

**STRATEGIES TO ACHIEVE GOALS RELATED TO TV OR COMPUTER
ACTIVITIES: THEIR CORRELATES WITH ADOLESCENTS' WELL-BEING**

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ABSTRACT

This study explores the relationship among life domains satisfaction, overall life satisfaction, self-esteem, perceived social support and salient values for future in a sample of boys and girls aged between 12 and 16. Additionally, links between the above measures of well-being and the typology of intentional behaviours used to fulfil intended goals related to some audiovisual media are analysed. Intentional behaviours explored in this research are: activities reported to gain knowledge about computers and activities to achieve desirable things seen on TV. The tendency to plan or rely on chance when searching information on the Internet already explored in a previous work (Casas, González et al., 2004; Casas, Figuer et al.; 2003) is also included.

The results obtained from the application of principal components analysis of the scaled variables measuring well-being and qualitative analysis of the open-items evaluating goal-achievement strategies seem to reveal that particular relationships among measures related to well-being could be associated to different behaviours in relation to media. It is also likely that these behaviours, which depend on the concrete media considered, have an important influence, in turn, in the configuration of a particular structure of well-being. Age and gender differences are also considered.

Key words: life-satisfaction, values, goal achievement, perceived control, self-esteem, adolescents, perceived social support.

INTRODUCTION

Research about adolescents' well-being as part of their quality of life has been a field under increasing development only for the last two decades (Casas, Rosich et al., 2000; Alsinet, 2000). Since then, a large number of studies have been conducted aiming to explore, for instance, how children and adolescents perceive their overall life satisfaction and life domains satisfaction (Huebner, 1994). This has been largely caused by the emergence of new instruments for measuring well-being at earlier ages, which are particularly sensitive to the evolving development of respondents.

On the one hand, despite some agreement has been reached among scholars that well-being - specifically psychological well-being- is composed of a number of different dimensions, discrepancies still exist about how many are these and the characteristics they have

(Cummins and Cahill, 2000). Within those dimensions, self-esteem, perception of control and perception of social support are probably those that researchers have most focused on. Hence, all three have been repeatedly identified as strong predictors of well-being both in children and adolescents (Dew and Huebner, 1994; Huebner, 1991a; 1991b; Huebner and Alderman, 1993; Smith, Adelman, Nelson, Taylor and Phares, 1987; Emmons and Diener, 1985; and many others). However, they have rarely been studied all together.

Values have been, in comparison, seldom considered among researchers, although their inclusion in well-being studies has been defended by some authors (Diener and Fujita, 1995; Diener, Suh et al., 1998; Csikzentmihalyi, 1997). In fact, relationships among and between values, particularly those related to computer knowledge, and self-esteem, perception of control and perception of social support, have already been observed in a previous study (Casas, Buxarrais, et al., 2004). Values are presumably related to high levels of well-being in the sense that people involved in activities aimed at achieving concrete objectives, seem to be more likely to experiencing feelings of well-being.

On the other hand, relationships between well-being and the typology of intentional behaviours displayed to achieve goals have scarcely been studied (Casas, González et al.; 2004). Some field studies emphasize that levels of satisfaction increase when boys and girls perceive that they have an active influence in goal fulfilment processes linked to concrete expectations (Hart, 1992). However, the existence of an expectation does not necessarily mean that a proactive behaviour to make this expectation become a reality is actually displayed (Friedman, Scholnick et al., 1987). In any case, levels of well-being seem to be higher if such intentions are acted on (Casas, González et al., 2004).

This research takes into account the above considerations and is based on the results obtained in two previous studies. In the first (Casas, González et al., 2004), we analysed relationships between overall life satisfaction, life domains satisfaction and perceived control, on one side, and strategies to look for information on the Internet, on the other. It was observed that perceived control acts as a key concept in order to understand both adolescents' psychological well-being and their tendency to plan or not to plan their search. Those adolescents most prone to plan it, showed a higher satisfaction with school and with overall life satisfaction as well.

In the second study (Casas, Figuer et al., 2003), we extended the analysis to other components of well-being such as self-esteem and perceived social support and to the strategies used to increase knowledge about computers. The most remarkable result was that concrete expectations about computer knowledge had nothing to do with any of the studied elements of well-being. In contrast, they were related, as expected, to the strategies displayed to make those expectations become a reality.

Continuing with our objective of better comprehending relationships between psychological well-being and not only behavioural intentions, but also actions that come from them, we have included two more items in the case at hand: salient values for future, and activities to achieve desirable things seen on TV. We have done this for two reasons: first of all, because of our above mentioned interest in exploring values in relation to well-being. Secondly, in order to broadening the analysis to other daily life behaviours, such as viewing TV, a common daily activity.

