perceived control. This seven-item scale assesses, according to its authors, potentially stressful life situations and the coping strategies used for managing them. The scale ranges from 1=*Strongly disagree* to 5=*Strongly agree*. Minimum total score is 7, and maximum, 35.

5. *Perceived Social Support Scale*: In order to measure the social support children perceive from their family and friends, we used the *Social Support Appraisals (SSA)* scale of Vaux et al. (1986). This scale comprises 23 items that explore children's perception of the social support they receive from their family, their friends and others in general. For the questionnaire used in this study, respondents were presented only with the items referring to family and friends. Score on each item is from 1 to 4, with 1 = *Strongly disagree* and 4 = *Strongly agree*. Total score ranges from 8 to 32 for family, and from 7 to 28 for friends.

Procedure

First of all, we contacted the secondary schools previously selected (their head teachers as well as their

parents' associations) in order to request permission to apply the questionnaire to the adolescents collectively during class time.

During the questionnaire session, the teacher of that class was present, together with one or two of the researchers. The pupils were told that the information provided would be treated confidentially.

After the session each child was given a questionnaire in a sealed envelope to deliver to their parents. This was to be returned completed to their teacher within approximately one week, also in a sealed envelope.

RESULTS

Principal components analysis for the adolescent's values

The *principal components analysis* of the ten items that assess the extent to which the adolescents would like to be appreciated by others in the future offers a three-dimensional model that explains 63.24% of the total variance.

Dimension I, which we call *Abilities and Knowledge*, includes the following values: intelligence, technical skills, knowledge about computers and profession. Dimension II, that of *Material Values*, includes money, power and knowledge of the world. Finally, the values related to people skills, sensitivity and pleasantness make up Dimension III, which we refer to as *Interpersonal Relations*.

In line with expectations according to gender stereotypes, the boys attribute significantly greater importance to the dimensions *Material Values* ($t=6.420$; $p<0.0005$) and *Abilities and Knowledge* ($t=5.347$; $p<0.0005$), whilst the girls place greater emphasis on the dimension *Interpersonal Relations* ($t=8.949$; $p<0.0005$).

By age, the only significant difference is found in relation to the dimension *Interpersonal Relations*, in the sense that the older the children, the greater the importance attributed to this dimension ($F_{4,1543}=4.588$; $p=0.001$).

Principal components analysis for the parents' values

A *principal components analysis* was also carried out for the 10 items referring to the extent to which the parents in the study would like their children to be appreciated by others in the future in relation to different aspects. A three-dimensional model explains 61.4% of total variance. Dimension I, *Abilities and Knowledge*, refers to the same values as in the case of the children,

that is, intelligence, technical skills, knowledge about computers and profession. Dimension II, *Material Values*, includes, also as in the case of the children's analysis, the values of money and power; however, in contrast to that case, knowledge of the world moves to Dimension III, *Interpersonal Relations*, which thus comprises the following values: people skills, pleasantness and knowledge of the world.

No significant differences are found according to children's gender or age. On the other hand, differences do emerge on considering who responds to the questionnaire (mother, father or the two jointly) in relation to the dimension *Material Values*. Thus, mothers who respond alone score significantly lower on this dimension than fathers who respond alone ($F_{2,589}=3.132$; $p=0.044$). Joint responses from parents offer an intermediate score.

Agreements and discrepancies of values between parents and children and their relationship to the psychometric scales

With the aim of analyzing the degree of agreement and discrepancy in values aspirations between children and their parents in relation to each of the ten values previously described, we compared their responses given on the five-point Likert-type scale. Differences of one point were considered as *Low discrepancy*, those of more than one point as *High discrepancy*, and absence of differences as *Agreement*. As can be seen in Table 1, the results obtained show that in all the values considered, low discrepancy is the pattern that most frequently appears. Values with the highest percentages of high dis-

Table 1
Percentages of agreement/discrepancy of values between children and parents

VALUES	A	LD	HD
Intelligence	40.2	58.5	1.2
Technical skills	34.7	63.6	1.7
People skills	38.4	58.8	2.8
Knowledge about computers	28.8	64.8	6.4
Profession	38.6	58.1	3.4
Sensitivity	34.8	59.6	5.5
Pleasantness	39.2	59.7	1.1
Money	33.7	59.1	7.2
Power	32.5	58.9	8.6
Knowledge of the world	30.2	62.6	7.2

A: Agreement
LD: Low discrepancy
HD: High discrepancy

crepancy, and in turn, with the lowest percentages of agreement, are: knowledge about computers, money, power and knowledge of the world.

