

## **IDENTIFICATION, SYMPATHY AND FOOTBALL DEMAND.**

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### **Abstract**

This present work analyzes the effects derived from sympathy and identification links between fans and clubs in sports demand, at the same time considering psychosociological factors which affect the willingness to pay for goods and services that have characteristics similar to the public goods. With this objective, after reconsidering the diverse approaches to this type of bonds, we propose and contrast a theoretical model that allows us to extract a series of conclusions on the interrelation between sympathy and willingness to pay. Altogether, the results allow us to establish a clear causality between these concepts, insofar as identification with a club (and its ethical-normative and psychological determinants) constitutes an important causal factor in its valuation that can explain some irregularities found within the contingent valuation method.

PsycINFO classification: 3720, 3920

JEL classification: D12, L83

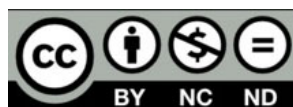
Keywords: identification, sports, sympathy, willingness to pay



## **1. - Introduction.**

The analysis of the consumption of sport is very complex if we compare it with any other expression of scenic art. This complexity is rooted in the anthropological roots of the sport (Elias and Dunning, 1986) and it is especially evident in the psychological implications that the individuals experience with relation to sport spectacles in general and the stable bonds or loyalty to clubs, in particular. The characteristics of this bond imply that the approach must necessarily be multidisciplinary since presents economic, sociological and psychological facets, all of which are integrated under the general epigraph of consumer behavior (Beccarini and Ferrand, 2006).

The set of followers of a club constitutes a heterogeneous group that incorporates both those who simply follow the evolution of a team or occasionally watch sports and also those who unconditionally and directly support it. Thus we could even speak of diverse degrees of adhesion and of a distinction between rational and "apparently" irrational consumers with regard to their answers. The rational consumer wishes to acquire some form of entertainment whereas the apparently "irrational" one constitutes the hardcore of committed supporters. In this sense, the motivation or the causality of the consumption of a sport spectacle cannot be reduced to the results of a club. In this respect, the chain of victories is not the only indicator of the levels of interest; although it can have an effect on the future levels of support (Branvold et al. 1997)



This leads us to the need of identifying the typology of the fans and explaining the process of establishing a stable commitment with a certain team or sport grouping, as well as the effects derived from this type of bonds.

At the same time, the studies of contingent valuation used in the assessment of public goods (like sports clubs) and non-market goods in general, have repeatedly demonstrated weaknesses that have resulted in the well-known problems of aggregation "embedding effect" and the purchase of moral satisfaction "moral glow" (Kahneman and Knetsch, 1992a, 1992b). This divergent evidence raises questions about the object of valuation and the determinants therein. The study of sympathy relations can constitute an explanatory alternative for determining the valuations of the individuals not exclusively limited to the sport scope (Sally, 1995; 2001 and 2002).

## **2.- Conductual explanatory Models.**

The analysis of consumer behavior in this context requires the development of an explanatory model on the personal involvement of the subject, given the qualitatively and quantitatively diverse links that we find between consumer and club. As means of example, the mere spectator contemplates the evolutions of the game without any personal involvement. On the contrary, for a supporter or fan, the evolution of one's team clearly affects one's level of well-being, while implying a lengthy dedication of time and resources (Pooley, 1978). These conducts have already been the focus of an important number of works that have highlighted the importance of the sociocultural environment, the factors of attraction (Branvold et al., 1997; Baade and Tiehan, 1990), as well as the cognitive and affective determinants (Madrigal, 1995) and the characterization of behaviors (Zillman and Paulus, 1993).



A good part of these studies on consumer satisfaction focus on the expectation-confirmation model (Oliver, 1980). However, some investigations emphasize the role played by the emotional and affective dimensions (Madrigal, 1995). This perspective leads us to differentiate two kinds of satisfaction. While horizontal satisfaction is derived from the direct consumption of a product-spectacle, vertical satisfaction is associated with involvement in brand or club. The latter is classified within the scope of emotions (Beccarini and Ferrand, 2006) and can be interpreted using three possible models (see Table 1). All of them can be interpreted by the establishment of sympathy and commitment relations between fan and club

Table 1.-Models of sport fan behavior from the scope of vertical satisfaction.