METHOD

Procedure and sample

Data from this study were obtained by administering a questionnaire to students in compulsory secondary education in two Spanish municipalities of Catalonia (extreme N.E. of Spain), aged 12 to 16 years old. Children belonged to an intentional selection of classrooms by school, planned in order to get a sample of middle class students attending regular schools that were considered to have a population of students illustrative of the most frequent characteristics of adolescents living in the city. We administered the questionnaire to the whole group of pupils in the classroom setting. All the schools were located in the cities of Girona – a middle-size city according to Spanish standards, about 73.000 inhabitants and Salt (with about 22.000 inhabitants). We obtained a sample of 968 students (13,2% of 12-olds, 22,5% of 13-olds, 26,7% of 14-olds, 23% of 15-olds and 14,6% of 16-olds) of whom 478 are boys (49,4%) and 490 girls (50,6%).

Consistent with ethical guidelines for conducting research in Spain, first of all school directors and presidents of the mothers and parents association of each selected school were contacted to ask for permission. Next step was to contact teachers responsible for each classroom group. In some occasions, depending on the high school internal regulations, a letter was addressed to each parent. During the session, about an hour long, adolescents' regular

teacher and one or two researchers were present. Adolescents were carefully asked for co-operation and were informed that data would be treated confidentially.

Measures

The questionnaire includes closed and open-ended questions directed to systematically explore the different activities, perceptions and evaluations of adolescents in regard to different audiovisual media (television, computer and video console), as well as some of their facilities (educational CD-Roms, Internet and games) (see Casas et al., 2000; 2001, for more details). The present study stems from an exploratory analysis of a selection of those variables, some of them being closed-ended and some others open-ended items. They are described underneath:

a) Closed-ended items:

Overall and domain satisfaction with life

Seven items exploring satisfaction with specific domains were included in the questionnaire. Domains were: satisfaction with school performance, with learning, with time use, with amusement, with preparation for future, with the family and with friends. Additionally, an item on overall life satisfaction was also included. All these variables were measured through a five-point Likert scale, value 1 meaning “very dissatisfied” and 5 “very satisfied”.

Values

One technique that has been used to explore adolescents’ expectations is asking children to what extent they would like to be appreciated for some concrete values, when they get older. We have used this technique in previous research in order to identify different value structures between parents and adolescents (Casas, Buxarrais, et al., 2004). For the present study we used this same technique while designing a closed set of items referred to salient values for adolescents when they become 21 years old. Twelve values were studied: intelligence, technological skills, social skills, computers knowledge, profession value, family value, sensitivity, sympathy, money, power, knowledge of the world and own image. Variables regarding values were measured through a five-point Likert scale, value 1 meaning “not at all” and 5 “very much” (concerned about being appreciated for each value).

Self-esteem

One psychometric scale included in our questionnaire was the Rosenberg's *Self-esteem Scale* (Rosenberg, 1965; 1979). This scale assesses self-esteem through 10 items. Scores go from 1 to 4 depending on the level of agreement with each of the statements, where 1 corresponds to the answer *Strongly disagree* and 4 to *Strongly agree*.

Perceived control

When we designed this exploratory research, we looked for a short scale, in order not to make a too long questionnaire. Therefore, we decided to use Pearly and Schooler's *Mastery Scale* (1978) as indicator of perceived control. This seven-item scale evaluates, according to the authors, potential life-strains that previous research had revealed to be commonly experienced in major social role areas, and the coping repertoires people employ in dealing with the strains they experience in these roles.

Perceived social support

We have used the *Social Support Appraisals Scale (SSA)* of Vaux, Phillips et al. (1986) to obtain measures of adolescents' perceived social support from family and friends. This scale is formed by 23 items directed to explore boys' and girls' perception of the social support they receive from their family, their friends and people in general. However, only family and friends related items were presented. Scores go from 1 to 4, where 1 corresponds to the answer *Strongly disagree* and 4 to *Strongly agree*.

b) Open-ended items:

Information searching strategies

Two open-ended questions compose what we have described as information searching strategies. The first one is aimed to explore the typology of the information searching strategies used to get information on the Internet and the second one to explore the strategies used to gain knowledge about computers. They are described in more detail in what follows:

The option of planning or searching by chance on the Internet has been analysed through the answers to the following open-ended question: *to get information you look for on the Internet, do you think you have to plan your search carefully, or is it better to search by chance?* Most adolescents using the Internet did answer using the expression "*to plan*", "*by chance*" or "*both*". Despite the possibility of giving a wider explanation, only very few gave a detailed one. The analysis of this variable in this paper excludes non-answers (no Internet use) and

non-valid answers, so that the three before mentioned categories have been the only ones considered.

The exploration of the strategies used by the adolescents in order to improve their knowledge about computers is based on the analysis to a two-part open-ended question. First of all, we asked them what they would like to know about computers. Their answers have been categorised into three groups: those saying that they want to know “*everything*”, those preferring to know “*concrete things*” and those expressing they want to know “*nothing*”. It is worth mentioning that “*everything*” and “*nothing*” categories refer to literal answers of boys and girls, whilst “*concrete things*” category is the consequence of joining together different, although specific, answers as: programming, working and other things.