The only significant difference detected on considering the variables gender and child's age and the person responding to the questionnaire (mother, father, jointly) concerns the fact that the boys present high discrepancy from their parents' responses for the value *sensitivity* more frequently than the girls ($\chi^2=10.618$; $p=0.005$).

Next, we analyzed the relationships between the agreements/discrepancies of values in relation to score on the psychometric scales included in the questionnaire. It will be recalled that these scales are: self-esteem, perceived control and perceived social support from friends and from family. Table 2 shows the results obtained with this analysis.

As Table 2 shows, the general pattern is the absence of a relationship between the agreement/discrepancy of values and score on the psychometric scales, exception for the cases of intelligence, people skills and knowledge about computers. In the case of intelligence, the relationship is found with the perceived social support from family scale, and in that of people skills, with the perceived social support from friends scale. For both values, we find that a high discrepancy between children and parents is associated with a significantly lower score on these scales, whilst agreement is associated with the highest scores. The knowledge about computers value is significantly related to all the scales studied, following the same pattern as intelligence and people skills.

By gender, the only significant differences in the case

Table 2 Significant relationships between agreements/discrepancies of values and the psychometric scales (excluding values that present no significant relationships)	
<i>Self-esteem</i>	
<i>Knowledge about computers</i>	$F_{2,232}=3,686$; $p=0.026$
<i>Perceived control</i>	
<i>Knowledge about computers</i>	$F_{2,598}=4,456$; $p=0.012$
<i>Perceived social support from friends</i>	
<i>People skills</i>	$F_{2,571}=4,036$; $p=0.018$
<i>Knowledge about computers</i>	$F_{2,569}=3,058$; $p=0.048$
<i>Perceived social support from the family</i>	
<i>Intelligence</i>	$F_{2,572}=4,772$; $p=0.009$
<i>Knowledge about computers</i>	$F_{2,565}=4,198$; $p=0.016$

of boys emerge in relation to two values: knowledge about computers ($F_{2,232}=3,211$; $p=0.042$) and sensitivity ($F_{2,233}=4,524$; $p=0.012$), in both cases for the score on the self-esteem scale. High discrepancy from the scores of parents in both values is associated with a lower score in self-esteem, but, whilst for knowledge about computers high self-esteem is related to agreement, for sensitivity it is related to low discrepancy.

As regards the girls, significant differences were found only for the knowledge about computers value in relation to their score in perceived social support from the family ($F_{2,333}= 3.429$; $p=0.034$). The pattern in this case is that the perception of social support from the family decreases as discrepancy between parents and daughters increases.

Principal components analysis for satisfaction with different life domains, and correlation with global life satisfaction

A three-dimensional structure, from principal components analysis of the seven items designed to explore satisfaction with different life domains, explains 70.1% of total variance. Satisfaction with school results, learning and preparation for the future make up Dimension I, called *Satisfaction with learning*. Dimension II, *Satisfaction with interpersonal relations*, includes: satisfaction with the family and satisfaction with friends. Dimension III, *Satisfaction with one's use of time*, is made up of satisfaction with use of time in general and with leisure pursuits.

The only significant difference among the three satisfaction dimensions with respect to gender is found for Dimension I, in satisfaction with learning, where girls report higher satisfaction than boys ($t=3.665$; $p<0.0005$). By age, it is observed that the older the children, the lower the score in the satisfaction with learning dimension. This tendency is significant ($F_{4,1568}=20.268$; $p<0.0005$).

We used the Pearson correlation to analyze the relationship between the satisfaction dimensions and satisfaction with life on the whole, or global life satisfaction. It was found that the three dimensions of satisfaction with different life domains correlate positively and significantly with global life satisfaction ($r=0.372$; $p<0.0005$ for satisfaction with learning, $r=0.384$; $p<0.0005$ for satisfaction with interpersonal relations and $r=0.333$; $p<0.0005$ for satisfaction with one's use of time).

Agreements and discrepancies of values between parents and children and their relationship to the satisfaction dimensions and global life satisfaction

We examined the relationships between the agreements/discrepancies of values and the satisfaction dimensions (satisfaction with learning, satisfaction with interpersonal relations and satisfaction with one's use of time) and score on the global life satisfaction variable. Table 3 shows the results obtained.

As regards the dimension of satisfaction with learning, significant differences are found for the values of intelligence, knowledge about computers, profession and knowledge of the world. The tendency for the first three is that the greater the discrepancy in the value, the lower the score in the satisfaction dimension. On the other hand, for knowledge of the world, although the adolescents who differ greatly from their parents in this value are still those who report the lowest satisfaction in this dimension, those who show most satisfaction are those who differ little from their parents in this same value.