Hierarchy of effects		Stages of Adoption		Psychological <i>continuum</i>	
Awareness	Cognitive	Precontemplation	Cognitive- Affective-Conative	Awareness	Cognitive
Knowledge		Contemplation		Attraction	Cognitive-affective-conative
Liking	Preparation	Attachment			
Preference	Affective	Action (6 months) Overt behavior		Allegiance	
Purchase		Maintenance			
		Conative		Termination Overt behavior ceases	

Source: Authors own elaboration.



The hierarchy of effects model focuses on the description of the phases that an individual follows in a purchase process (Barry, 1987). Methodologically, this type of models considers the learning process and its impact on the attitudes of the agents throughout the decision making in the purchase of a product. Thus, an individual evolves from an initial awareness of the existence of a product, knowledge, taste or appreciation of the product, preference and, finally, the purchase. Although the sequence of effects can hold a certain relation, the particularities of the consumption of sports imply that this kind of model, when applied to habitual consumption, is not totally possible to assimilate. In the same way, this approach considers the existence of a dissociation of the cognitive, affective and conative dimensions that is not totally acceptable. In general, it means that the individuals know, appreciate and then acquire, when these dimensions can be considered present in each phase of the sequence.

The model of the stages of adoption or the transtheoretical model, however (Prochaska and Diclemente, 1982; Mullin et al, 2000), approaches the influential factors in conductual changes from a multidimensional perspective. In this sense, this theory proposes the existence of six stages that go from a precontemplation to the total alteration of behaviors, all of them affected by contextual variables and being open to new attitudes (supporting). As opposed to the previous theory, this one stresses the need for a degree of temporary persistence of the behaviors, as well as the existence of an interrelation between cognitive, affective and conative dimensions, present in all the phases of the decision making process.

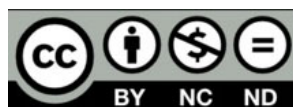
However, both models lack of an explanatory theory that goes beyond the simple description of the phases or stages. In this sense, the general model proposed by Funk and James (2001) tries to justify the sociopsychological processes that lie behind the appearance of these different degrees of entailment, integrating the diverse attitudes of



consumers in a *continuum*. This model establishes four borders in connection with the evaluative processes by means of which a person internalises a social situation and that qualitatively mark the different stages regarding the links with a sport object of attraction.

As in the previous approaches, in the initial phase (awareness), the individual simply knows of the existence of the sport and its norms, but does not express any form of special attraction. Nevertheless, the phase of attraction implies that the subject has already decided on a specific object, largely motivated by sociopsychological and demographic factors (the context of membership, family, religious, racial and political reasons) appearing with affective and conative dimensions. The third stage marks a qualitative jump, since in this phase (attachment) a psychological connection with this object and an identification with its characteristics begin to crystallize. Finally, in the last stage (allegiance), the subject feels identified with the club and its symbols thus affecting his behaviors in the long term.

Focusing on each one of the phases, an individual is initially "conscious" of the existence of this scenic art. Given the omnipresence of sport activities, this initial point is usually associated with very early stages of life and through the familiar and social bonds in the socialization process. Nevertheless, the appearance of new sports makes it possible for this stage to arise in adulthood. Geographic proximity, the influence of companions and the bonds with the community can also be decisive in order to create a "conscience", although this does not imply the existence of a particular interest for this type of activities. An increase of "conscience" can turn into attraction insofar as the agent compares different sports and teams and makes a decision on his personal preferences. This election is the distinctive feature of this phase and is influenced by the psychological characteristics of the individual, social influences and hedonic reasons. In



fact, not only can the paternal or the immediate surroundings influences be decisive, but the existence of a successful team or the opportunities of leisure are also relevant. This stage can be associated with direct spectators but also with fans through *Mass Media* and is not necessarily stable; therefore we are speaking of a weak bond.

The involvement of an agent is characterized not only for revealing interest in the activity, but for becoming known or being socially distinguished for that, giving a central dimension to his life style and undertaking the risks associated with the probable insolvency or failure of the team. Then, the meaning of the election is more internal than external, that is to say, the intrinsic meaning that the sport object has for the individual (Funk and Pastore, 2000). Obviously, when the object (team) generates answers that fortify the bonds with certain values and concrete beliefs and even favors the self-concept of the subject (citizen pride, social capital, affective links with a space or community...), this relation is strengthened. Therefore, the attitude of the team is essential (providing information, generating symbols, promoting certain values...).