Secondly, we asked the adolescents what they are actually doing to know what they had previously said they would like to know about computers. In this case, the utilised categories have been the following: “*nothing*”, “*information searching*” and “*concrete actions*”. The “*nothing*” category encompasses answers literally expressing “nothing” or “little”. The “*information searching*” category includes those adolescents` answers saying that they look for information or ask other people, while the “*concrete actions*” category refers to time investment and efforts to know more about computers and testing with the computer as well.

Activities to achieve desirable things seen on TV

This variable has been measured through a three-part open-ended question. First of all, we asked adolescents whether there is something on TV they would like doing, thus obtaining yes and no answers. If the answer was positive, they were required afterwards to say what they would like doing. The answers to this last question were classified into three categories: “*sport*”, “*media*” and “*travelling or adventure*” activities. Other answers different from these were rejected due to its very small number. Finally, we asked adolescents to say how do they go about doing what they have seen on TV. Their answers were classified into three categories: “*nothing*”, “*training or learning*” and “*trying or demanding*”.

All three open-ended measures have been analysed, as stated, through categorisation. Each categorisation was worked and tested by the members of the research team, obtaining more than 99% of coincidence.

RESULTS

Principal Component Analysis of life domains satisfaction, salient values for future, self-esteem, perceived control and perceived social support, and correlations among well-being dimensions

Principal component analysis (PCA) has been applied to the scaled variables measuring well-being (life domains satisfaction, salient values for future and the psychometric scales of self-esteem, perceived social support and perceived control), excepting overall life satisfaction, which consists of just one item. Structures emerging from this analysis, with explained variances ranging from 50,55% to 70,79%, were already used in previous studies (Casas, González et al., 2004; Casas, Figuer et al. 2003). Those structures are described below:

A three-dimension structure from the 7 items aimed to explore satisfaction with the following life domains: school performance, learning, time use, amusement, preparation for future, family and friends, has been developed. We have named Dimension I as *Enjoying time satisfaction*, Dimension II as *School satisfaction* and Dimension III as *Family satisfaction*. On the other hand, the three dimensions in the case of salient values for future are: *Materialistic values* (composed of money, power and image values), *Capacities and knowledge values* (includes intelligence, technical skills, computer knowledge, profession and knowledge of the world values) and, finally, *Interpersonal relationships values* (social skills, family, sensitivity and sympathy values).

In relation to the psychometric scales, a two-dimension structure offers a good solution for the self-esteem and perceived control scales, respectively. *Positive and Negative self-esteem* are the dimensions of the former and *External and Internal attribution of control* of the latter. Three dimensions are considered appropriated for the perceived social support scale, they are: *Family perceived social support*, *Friends perceived social support* and *Lack of perceived social support*.

Relationships among overall life satisfaction and life domains satisfaction, salient values for future, self-esteem, perceived control and perceived social support dimensions have been studied through Pearson correlations (positive and negative correlations refer in all cases to significant correlations from a statistical point of view: $p < 0,05$. No correlation means an absence of significant correlation, see Table 1 for more details).

Firstly, **overall life satisfaction** has been correlated to all dimensions described above. The results are the following:

- Correlations are positive with *Enjoying time satisfaction, School satisfaction, Family satisfaction, Capacities and Knowledge values, Interpersonal relationships values, Positive self-esteem, Internal attribution of control, Family perceived social support* and *Friends perceived social support*.
- Correlations are negative with *Negative self-esteem, External attribution of control* and *Lack of perceived social support*.
- No correlation is found with *Materialistic values*.

Secondly, relationships between the three **dimensions of life domains satisfaction** (*Enjoying time satisfaction, School satisfaction* and *Family satisfaction*) and the rest of dimensions have been explored:

- The first dimension, *Enjoying time satisfaction*, shows positive correlations with *Materialistic values, Capacities and knowledge values, Interpersonal relationships values, Positive self-esteem, Internal attribution of control, Family perceived social support* and *Friends perceived social support*. Correlations are negative with *Negative self-esteem* and *External attribution of control*. No significant correlation is found for *Lack of perceived social support*.
- The second dimension, *School satisfaction*, is positively correlated with *Capacities and knowledge values, Positive self-esteem, Internal attribution of control* and *Family perceived social support*. At the same time, is negatively correlated with *Materialistic values, Negative self-esteem, External attribution of control* and *Lack of perceived social support*. No correlation is found neither with *Interpersonal relationships values* nor with *Friends perceived social support*.
- The third dimension, *Family satisfaction*, is positively correlated with *Interpersonal relationships values, Positive self-esteem, Internal attribution of control, Family perceived social support* and *Friends perceived social support*. Negative correlations are detected with *External attribution of control* and *Lack of perceived social support*. No correlation is observed with *Materialistic values, Capacities and knowledge values* and *Negative self-esteem*.