By gender, we find that for this same satisfaction dimension, the only value among the boys that shows significant differences is that of profession ($F_{2,257}=3.402$; $p=0.035$), the tendency being that the greater the discrepancy from parents, the lower the satisfaction. For the girls, there are three values significantly related to the satisfaction with learning dimension: intelligence ($F_{2,366}=3.356$; $p=0.036$), knowledge about computers ($F_{2,362}=3,042$; $p=0.049$) and knowledge of the world ($F_{2,365}=8,013$; $p<0.0005$). In all three cases, the girls who most differ from their parents are those who report lowest satisfaction in this dimension.

There are two values with relationships to the dimension of satisfaction with interpersonal relations: money and knowledge of the world. In either case, low discrepancy is associated with a low satisfaction score in the dimension considered. However, whilst for the money value high discrepancy is related to high satisfaction, for knowledge of the world, it is agreement that is associated with higher satisfaction scores.

By gender, the only significant difference found is in relation to the money value among girls ($F_{2,362}=3.649$; $p=0.027$). In this case it is those who differ most that report highest satisfaction with interpersonal relations, whilst those with low discrepancy are the least satisfied, those who show agreement being exactly in the middle.

The two previous values, money and knowledge of the world, are also found to be significantly related to the

satisfaction with one's use of time dimension. For the money value, the tendency is that the greater the discrepancy between parents and children, the higher the satisfaction in this dimension. For knowledge of the world, the pattern is less clear: those who report being most satisfied with their use of time are those who differ little from their parents, and those who report least satisfaction in this regard are those who differ greatly; those who show agreement are exactly in the middle.

The only two significant differences found in relation to gender are for boys with respect to money ($F_{2,250}=5.259$; $p=0.006$) and power ($F_{2,248}=3.744$; $p=0.025$). In either case, we find the tendency that the higher the discrepancy, the greater the satisfaction with one's use of time.

Knowledge about computers and profession are the only two values found to be related to the adolescents' satisfaction with life on the whole. In both cases, the greater the satisfaction, the greater the agreement between parents and children.

Both boys and girls show significant differences for global life satisfaction in relation to the knowledge about computers value ($F_{2,260}=9.202$; $p<0.0005$ for boys and $F_{2,369}=4.504$; $p=0.012$ for girls). In the two cases we find the same tendency: the greater the agreement with parents, the higher the satisfaction. In turn, only among the boys do we also find statistically significant differences with respect to agreement/discrepancy for the values technical skills ($F_{2,260}=4.742$; $p=0.009$) and pro-

Table 3 Significant relationships between agreements/discrepancies of values and satisfaction (excluding values that present no significant relationships)	
<i>Satisfaction with learning</i>	
<i>Intelligence</i>	$F_{2,622}=5,570$; $p=0,004$
<i>Knowledge about computers</i>	$F_{2,615}=3,302$; $p=0,037$
<i>Profession</i>	$F_{2,627}=3,668$; $p=0,026$
<i>Knowledge of the world</i>	$F_{2,619}=4,348$; $p=0,013$
<i>Satisfaction with interpersonal relations</i>	
<i>Money</i>	$F_{2,613}=4,477$; $p=0,012$
<i>Knowledge of the world</i>	$F_{2,619}=3,537$; $p=0,030$
<i>Satisfaction with one's use of time</i>	
<i>Money</i>	$F_{2,613}=3,837$; $p=0,022$
<i>Knowledge of the world</i>	$F_{2,619}=4,240$; $p=0,015$
<i>Satisfaction with life on the whole</i>	
<i>Knowledge about computers</i>	$F_{2,630}=12,540$; $p<0,0005$
<i>Profession</i>	$F_{2,644}=4,572$; $p=0,011$

fession ($F_{2,266}=8.134$; $p<0.0005$). For both of these values, the greater the discrepancy, the lower the satisfaction with life on the whole.

Principal components analysis of the psychometric scales

The principal components analysis carried out on the *Self-esteem* scale shows a two-dimensional structure that explains 49.86% of the total variance. These two dimensions are *Positive self-esteem* and *Negative self-esteem*. The boys and the girls differ in their scores for the positive self-esteem dimension, the former scoring more highly ($t=5.972$; $p<0.0005$). There are significant differences according to age, both for positive self-esteem ($F_{4,1427}=3.356$; $p=0.01$) and for negative self-esteem ($F_{4,1427}=3.126$; $p=0.014$). Nevertheless, the tendency is not clear.

The two-dimensional structure resulting from application of a principal components analysis to the *Perceived control* scale explains 55.02% of the total variance. The dimensions identified are *Perceived external control* and *Perceived internal control*. Neither gender nor age appears to be related to these two dimensions.