The studies carried out within this stage show that the individuals found in this level follow the team as a form of escapism from their daily routine, so as to accede to a wider package of leisure services (Wann, 1995) and in particular, to achieve vicarious success (Mahony, 2000). The sport events are finite and nonpredictable. The result cannot be anticipated from the beginning (at least to a great extent), making sport attendance a pleasurable experience, associated with a form of drama influenced by the knowledge and affection of the fan (Hirt et al., 1992). The distinctive characteristic that distinguishes the fans from mere spectators is the formation of a tacit alliance with cognitive and affective effects where these "perceive themselves as members of the same group integrated by the existence of a common identity and the pursuit of a concrete objective" (Zillman and Paulus, 1993).



These bonds can be causally explained by the BIRG strategies and, their necessary corollary, CORF (Madrigal, 1995; Hirt et al., 1992). In the BIRG answer (Basking in Reflected Glory) the individuals maintain a strategy of exaltation of the self, that is to say, with the election of a determined object, subjects seek to raise their esteem in the eyes of others, increasing their association or connection with a highly successful group, brand, team...<sup>1</sup>. Thus, BIRG is an inclination (not only an affective movement) to share the glory of a figure which we could associate with due to diverse causes (origin, cultural identity...) or through a purely incidental form. CORF (Cutting off Reflected Failure), on the contrary, is a protection movement by means of which an individual wishes to be distanced of a source of problems or failures. This type of movements explains the attitudes of identification and non-identification that are respectively related to "good and bad times".

Nevertheless, a bond with a determined team or group constitutes a dangerous strategy as dissociation after the election is more complex, since the follower sees the object as an extension of himself so that the success will be interpreted as personal success and the failures as losses. On the other hand, disagreement or the CORF answer requires an intentional cognitive process whereas the affective reactions are not found in conscious control mechanisms (Oliver, 1993, Westbrook, 1998). Consequently, the established bonds are clearly asymmetric.

Identification could be considered a final stage in this *continuum*. Being nothing is not more than a stable long term relation of fidelity with a certain group or cause. The studies on consumer loyalty present a long tradition in the scope of marketing (Pritchard and others, 1999) including their application to sport activities (Hansen and Gauthier,

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<sup>1</sup> The identification with a team is related to self-esteem and an optimistic perspective on life and negatively with negative affective experiences (Branscombe and Wann, 1991).





1989). In general, these works all indicate that loyalty is a more complex phenomenon than a mere measuring of the attendance frequency as it involves attitudinal aspects, not only the direct consumption of sport events but also aspects that reinforce the personal connection, resist counter persuasion and influence the cognitive processes with an impact on the behavior (Mahony, 2000).

The line of thinking raised by the diverse explanatory theories allows us to establish a logical sequence of the stages or levels of pursuit of a sport organization. However, all of them can be understood as phases within a *continuum*, a process in which the individual gradually increases the levels of sympathy-identification with a certain club or organization. As we will see, the establishment of this type of bonds will be understood in terms of commitment, income transfers, wealth and valuation.

### **3.-Sympathy bonds, commitment and transfers.**

The study of prosocial behaviors, that is to say, those conducts that surpass the narrow frame of particular interest and move towards the construction of some form of community, insists on the importance of the sympathy concept to explain the existence of close relationships based on interactions such as families, clubs, communities, etc (Sally, 1995). In this sense, *Experimental* and *behavioural Economics*, have demonstrated the relevance of aspects like sympathy, group property (*we-rationality*) in the explanation of the rationality of the economic agents, specially in their impact on altruistic behaviors, valuations of public goods, etc (Kahneman and Netsch, 1992 and Milgrom, 1993).

This kind of relations is characterized by the fact that personal utility is affected by the perception of utility for others. Then we cannot consistently speak of a function with a totally independent personal utility. Additionally, this interdependence is a



decreasing function of the distance, interpreted in a social sense. Finally, the existence of a sequence of interactions entails reciprocity, or what is the same, sympathy is not an unconditional answer (Sally, 1995).

In this sense, we can understand that sympathy is referring to two forms of identification. Sympathetic identification, whereby every individual is affected by other people's well-being, given that empathetic identification is based on the mutual knowledge between members of some form of community (Pena and Sanchez, 2005).