Thirdly, relationships among **salient values for future dimensions**, that is, *Materialistic values*, *Capacities and Knowledge values* and *Interpersonal relationships values*, and the dimensions of the three psychometric scales have been also studied:

- The first dimension, *Materialistic values*, has positive correlations with *External attribution of control* and *Family perceived social support* and *Friends perceived social support*. No relation with *Positive and Negative self-esteem*, *Internal attribution of control*, and *Lack of perceived social support* is detected.
- The second one, *Capacities and knowledge values*, is positively related with *Positive self-esteem*, *Internal attribution of control*, *Family perceived social support* and *Friends perceived social support*. One negative correlation is observed with *Lack of perceived social support*. Any correlation is found with *Negative self-esteem* or *External attribution of control*.
- As in the case of the second dimension, the third one, *Interpersonal relationships values* is positively related with *Positive self-esteem*, *Internal attribution of control*, *Family perceived social support* and *Friends perceived social support*. The correlation is negative for the *Lack of perceived social support*. Similarly, no correlation is observed with *Negative self-esteem* and *External attribution of control*.

Lastly, dimensions of the three **psychometric scales** (self-esteem, perceived control and perceived social support) have been correlated among each other:

- *Positive self-esteem* is positively correlated with *Internal attribution of control*, *Family perceived social support* and *Friends perceived social support* and negatively with *External attribution of control* and *Lack of perceived social support*. Just the contrary is true for the *Negative self-esteem* dimension, positive correlations are found with *External attribution of control* and *Lack of perceived social support*, and negative with *Internal attribution of control*, *Family perceived social support* and *Friends perceived social support*.
- One positive correlation is observed between *External attribution of control* and *Lack of perceived social support* and two negative correlations with *Family perceived social support* and *Friends perceived social support*. The opposite is found in regard to *Internal attribution of control*, in this case, the positive correlation takes place with *Family perceived social support* and *Friends perceived social support* and the negative with *Lack of perceived social support*.

All significant correlations before mentioned are displayed in the following table ('+' symbol means positive correlations and '-' symbol negative ones):

| | | Life domains satisfaction | | | Salient values for future | | | Self esteem dimensions | | Perceived control dimensions | | |
|--------------------------------------|----------------------------------|---------------------------|---------------|--------|---------------------------|---------------|--------------------------|-------------------------|----------|------------------------------|---------------------------------|---------------------------------|
| | | Overall life satisfaction | Enjoying time | School | Family | Materialistic | Capacities and Knowledge | Interpersonal relations | Positive | Negative | External attribution of control | Internal attribution of control |
| Life domains satisfaction dimensions | Enjoying time | +0,382 | | | | | | | | | | |
| | School | +0,375 | | | | | | | | | | |
| | Family | +0,328 | | | | | | | | | | |
| Salient values for future dimensions | Materialistic | | +0,082 | -0,078 | | | | | | | | |
| | Capacities and Knowledge | +0,154 | +0,010 | +0,215 | | | | | | | | |
| | Interpersonal relations | +0,098 | +0,139 | | +0,164 | | | | | | | |
| Self-esteem dimensions | Positive | +0,417 | +0,252 | +0,303 | +0,214 | | +0,298 | +0,126 | | | | |
| | Negative | -0,235 | -0,168 | -0,118 | | | | | | | | |
| Perceived control dimensions | External attribution of control | -0,289 | -0,134 | -0,229 | -0,091 | +0,078 | | | -0,248 | +0,539 | | |
| | Internal attribution of control | +0,277 | +0,164 | +0,182 | +0,143 | | +0,167 | +0,171 | +0,363 | -0,082 | | |
| Perceived social support dimensions | Family | +0,388 | +0,102 | +0,247 | +0,418 | +0,418 | +0,126 | +0,130 | +0,303 | -0,080 | -0,141 | +0,242 |
| | Friends | +0,217 | +0,375 | | +0,166 | +0,166 | +0,105 | +0,198 | +0,212 | -0,147 | -0,117 | +0,225 |
| | Lack of perceived social support | -0,078 | | -0,113 | -0,10 | | -0,097 | -0,106 | -0,136 | +0,080 | +0,175 | -0,142 |

Table 1. Correlations among measures related to well-being

Information searching strategies and activities to achieve desirable things seen on TV

As mentioned in the method section, the questionnaire included three open-ended questions. One of them is directed to explore the typology of searching strategies used to get information on the Internet. Another one explores the strategies used to gain knowledge about computers. The third one explores the activities developed by adolescents in order to achieve desirable things they see on TV. The first two questions were already explored beforehand (Casas, González et al., 2004; Casas, Figuer et al. 2003), but the last one was not, neither the relationships among the three.

The first open-ended question, aimed to explore the tendency *to plan, by chance* searching or *both* strategies when looking for information on the Internet was answered by a sample of 605 of the adolescents. The percentages obtained for each category were as follows: 72,7% expressed that they *plan* their search, 20,5% said relying on *chance* when surfing and 6,8% used *both* indistinctly. Any difference was observed regarding either gender or age.