Three dimensions emerge after application of a principal components analysis to the *Perceived social support* scale, explaining 57.54% of total variance. Dimension I refers to *Perceived social support from the family*, Dimension II to *Perceived social support from friends*, and Dimension III to *Perceived absence of social support*. By gender, the girls perceive significantly greater social support from friends than the boys ($t=7.21$; $p<0.0005$). By age, the younger children perceive significantly greater social support from the family than the older ones ($F_{4,1301}=9.803$; $p<0.0005$).

All the Pearson correlations calculated in the analysis of the relationships between the above dimensions were significant, though not very strong (see Table 4).

Correlation between the values dimensions and the psychometric scales dimensions

Pearson correlations were calculated between the values dimensions and the dimensions corresponding to the three psychometric scales included in the questionnaire. Below are shown those correlations found to be significant:

- 1) In relation to self-esteem:
 - Values related to abilities and knowledge with positive self-esteem ($r=0.228$; $p<0.0005$).
 - Values related to interpersonal relations with positive self-esteem ($r=0.096$; $p<0.0005$).
- 2) In relation to perceived social support:
 - Values related to abilities and knowledge with perceived social support from the family ($r=0.135$; $p<0.0005$).
 - Values related to abilities and knowledge with perceived absence of social support ($r=0.077$; $p=0.007$).
 - Material values with perceived absence of social support ($r=0.149$; $p<0.0005$).
 - Values related to interpersonal relations with perceived social support from the family ($r=0.096$; $p=0.001$).
 - Values related to interpersonal relations with perceived social support from friends ($r=0.182$; $p<0.0005$).
- 3) In relation to perceived control:
 - Values related to abilities and knowledge with perceived internal control ($r=0.146$; $p<0.0005$).
 - Material values with perceived external control ($r=0.108$; $p<0.0005$).
 - Values related to interpersonal relations with perceived internal control ($r=0.11$; $p<0.0005$).

Table 4
Significant correlations between the dimensions of the psychometric scales

	<i>Perceived external control</i>	<i>Perceived internal control</i>	<i>Perceived social support from the family</i>	<i>Perceived social support from friends</i>	<i>Perceived absence of social support</i>
<i>Positive self-esteem</i>	$r=-0.193$ $p<0.0005$	$r=0.368$ $p<0.0005$	$r=0.325$ $p<0.0005$	$r=0.238$ $p<0.0005$	$r=0.108$ $p<0.0005$
<i>Negative self-esteem</i>	$r=0.538$ $p<0.0005$	$r=-0.077$ $p=0.004$	$r=-0.131$ $p<0.0005$	$r=-0.103$ $p<0.0005$	$r=-0.156$ $p<0.0005$
<i>Perceived external control</i>			$r=-0.139$ $p<0.0005$	$r=-0.105$ $p<0.0005$	$r=-0.188$ $p<0.0005$
<i>Perceived internal control</i>			$r=0.244$ $p<0.0005$	$r=0.180$ $p<0.0005$	$r=0.123$ $p<0.0005$

Correlation between the values dimensions, the satisfaction dimensions and global life satisfaction

Significant and positive Pearson correlations are found (albeit not very strong ones) for the values related to abilities and knowledge with the dimensions: satisfaction with learning ($r=0.175$; $p<0.0005$), satisfaction with interpersonal relations ($r=0.057$; $p=0.027$); satisfaction with one's use of time ($r=0.111$; $p<0.0005$) and global life satisfaction ($r=0.141$; $p<0.0005$).

The material values dimension correlates positively and significantly only with the satisfaction with one's use of time dimension ($r=0.10$; $p<0.0005$).

In contrast, the interpersonal relations dimension correlates positively and significantly with the dimensions of satisfaction with: learning ($r=0.079$; $p=0.002$), interpersonal relations ($r=0.122$; $p<0.0005$), one's use of time ($r=0.115$; $p<0.0005$) and life on the whole ($r=0.106$; $p<0.0005$).

Correlation between the psychometric scales dimensions, the satisfaction dimensions and global life satisfaction

The two self-esteem dimensions, positive and negative, correlate significantly with all the satisfaction dimensions and with global life satisfaction. In the case of positive self-esteem, the correlations are positive, and in that of negative self-esteem they are negative (Table 5).

For their part, the two perceived control dimensions (perceived internal control and perceived external control) also correlate significantly with all the satisfaction dimensions and with global life satisfaction. The correlations are positive for perceived internal control and negative for perceived external control (Table 6).

As regards the perceived social support dimensions, the significant correlations found are shown in Table 7.

DISCUSSION

First of all we analyzed the data from the adolescents, on the one hand, and from parents, on the other, exploring the

relationships between the different factors studied. Subsequently, we analyzed the agreements and discrepancies between the responses of children and their parents.