The egocentric interpretation, is a direct application of the principles of the neoclassic analysis on the prosocial behaviors, so that altruistic behaviors would be compatible with the maximization of the individual utility (Becker, 1976; Stark, 1995). However, the egoistic point of view focuses on the explanation of the voluntary contributions to public goods and, in particular, to the study of *warm glow* or the acquisition of some form of moral satisfaction. In this case the individuals obtain a satisfaction from their prosocial action in favor of a concrete group which they identify with, an action that would be ingrained in the psychological necessity of the construction of an identity or even in assertiveness itself (Andreoni, 1990). The altercentric approach incorporates the influence of the socialization processes or inculturation within the egoistic perspective. The individuals adopt prosocial conducts in order to gain admiration or prestige between their equals. Symbolic interactionism, for example, considers that the underlying motivation is the “empathic preferences”. Individuals build up their personality based on the judgments of others in an authentic “looking glass self” in such a way that the self would be no more than the “generalized other” (Mead, 1982). This approach adopts a more organic perspective whereas methodological individualism disregards the importance of the social organizations,



their ethics and their institutions in the economic coordination (Gui, 2000; Khalil, 2003)..

Although, there is no univocal interpretation of this concept within Economic Science, the diverse explanatory alternatives of the prosocial behaviors (egoistic, egocentric and altruistic) interpret it as a kind of interdependent functions of utility. This simplification allows us to formalize the capacity that this bond has in influencing the individual decision making.

### 3.1. Sympathy and voluntary transferences.

In the present context and following Stark (1995) a relation of sympathy can be modeled through a bina made up of a club fan (A) and the club or a sport organization (B). We assume the existence of only one good  $x$  that is in the hands of A. This good can be interpreted as income in a Beckerian sense, e.g. money, time, human capital etc. The fan could invest his resources supporting the club economically and socially.<sup>2</sup> On the one hand, the consumption of  $x$  determines the satisfaction or utility in a direct way ( $V_A(x) > 0; V_B(x) > 0$ ), verifying that  $V'_A(x) > 0; V'_B(x) > 0$ . On the other hand, each agent is individually influenced by the level of utility of the other in an indirect way. In other words, each agent directly wishes to have the good and indirectly wishes for others to also enjoy it. Consequently, the utility of each agent would be represented within interdependent functions of utility

$$U_A(x_A, x_B) = (1 - \beta_A)V_A(x_A) + \beta_A U_B(x_A, x_B) \quad [1]$$

$$U_B(x_A, x_B) = (1 - \beta_B)V_B(x_B) + \beta_B U_A(x_A, x_B) \quad [2]$$

where,

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<sup>2</sup> It is important to note that a supporter not only makes economic contributions, but time and even knowledge, experience, etc. could be crucial in the generation of the great sport events.

$x_A$  is the level of consumption made directly by A and destined to uses other than supporting to the club

$x_B$  is the level of consumption made by B derived from the fans' contributions.

$\beta$  is a parameter encompassing the concept of sympathy

Indeed,  $\beta$  is the weight that the utility of the other individual plays in one's own utility ( $-1 < \beta < 1$ ).<sup>3</sup> A positive value of  $\beta$  reflects an altruistic behavior, a negative value a positional egoistic behavior and a value of 0 corresponds to a situation of indifference, *no-tuism*. In terms of the conductual models considered in the previous section a positive value of  $\beta$  represents the existence of bonds of the type BIRG (basking in reflected glory). A null or negative value considers both the existence of CORF (cutting in reflected failure) and the desire to contribute to the failure of a certain club.

Rearranging equations [1] and [2], the utility function of each agent can be expressed as follows:<sup>3</sup>

$$U_A(x_A, x_B) = (1 - \alpha_A)V_A(x_A) + \alpha_A V_B(x_B) \quad [3]$$

$$U_B(x_A, x_B) = (1 - \alpha_B)V_B(x_B) + \alpha_B V_A(x_A) \quad [4]$$

where the parameters  $\alpha_A = \frac{\beta_A(1 - \beta_B)}{1 - \beta_A\beta_B}$  and  $\alpha_B = \frac{\beta_B(1 - \beta_A)}{1 - \beta_A\beta_B}$  reflect the weight

of the utility derived from the consumption made by the other agent.<sup>4</sup>

<sup>3</sup> The introduction of interdependence by the club  $U_B(x_A, x_B) = (1 - \alpha_B)V_B(x_B) + \alpha_B V_A(x_A)$  can be interpreted as such because the club is not indifferent to the situation of its supporters, that is, the organization cannot be understood without its nucleus of followers.