Higher number of responses were obtained, compared to the above question, when asking the adolescents what they would like to know about computers (N=753) and what they actually do to gain this knowledge (N=744). Among the 753 respondents of the first part of the question, 51,8% referred they would like to know *concrete things*, 30,7% *everything* and 17,5% said *nothing*. Differences by gender were observed in the sense that boys expressed with more frequency than girls that they wanted to know *everything*. In contrast, more girls than boys preferred knowing *nothing*.

On the other hand, 42,2% of the 744 subjects responding to the second part of the question, expressed that they *search information* to gain knowledge about computers, 33,7% manifested doing *nothing* and 24,1% carried on *concrete actions*. Neither gender nor age showed statistical differences.

The third question has three parts. First of all, we asked adolescents if there is something they have seen on TV they would like doing. Among the 861 responses obtained, 78,3% correspond to the answer *yes* and 21,7% to the answer *no*. However, only 374 adolescents have explained what they would like doing: 60,2% report activities related to *sport*, 31,8% *media* related activities and 8% *travelling or adventure* activities. Paradoxically, a higher number of responses (N=489) is obtained in comparison to the previous question when asking adolescents how they go about doing what they see on TV: 44,4% of them confess doing *nothing*, 37,2% say *training or learning*, and 18,4% *trying or demanding*. Boys and girls differ in the type of activities they would like to do ($\chi^2_2=27,311$; $p<0,0005$) being the boys more prone to preferring *sports* and girls *media* related activities. Age has nothing to do with the responses to this third question.

Relationships between age and each of the above open-ended questions have been studied both for boys and girls separately. Only one significant relation has been found when asking

boys what they are actually doing to gain knowledge about computers ($\chi^2_8=17,031$; $p=0,030$): the oldest tend to say *nothing* whereas the youngest express more frequently doing *actions*.

Potentially crossed effects between the three open-ended questions on the one hand and age and gender on the other hand have been studied through discriminant analysis, logistic regression and loglinear analysis with the result that no significant tendency has been observed.

Additionally, relationships among the three open-ended questions and among the different parts of each question have been explored.

A) In relation to **information searching strategies** (the tendency to *plan*, *by chance* searching or *both*) used on the Internet:

- No relation is found with things adolescents would like to know about computers, with the activities reported to gain this knowledge or with the activities to achieve desirable things seen on TV.
- Is related to the things seen on TV they would like doing ($\chi^2_4=9,910$; $p<0,042$). Those who rely *on chance* prefer *sport* activities and dislike *media* related activities. Adolescents who use *both* strategies indistinctly prefer *travelling or adventure* activities.

B) A relationship was found between **things adolescents would like to know about computers and what they actually do to know it** ($\chi^2_4=122,995$; $p<0,0005$). Those boys and girls expressing their preference for knowing *everything* tended to *search for information*. Secondly, those who wanted to know *concrete things*, did *concrete actions*. As expected, adolescents who wanted to know *nothing*, obviously did *nothing* afterwards.

C) No relationship is found between **things seen on TV they would like to do and the activities done afterwards to achieve them**.

D) In regard to **activities reported to achieve desirable things seen on TV**:

- An association is found with things adolescents would like to know about computers ($\chi^2_4=24,050$; $p<0,0005$). Those prone to doing *nothing* to achieve desirable things seen on TV correspond to those who want to know *nothing* or *everything* about computers. Boys and girls that want to know *concrete things* about computers report that they prefer *training or learning* activities to achieve desirable things seen on TV.

- The activities reported to gain knowledge about computers are also related with those aimed to achieve desirable things seen on TV ($\chi^2_{4}=16,433$; $p=0,002$). Those who report that they *search for information* as well as those who do *concrete actions* to gain knowledge about computers, tend to *try or demand* to achieve desirable things seen on TV. Finally, responses *nothing* to both questions are positively associated.

Well-being and its relationships with information searching strategies and activities to achieve desirable things seen on TV

The three open-ended questions aimed to explore information searching strategies (tendency to plan or not on the Internet and to gain knowledge about computers), and the activities adolescents do to achieve desirable things seen on TV, have been studied in relation to different measures related to well-being.

In the following table, all the significant relations among the studied variables are displayed:

| | | Information searching strategies on the Internet | Things of computers they would like to know | Activities to gain knowledge about computers | Things on TV they would like to do | Activities to achieve things seen on TV |
|---|---|---|--|---|---|--|
| Overall life satisfaction | | F _{2,599} =4,526 p=0,011 | - | F _{2,737} =6,010 p=0,003 | - | - |
| Life domains satisfaction dimensions | <i>Enjoying time</i> | - | - | F _{2,714} =3,868 p=0,021 | F _{2,356} =6,020 p=0,003 | - |
| | <i>School</i> | F _{2,583} =11,06 p<0,0005 | - | F _{2,714} =12,577 P<0,0005 | - | - |
| | <i>Family</i> | - | - | F _{2,714} =3,810 p=0,023 | - | - |
| Salient values for future dimensions | <i>Materialistic</i> | - | - | - | - | F _{2,463} =3,993 p=0,019 |
| | <i>Capacities and Knowledge</i> | - | F _{2,715} =11,341 P<0,0005 | F _{2,701} =6,990 p=0,001 | - | F _{2,463} =4,474 p=0,012 |
| | <i>Interpersonal relations</i> | - | F _{2,715} =3,278 p=0,038 | - | - | - |
| Self-esteem dimensions | <i>Positive</i> | F _{2,537} =5,515 p=0,004 | - | F _{2,657} =5,869 p=0,003 | - | - |
| | <i>Negative</i> | - | - | - | - | - |
| Perceived control dimensions | <i>External attribution of control</i> | F _{2,570} =5,554 p=0,004 | - | - | - | - |
| | <i>Internal attribution of control</i> | F _{2,570} =3,713 p=0,025 | - | F _{2,696} =7,541 p=0,001 | - | F _{2,456} =4,526 p=0,011 |
| Perceived social support dimensions | <i>Family</i> | F _{2,498} =3,792 p=0,023 | - | F _{2,593} =5,026 p=0,007 | - | - |
| | <i>Friends</i> | - | - | - | - | F _{2,384} =3,925 p=0,021 |
| | <i>Lack of perceived social support</i> | F _{2,498} =7,663 p=0,001 | - | - | - | - |

Table 2 . Relationships among measures related to well-being, information searching strategies and activities to achieve desirable things seen on TV

We have seen in previous studies (Casas, González et al., 2004; Casas, Figuer et al., 2003), that those who tend to *plan* when searching on the Internet and those who *search for information* to gain knowledge about computers, obtained higher levels of overall life satisfaction. In the case at hand, no relation is found between overall life satisfaction and things on TV they would like to do, neither the activities carried out to achieve these things.

Concerning life domains satisfaction, the only dimension related to information searching strategies on the Internet was *School satisfaction*, in the sense that subjects in our sample who tend to search *by chance* were the most dissatisfied with it. Activities adolescents report to gain knowledge about computers had to do with the three dimensions of life domains satisfaction, being those who expressed doing *nothing* the less satisfied in all three. Those who *search for information* were the most satisfied in the *Family satisfaction* dimension, whereas those who did *concrete actions* were the most satisfied in the other two dimensions.

The things seen on TV that adolescents would like to do were related to *Enjoying time satisfaction* dimension but not to the dimensions of *School or Family satisfaction*. The highest percentages for the first dimension correspond to the adolescents who, among the things they see on TV, prefer doing *sports* related activities, whilst the lowest satisfied are those who would like to do *travelling or adventure* activities.

Salient values for future dimensions were only previously studied in relation to the information searching strategies on the Internet and no relationship was found. When the other two open-ended questions are considered, interesting relationships are detected. First of all, the things about computers boys and girls would like to know are related to the following dimensions: *Capacities and Knowledge* related values and *Interpersonal relations* values. Those who express the desire of knowing *nothing* are those who undervalue the first one and, at the same time, overvalue the second one. Secondly, those who want to know *everything* about computers, tend to obtain higher scores in the first dimension, whereas the lowest punctuations in the second dimension correspond to those adolescents who want to know only *concrete things*.

Unsurprisingly, those who do *nothing* to gain knowledge about computers and do *nothing* to achieve what they have seen on TV, get the lowest punctuations in *Capacities and knowledge* dimension. In contrast, those prone to do *actions* or *search for information* to get knowledge about computers and those who prefer *training or learning* to achieve things seen on TV, are the ones who express the highest punctuations. Interestingly, high scores in *Materialistic values* dimension correspond to a preference for doing *nothing* to achieve things seen on TV, being those who prefer *trying or demanding* the least interested in *Materialistic values*.

The three open-ended questions have been studied in relation to the three psychometric scales. As observed in previous studies (Casas, González et al., 2004; Casas, Figuer et al., 2003),

both the information searching strategies on the Internet and the activities displayed to gain knowledge about computers were associated to the *Positive self-esteem* dimension. The adolescents who *plan* or search *by chance* on the Internet indistinctly, and those who do *concrete actions* to know more about computers, obtained the highest punctuations in this dimension. Concerning the perceived control dimensions, the following was observed: the tendency *to plan* when surfing on the Internet and to *search for information* to gain knowledge about computers were associated with high scores in *Internal attribution of control*, while high punctuations in *External attribution of control* was much more common among those preferring to search *by chance* on the Internet. Besides, subjects who perceived a high social support from the family corresponded to those who *plan* their search on the Internet and those who *search for information* to get knowledge about computers. Accordingly, the tendency *to plan* was associated with low punctuations in the *Lack of perceived social support* dimension.