As far as *values* are concerned, we first carried out a principal components analysis of the responses of the children and their parents. In either case, a three-dimensional model explains over 60% of the variance. It is notable that the structure is almost identical between the two, a difference emerging only in relation to the value knowledge of the world. Thus, whilst for the children

	<i>Positive self-esteem</i>	<i>Negative self-esteem</i>
<i>Satisfaction with learning</i>	$r=0,272$ $p<0,0005$	$r=-0,131$ $p<0,0005$
<i>Satisfaction with interpersonal relations</i>	$r=0,232$ $p<0,0005$	$r=-0,191$ $p=0,001$
<i>Satisfaction with one's use of time</i>	$r=0,236$ $p<0,0005$	$r=-0,110$ $p<0,0005$
<i>Satisfaction with life on the whole</i>	$r=0,429$ $p<0,0005$	$r=-0,256$ $p<0,0005$

	<i>Perceived control internal</i>	<i>Perceived control external</i>
<i>Satisfaction with learning</i>	$r=0,191$ $p<0,0005$	$r=-0,185$ $p<0,0005$
<i>Satisfaction with interpersonal relations</i>	$r=0,151$ $p<0,0005$	$r=-0,086$ $p=0,001$
<i>Satisfaction with one's use of time</i>	$r=0,151$ $p<0,0005$	$r=-0,092$ $p<0,0005$
<i>Satisfaction with life on the whole</i>	$r=0,271$ $p<0,0005$	$r=-0,261$ $p<0,0005$

	<i>Perceived social support from the family</i>	<i>Perceived social support from friends</i>	<i>Perceived absence of social support</i>
<i>Satisfaction with learning</i>	$r=0,286$; $p<0,0005$		$r=0,115$; $p<0,0005$
<i>Satisfaction with interpersonal relations</i>	$r=0,381$; $p<0,0005$	$r=0,286$; $p<0,0005$	$r=0,098$; $p<0,0005$
<i>Satisfaction with one's use of time</i>	$r=0,061$; $P=0,03$	$r=0,247$; $p<0,0005$	
<i>Satisfaction with life on the whole</i>	$r=0,404$; $p<0,0005$	$r=0,217$; $p<0,0005$	

this value is included in the *Material Values* dimension, for the parents it forms part of the dimension *Values related to Interpersonal Relations*. The dimension *Values related to Abilities and Knowledge* is made up of the same values for both groups.

As was to be expected in relation to gender, the girls rate more highly than the boys the dimension of interpersonal relations, whilst the boys place more emphasis on the dimensions of abilities and knowledge and material values.

Curiously, it is found that fathers who respond alone are also those who obtain the highest scores in this latter dimension. Another finding of note is the increasing importance attributed to the interpersonal relations dimension, by both boys and girls, as they get older, a phenomenon that appears to coincide with the onset of adolescence.

A principal components analysis was also carried out for the items designed to explore *satisfaction* with seven different *life domains*. A three-dimensional structure, explaining 70.1% of total variance, was considered appropriate for the purposes of this research. These dimensions are: *Satisfaction with learning*, *Satisfaction with interpersonal relations* and *Satisfaction with one's use of time*. The satisfaction dimension related to learning is notable for its relationship to gender, with girls scoring higher, and to age, in the sense that the older the children, the lower the score.

The results show that *satisfaction with life on the whole* correlates significantly and moderately with the three

satisfaction dimensions. In order of contribution to global life satisfaction, from greater to lesser, the order is as follows: satisfaction with interpersonal relations, satisfaction with learning and satisfaction with one's use of time.

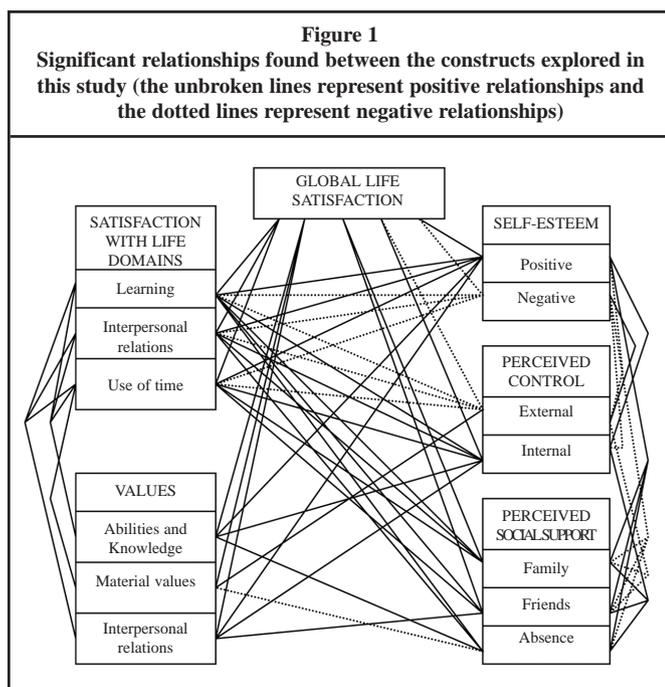
We next applied a principal components analysis to the three psychometric scales included in the questionnaire: self-esteem, perceived control and perceived social support. Emerging from the first scale is a model of two factors that we called *Positive self-esteem* and *Negative self-esteem*. In turn, the perceived control scale also gives a two-factor structure: *Perceived internal control* and *Perceived external control*. Finally, three factors emerge from the perceived social support scale, namely, *Perceived social support from the family*, *Perceived social support from friends* and *Perceived absence of social support*. All of these dimensions correlate among one another in a significant manner.