<sup>4</sup> Logically the condition  $\alpha_A + \alpha_B < 1$  should be fulfilled, since in the cases where the condition were higher than 1 it simply would be necessary to consider a change in the agents (A would become B and viceversa) and would respond to situations of mutual extreme altruism or proexistence in which each one of them lives more on the terms of the other than on his own ones. The results in a situation of this type are equivalent to an interchange of personalities, in such a way that the decisions in both are adopted according to the criteria of the other rather than of oneself, so that the decisions in both take more based on the criteria from the other than of the own ones.



For the sake of analytical simplicity and in order to determine the optimal level of consumption of both agents, the following functional specifications can be assumed

$$V_A(x) = \ln(x) \text{ and } V_B(x) = \ln(\phi x) \text{ being } 1 > \phi > 0$$

In this case, the optimal level of consumption for A would be

$$\frac{dU_A(x_A, x_B)}{dx_A} = \frac{d((1 - \alpha_A) \ln x_A + \alpha_B \ln(\phi(x - x_A)))}{dx_A} = \frac{(1 - \alpha_A)}{x_A} - \frac{\phi \alpha_B}{\phi(x - x_A)} = 0$$

The first order condition of maximization of utility from the perspective of A is

$$\frac{x_A}{x_B} = \frac{1 - \alpha_A}{\alpha_B} \quad [5]$$

The same condition for B is:

$$\frac{x_A}{x_B} = \frac{\alpha_A}{1 - \alpha_B} \quad [6]$$

hence

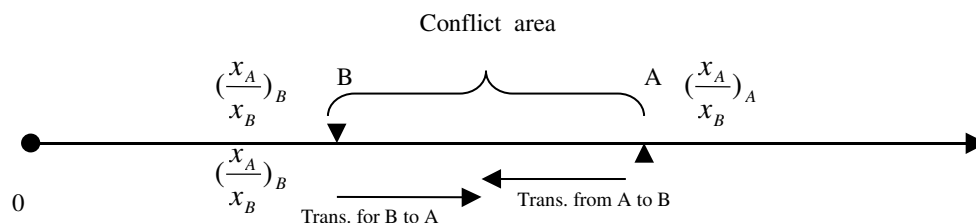
$$\left(\frac{x_A}{x_B}\right)_A = \frac{1 - \alpha_A}{\alpha_B} > \left(\frac{x_A}{x_B}\right)_B = \frac{\alpha_A}{1 - \alpha_B} \quad [7]$$

Thus, the club fan A) who maintains a relationship of sympathy, will consume a higher level of  $x$  than the club (B) would wish from its perspective. This result could also be also derived directly from the condition  $\alpha_A + \alpha_B < 1$ . In general, if we consider A and B jointly, it will always happen that the level of consumption wished by both

with respect to the other is smaller than the level they really wish to maintain from an individual perspective.

Nevertheless, the existence of sympathy relations entails a reduction of the margins of conflict derived from these divergences in the preferences with respect to the others and contributes to an approach of preferences or a reduction of the natural margins of conflict in a negotiation, until the point at which these would disappear in the case that  $\alpha_A + \alpha_B = 1$  is verified (see figure 1).

Figure 1. Line of Margins of conflict and sympathy



Source: Authors own elaboration based on Stark (1995)

According to the previous analysis it can be concluded that a bond of mutual sympathy implies the existence of tacit or negotiation and conflict free transfers between individuals. In other words, the extension of relations of sympathy implies the appearance of a willingness to pay or to make voluntary contributions. This means that fans or supporters choose to voluntarily get rid of a part of their consumer surplus. This result could also be interpreted as a reduction of the transaction costs.

This implication leads to the so-called *shrinking theorem*: the existence of interdependent utility functions implies the appearance of tacit transferences or the appearance of a greater willingness to pay. So, those agents who show a bond of sympathy with a community, club, cause..., would be willing to get rid of a part of their



consumer surplus. This result could be considered as counterintuitive from the point of view of rational choice, something with clear implications for the interpretation of the contingent valuation models

The most interesting implication of the model previously developed has to do with the effects of the variation in the sympathy levels. As we have seen, the intensity of sympathy is gathered in the initial parameter  $\beta$  that is the weighting that the subject A or B assign to the utility for the other individual regarding their own utility.

$$\frac{\partial(\frac{x_A}{x_B})_A}{\partial\beta} = -\frac{d\alpha_A}{\alpha_A^2} \quad [8]$$

An increase in the level of sympathy in A will cause a reduction of the consumption wished by A and an elevation of the wished consumption by B on the part of A. In terms of figure 1, it involves a displacement on the straight line of the ratio of subject B and, consequently, a reduction of the conflict margin.