In the present study, it has been observed that the activities to achieve things seen on TV are related to some dimensions of the psychometric scales. Concretely, to the *Internal attribution of control* and *Friends perceived social support*. For both dimensions, those who do *nothing* obtain the lowest scores, whilst the highest punctuations are got by those who prefer *trying or demanding*.

DISCUSSION

The relationships among different measures related to well-being (life domains satisfaction, overall life satisfaction, self-esteem, perceived social support and salient values for future) have been explored. Answers to the three open-ended items measuring different information strategies used on the Internet and with computers, and activities to achieve desirable things seen on TV as well, have been considered separately and in relation to each other. Additionally, variables related to well-being and the three open-ended items have been crossed.

Some interesting observations emerge from the analysis of measures associated to well-being. Firstly, all of these variables, the majority of which have been studied through their dimensions -with the obvious exception of overall life satisfaction as it is composed by just one item- are correlated somehow among each other, thus indicating the importance of studying them altogether. This statement includes values, too. Concretely, two out of the

three dimensions of values (*Capacities and knowledge* and *Interpersonal relationships*) are positively related to overall life satisfaction, *Enjoying time satisfaction* dimension, *Positive self-esteem*, *Internal attribution of control*, and *Perceived social support from family and friends*, and negatively with *Lack of perceived social support*. Additionally, positive correlations between *Capacities and knowledge* value dimension and *School satisfaction*, and between *Interpersonal relationships* and *Family satisfaction* can be observed.

In contrast, *Materialistic values* correlate in a positive manner with *Enjoying time satisfaction*, *External attribution of control* and *Perceived social support from family and friends*, and negatively with *School satisfaction*. These findings are in line with other previous studies (Kasser and Ahuvia, 2002; Kasser and Ryan, 1996) which observe that high punctuations in materialistic values are associated to low levels of well-being. The fact that all three-value dimensions correlate to *Family and Friends perceived social support* requires, however, further interpretation. One possible explanation could be that something as common at these ages as receiving financial help from both family and friends is perceived by adolescents in terms of social support.

Secondly, as expected, our results show once again that overall life satisfaction is related with satisfaction with different life domains, although correlations are rather low, indicating that life as a whole is not simply the summing up of the life domains.

Lastly, it is worth mentioning that correlations among *Negative self-esteem*, *External attribution of control* and *Lack of perceived social support* are always positive. Among *Positive self-esteem*, *Internal attribution of control* and *Family and Friends perceived social support* are positive as well. Correlations between the former and the latter dimensions are negative in all cases. In relation to overall life satisfaction, correlations are also negative with the first three and positive with the last four dimensions. This indicates not only an important degree of coherence among responses but also that an underlying structure of well-being already explored in previous studies (Casas, González et al., 2004; Casas, Figuer et al., 2003; Casas, Buxarrais et al., 2004) might be there (see Figure 1 for more detail).

In relation to the three open-ended questions, it was expected the highest percentage of responses to correspond to the activities to achieve desirable things seen on TV as this was the most available device present at home, compared to computer and Internet, when data collection took place. However, a high percentage has been only observed when adolescents

are asked if there is something on TV they would like to do, but when they are required to explain what and how they get to do it, percentages decrease considerably. A possible explanation could be that things they see on TV are not so motivating for them. The difference of percentage between Internet and computer questions, in favour of the second, it is due maybe to the higher availability of computer in the households and in schools as well. Responses to the three questions do not show any relation to age and only some weak relation to gender. The only two differences observed are the following: 1) boys express more often than girls that they would like to know *everything* about computers, whereas girls say more than boys that they would like to know *nothing*; 2) From the things they see on TV, boys would like to do *sports* more often than girls and girls *media related activities* more often than boys.