In relation to gender, boys score higher in the positive self-esteem dimension, and girls in that of perceived social support from friends. By age, the only noteworthy result is that as the children get older, perception of social support from the family decreases.

On correlating the values dimensions with those obtained in the three psychometric scales, some interesting findings emerge. First, the abilities and knowledge dimension correlates significantly and positively with the dimensions of positive self-esteem, perceived social support from the family, perceived absence of social support and perceived internal control. Second, the interpersonal relations dimension is found to be associated with positive self-esteem, perceived social support from the family and friends and perceived internal control. And finally, the material values dimension correlates positively and significantly with perceived internal control, and negatively with perceived absence of social support.

These same values dimensions were studied in relation to those of satisfaction and to global life satisfaction. The dimension *Values related to interpersonal relations* correlates with the three satisfaction dimensions obtained and the global life satisfaction item. The abilities and knowledge dimension also correlates with all of these elements. Finally, the material values dimension relates only to the satisfaction with one's use of time dimension.

The satisfaction dimensions and the global life satisfaction item were correlated with the dimensions of the psychometric scales. Positive self-esteem, perceived internal control and perceived social support from the family were found to correlate positively, and negative



self-esteem and perceived external control negatively, with all the satisfaction dimensions and with global life satisfaction. In turn, perceived social support from friends was found to correlate positively with all the satisfactions mentioned, except that of satisfaction with learning. Finally, perceived absence of social support was found to correlate solely with the dimensions of

satisfaction with learning and satisfaction with personal relations, also in a positive manner.

All of these relationships are represented in the model in Figure 1, which corroborates a large part of the results obtained in other studies, with the novelty that our model includes the values as a factor that also correlates with psychological well-being.

Table 8
Significant relationships of agreements/discrepancies of values between the responses of each parent and those of their child, with scores on the psychometric scales, the satisfaction dimensions and global life satisfaction

<i>Values</i>	<i>Agreement</i>	<i>Significantly related to:</i>
Intelligence	High discrepancy	Low perceived social support from family (***) Low satisfaction with learning (**) (***)
	Agreement	High perceived social support from family (***) High satisfaction with learning (***)
Technical skills	High discrepancy	Low satisfaction with life on the whole (*)
	Agreement	High satisfaction with life on the whole (*)
People skills	High discrepancy	Low perceived social support from friends (***)
	Agreement	High perceived social support from friends (***)
Knowledge about computers	High discrepancy	Low self-esteem (*) (***) Low perceived control (***) Low perceived social support from friends (***) Low perceived social support from family (**) (***) Low satisfaction with learning (**) (***) Low satisfaction with life on the whole (*) (**) (***)
	Agreement	High self-esteem (*) (***) High perceived control (***) High perceived social support from friends (***) High perceived social support from family (**) (***) High satisfaction with learning (**) (***) High satisfaction with life on the whole (**) (**) (***)
Profession	High discrepancy	Low satisfaction with learning (*) (***) Low satisfaction with life on the whole (*) (***)
	Agreement	High satisfaction with learning (*) (***) High satisfaction with life on the whole (*) (***)
Sensitivity	High discrepancy	Low self-esteem (*)
	Low discrepancy	High self-esteem (*)
Money	High discrepancy	High satisfaction with interpersonal relations (**) (***) High satisfaction with one's use of time (*) (***)
	Low discrepancy	Low satisfaction with interpersonal relations (**) (***)
	Agreement	Low satisfaction with one's use of time (*) (***)
Power	High discrepancy	High satisfaction with one's use of time (*)
	Agreement	Low satisfaction with one's use of time (*)
Knowledge of the world	High discrepancy	Low satisfaction with learning (**) (***) Low satisfaction with one's use of time (***)
	Low discrepancy	High satisfaction with learning (***) Low satisfaction with interpersonal relations (***) High satisfaction with one's use of time (***)
	Agreement	High satisfaction with interpersonal relations (***)

(*) For boys only. (**) For girls only. (***) For the whole sample.