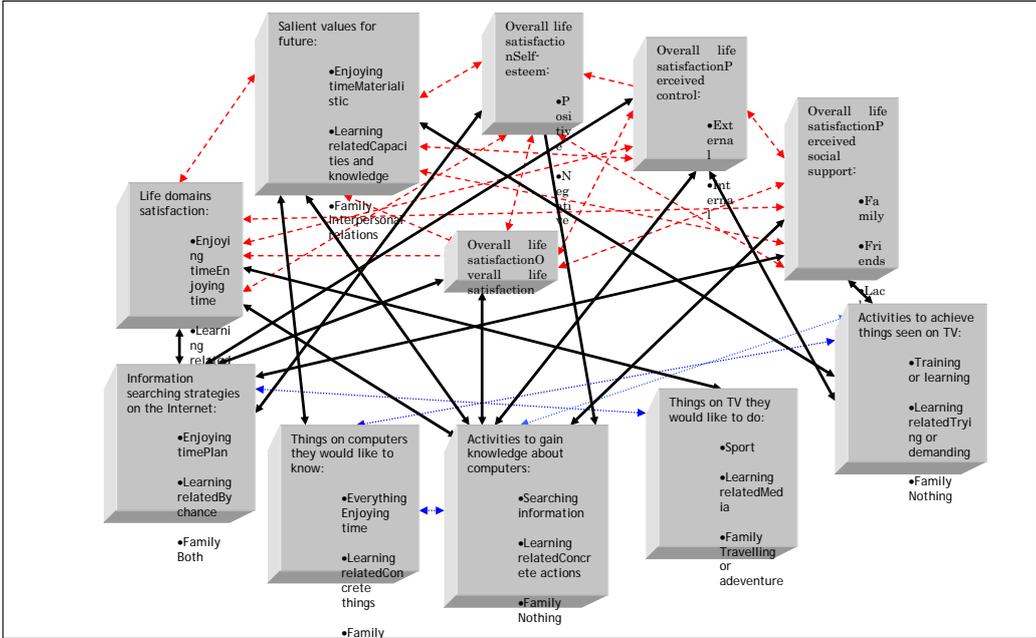


Figure 1. Relationships among all the studied variables

* please go to the bottom of document to see the larger image of Figure 1.

The most remarkably results when the three open-ended questions are studied in relation to each other are (see Figure 1): 1) Information searching strategies used on the Internet are related to the things seen on TV adolescents would like doing, in the sense that those who

rely on chance prefer *sport* activities and those who express *both* planning and relying on chance *indistinctly*, express their preference for *travelling or adventure activities*; 2) The things they would like to know about computers and what they actually do to know it. Those wanting to know *everything*, *search for information*, those most prone to know *concrete things* do *concrete actions*, and finally, adolescent who want to know *nothing*, do *nothing* afterwards; 3) Activities to achieve desirable things seen on TV and things they would like to know about computers in the sense that adolescents expressing that they do *nothing* are those who want to know *everything or nothing*. *Training or learning activities* about TV are associated with wanting to know *concrete things* about computers; and 4) Activities to achieve desirable things seen on TV and activities to gain knowledge about computers. *Trying or demanding* about TV responses is both linked to *search for information* and *concrete actions* about computers. Those who tend to do *nothing* are the same for the two media.

It seems from the above obtained results that certain configurations –that is, particular relationships among measures related to well-being- could be associated to different behaviours in relation to media. It is also likely that these behaviours, which depend on the concrete media considered, might have an important influence, in turn, in the configuration of a particular structure of well-being.

In previous studies (Casas, Figuer et al., 2003) it has been observed that concrete expectations about computers knowledge had nothing to do with different measures related to well-being, but they were associated to the strategies displayed to gain this knowledge. In the case at hand we have introduced in the analysis two new elements: salient values for future and activities to achieve things seen on TV. Interestingly, when salient values are introduced, some of the studied dimensions, *Capacities and knowledge* and *Interpersonal relationships*, seem to be related to the things about computers they would like to know. Those who express the desire of knowing *nothing* are those who undervalue the first one and overvalue the second. Adolescents expressing that they want to know *everything* obtain the highest scores in *Capacities and knowledge* dimension. In contrast, when exploring the things on TV they would like to do, no relationship is detected regarding to salient values for future, but with *Enjoying time* satisfaction dimension. Higher scores in this last dimension are accompanied by the preference of practising sports, while the lowest satisfied are those who would like to do *travelling or adventure* activities. In fact, doing sports is something more available than

travelling and this could be the explanation for the different scores in that satisfaction dimension.

Both activities to gain knowledge about computers and activities to achieve things seen on TV are more often associated to measures related to well-being than the concrete things adolescents would like to know about computers or TV. For the former relationships are observed with overall life satisfaction, the three satisfaction dimensions, *Capacities and knowledge value dimension*, *Positive self-esteem*, *Internal attribution of control* and *Family perceived social support*, whereas for the latter, relationships are observed for *Materialistic* and *Capacities and knowledge value dimensions*, *Internal attribution of control*, and *Friends perceived social support*. Thus, the only coincidences are found in *Capacities and knowledge value dimension* and *Internal attribution of control*. The fact that activities to achieve things seen on TV are not too much related to the different measures of well-being considered, raises a question mark on the huge influence that TV supposedly has on adolescent's life.

Main limitations of the current study include demographic features of the sample and the fact that only self-reported data are available. In relation to the sample, participants have been recruited from a unique area, thus making difficult the results to be generalised to the behaviour of, at least, Spanish adolescents. Lastly, the possible existence of a method bias due to self-reported data is another aspect to be aware of.

Several directions for future research stem from the limitations above mentioned. First of all, it is desirable in the near future to use more sophisticated statistical techniques such as structural equations, which are beyond the exploratory purposes of the present article. Second, the extension of this study to other samples, and even to adolescents of different cultural backgrounds will be also very helpful. Third, the use of discussion groups and in-depth interviews with adolescents should be employed in order to have different types of data to be compared. And thus, allowing us to deepen in our knowledge of the complex relationships among the variables studied in this article. In this sense, the analysis of the relationships among the constructs explored in this study should be broadened to other proactive behaviours to fulfil own goals in the case of the adolescent population.

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Figure 1.