In the analysis of the *agreements/discrepancies of values* between parents and their children, the pattern most frequently emerging is that of low discrepancy (of one point on a 5-point Likert-type scale) for scores given to the same value. Nevertheless, there are some values, specifically, knowledge about computers, money, power and knowledge of the world, for which the highest percentage corresponds to high discrepancy. It should be noted that agreement/discrepancy with respect to sensitivity is the only case for which there are differences by gender, with boys differing more from their parents than girls.

Table 8 shows the relationship of these agreements and discrepancies of values to scores on the psychometric scales (self-esteem, perceived control and perceived social support from family and friends), to the satisfaction dimensions and to the global life satisfaction item.

As it can be seen, in the case of the relationship between the agreements/discrepancies of values and scores on the psychometric scales used for the children, significant differences emerge only for the values of intelligence, people skills and knowledge about computers. In all three cases, a high discrepancy in the value is associated with low score on a scale: for intelligence, the scale of perceived social support from the family; for people skills, the scale of perceived social support from friends; and for knowledge about computers, all the psychometric scales studied.

In boys, high discrepancy in the knowledge about computers and sensitivity values is related to low score in self-esteem. In girls, high discrepancy in knowledge about computers is associated with low score in perceived social support from the family.

The following step was to explore the relationship between the dimensions of satisfaction with life domains and agreement/discrepancy of values between children and their parents. All the satisfaction dimensions studied, as well as satisfaction with life on the whole, correlate with certain values. Satisfaction with learning is related to agreement/discrepancy in the values of intelligence, knowledge about computers, profession and knowledge of the world: the greater the discrepancy, the lower the satisfaction. A high score in this dimension is related to high discrepancy in the value profession, among boys, and in the values of intelligence, knowledge about computers and knowledge of the world, among girls.

Low discrepancy in the values of money and knowledge of the world is associated with low satisfaction in the satisfaction with interpersonal relations dimension. High

satisfaction is related to high discrepancy for money and to agreement for knowledge of the world. High discrepancy in girls, but not in boys, for money is associated with high satisfaction with interpersonal relations.

High score in the satisfaction with one's use of time dimension is related to high discrepancy between adolescents and parents in the value money, and with low discrepancy in that of knowledge of the world. In the case of boys, high discrepancy in the values money and power indicate high satisfaction in this dimension.

There are two values that show a relationship to satisfaction with life on the whole: knowledge about computers and profession. In either case, agreement between parents and children is associated with high satisfaction of children with life on the whole (global life satisfaction). Moreover, for boys, though not for girls, high discrepancy in the technical skills and profession values is related to lower satisfaction.

REFERENCES

- Ayuste, A., Romañá, T., Salinas, H. & Trilla, J. (2001). *Educación y calidad de vida. Las cosas, los otros, uno mismo*. In G. Vázquez (Ed.), *Educación y calidad de vida*. Madrid: Editorial Complutense.
- Amezcuá, J.A. & Fernández, E. (2003). *La influencia del autoconcepto en el rendimiento académico*. Available at: <<http://fs-morente.filos.ucm.es/publicaciones/iberpsicologia/Iberpsi8/Amezcuá/Amezcuá.htm>>. [Consulted: 1 February, 2003].
- Beane, J.A. & Lipka, R.P. (1980). Self-Concept and Self-Esteem: A Construct Differentiation. *Child Study Journal*, 10 (1), 1-6
- Buxarrais, M. R., Martínez, M., Puig, J. M. & Trilla, J. (1995). *La educación moral en primaria y secundaria*. Madrid: Edelvives.
- Casas, F. (1996). *Bienestar social. Una introducción psicossocial*. Barcelona: PPU.
- Casas, F., Rosich, M. & Alsinet, C. (2000). El bienestar psicológico de los preadolescentes. *Anuario de Psicología*, 31(2), 73-86.
- Casas, F., Figuer, C., González, M. & Alsinet, C. (2003). Estrategias de búsqueda de información y bienestar psicológico en la adolescencia. *Actas del 8º Congreso Nacional de Psicología Social*. Málaga, 9-11 April, 2003.
- Casas, F., Figuer, C., González, M. & Coenders, G. (2003). *Satisfaction with life domains and salient values for future among chil-*

- dren and their parents in 5 different countries. *5th Conference of the International Society for Quality-of-Life Studies*. Frankfurt, 20-24 July, 2003.
- Casas, F., González, M., Figuer, C. & Coenders, G. (2003). Subjective wellbeing, values and goal achievement: The case of planned versus by chance searches on the Internet. *Social Indicators Research*. (In press).
- Cummins, R. (1996). The domains of life satisfaction: An attempt to order chaos. *Social Indicators Research*, 38, 303-328.
- Cummins, R. (1998). The second approximation to an international standard for life satisfaction. *Social Indicators Research*, 43, 307-334.
- Cummins, R. & Nistico, H. (2002). Maintaining life satisfaction: The role of positive cognitive bias. *Journal of Happiness Studies*, 3, 37-69.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95 (3), 542-575. [Translated as: Diener, E. (1994). El bienestar subjetivo. *Intervención Psicosocial*, 3 (8), 67-113].
- Fleming, J.S. & Courtney, B.E. (1984). The Dimensionality of Self-Esteem: II: Hierarchical Facet Model for Revised Measurement Scales. *Journal of Personality and Social Psychology*, 46 (2), 404-421.
- Garma, A.M. & Elexpuru, I. (1999). *El autoconcepto en el aula. Recursos para el profesorado*. Barcelona: Edebé.
- Gecas, V. (1982). The Self-Concept. *Annual Review of Sociology*, 8, 1-33.
- Gottlieb, B.H. (Ed.) (1983). Social support strategies. In *Guidelines for mental health practice (Vol. 7)*. Beverly Hills: Sage.
- Gracia, Herrero & Musitu, G. (1995). *El apoyo social*. Barcelona: PPU.
- Huebner, E.S. (1991). Initial Development of the Student's Life Satisfaction Scale. *Social Psychology International*, 12, 231-240.
- Hughes, H.M. (1984). Measures of Self-Concept and Self-Esteem for Children Ages 3-12 Years: A Review and Recommendations. *Clinical Psychology Review*, 4, 657-692.
- Jones, E.E. & Nisbett, R.E. (1971). *The actor and the observer: Divergent Perceptions of the Causes of Behavior*. New York: General Learning Press.
- Kernaleguen, A. & Conrad, S.G. (1980). Analysis of Five Measures of Self-Concept. *Perceptual and Motor Skills*, 51, 855-861.
- Lin, N., Dean, A. & Ensel, W. (1986). Social support from parents and friends and emotional problems in adolescence. *Journal of Youth and Adolescence*, 29 (3), 319-335.
- Martínez, M., Buxarrais, M. R. & Esteban, F. (2002). La Universidad como espacio de aprendizaje ético. *Revista Iberoamericana de Educación*, 29, 17-44.
- Michalos, A. (1995). Introducción a la teoría de las discrepancias múltiples (TDM). *Intervención Psicosocial*, 4 (11), 101-115.
- Rokeach, M. (1968). *Beliefs, attitudes and values*. San Francisco: Jossey-Bass.
- Rosenberg, M. (1965). *Society and the adolescent self image*. Princeton: University Press [Translated as: Rosenberg, M. (1979). *La autoimagen del adolescente en la sociedad*. Buenos Aires: Paidós].
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.
- Salgado, J.F. & Iglesias, M. (1995). Estructura factorial de la Escala de Autoestima de Rosenberg: Un análisis factorial confirmatorio. *Psicológica*, 16, 441-454.
- Shavelson, R.J., Hubner, J.J. & Stanton, G.C. (1976). Self-Concept: Validation of Construct Interpretations. *Review of Educational Research*, 46 (3), 407-441.
- Shin, D.C. & Johnson, D.M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5, 475-492.
- Skinner, E.A. (1997). Planning and perceived control. In S.L. Friedman & E.K. Scholnick. *The developmental psychology of planning: why, how, and when we plan?* Mahwah, NJ: Lawrence Erlbaum.
- Tolsdorf, C. C. (1976). Social networks, support, and coping: An exploratory study. *Family Process*, 15(4), 407-417.
- Vaux, A. et al. (1986). The social support appraisals (SS-A) scale: Studies and reliability and validity. *American Journal of Community Psychology*, 14 (2), 195-219.
- Veenhoven (1994). El estudio de la satisfacción con la vida. *Intervención Psicosocial*, 3(9), 87-116.
- Watkins, D. & Dhawan, N. (1989). Do We Need to Distinguish the Constructs of Self-Concept and Self-Esteem? *Journal of Social Behaviour and Personality*, 4 (5), 555-562.
- Wells, L.E. & Marwell, G. (1976). *Self-Esteem: Its Conceptualization and Measurement*. Beverly Hills, CA.: Sage Publications.
- Wylie, R.C. (1974). The Self concept In *A review of methodological considerations and measuring instruments (Vol. 1)*. University of Nebraska Press.