By contrast, an increase in income levels would not lead to a narrowing of the conflict margins, since it does not mean an alteration in the relative positions of both agents. Thus, an elevation of the availabilities of  $x$  does not modify the optimal positions. From this it can be deduced that, paradoxically, the potential conflicts of redistribution are not a decreasing function of the income levels, but are only a decreasing function of the levels of sympathy and, in such a case, of the relation between sympathy and income levels.

In order to verify that the optimization process depends exclusively on the sympathy levels and that the value of ratios calculated in [5] and [6] would not be affected, it would be necessary to simply introduce a modification in the departure constraints in the previous model:  $x_A + x_B = kx; k > 1$



In short, only modifications in the sympathy levels can assure increases the levels of transfers or willingness to pay.

One of the main implications of this result is that this perspective allows us to integrate the two main dissonant experiences observed in the empirical studies within the analysis of the influential factors in the contingent valuations (Kahneman, 1992a).

On the one hand, the problem of the *embedding effect* makes reference to the arbitrariness observed in the studies on the valuation of public goods that call into question the aggregation possibilities, in spite of the fact being consistent values. In these works, the willingness to pay did not undergo significant variations if we considered specific goods (a forest) as an object or a wider set of goods which this can be integrated into (the environment). The reason for this apparent dissonance lies in the object of the relation of sympathy itself. The relation that binds an individual with a club is the same one that ties him with the sport in general, in the same way that it is difficult to split the relation that exists between a concrete natural good to which one can relate to and the environment in general.

On the other hand, these studies showed a possible relation between the willingness to pay and the desire to acquire some form of moral satisfaction (*warm glow living*) through voluntary contributions. Whereas the acquisition of moral satisfaction explains embedding, sympathy offers a wider explanatory framework in order to interpret the socio-personal determinants of the valuations.

#### **4. Empirical Evidence**

In the previous section we outlined some verifiable implications that include:

(i) First, the existence of a direct relation between the sympathy relations and the willingness to pay or to contribute to the support of a certain sport club. Moreover,





those club fans showing greater levels of sympathy should tend to express higher levels of willingness than those who describe themselves like mere followers. (ii) Secondly, there is not any link between the willingness to pay and income, although the former is mainly determined by sympathy. (iii) Finally, an explanatory model identifying the main determinants of the appearance of sympathy-identification relations and of the willingness to pay will be estimated.

Our empirical analysis is based upon data taken from a survey conducted in 2004 on the population of the metropolitan area of A Corunna (Spain) with respect to the local soccer club (Deportivo de La Coruña). The questionnaire used consists of thirty two questions based on habits, consumption of sport spectacles, sympathy and willingness to pay, and were incorporated in the socio-demographic characterization of the population.<sup>5</sup>

Table 2: Technical features of the survey

Target population	Young and adult population (300,463 people), living in the area of Corunna (municipality).
Survey mode	In-home surveys.
Sample size	800 people in total: 600 in the municipality of Corunna and 200 in the metropolitan area: Arteixo, Cambre, Culleredo, Oleiros and Sada.
Sampling method	Disproportionate stratification in both subpopulations, with proportionate stratification between municipalities of metropolitan area. Disproportionate stratification by district and electoral section.
Sampling design	Multi-stage sampling: <ul style="list-style-type: none"> <li>▪ Random selection of sections in each subpopulation.</li> <li>▪ Random selection of starting points in each section.</li> <li>▪ Systematic selection of dwellings in routes generated from the former starting points.</li> <li>▪ Random selection of individuals in each dwelling.</li> </ul>
Sampling error	For a confidence level of 95.5 % the sampling errors would be the following: Stratum 1 (Corunna): $\pm 4.08$ % Stratum 2 (Other municipalities): $\pm 7.06$ % Total (stratum 1 + stratum 2): $\pm 3.54$ %
Date	January 2004

<sup>5</sup> The questionnaire is available upon request.



The survey results reveal the existence of a large percentage of the population, much higher than the percentage that claims to follow the club directly, showing an important level of sympathy (they adhere to the affirmation that the club sporting achievement affects to their personal well-being). Concretely it caters for a volume nearing 43% of the total of the population. On the contrary, those that we could define as indifferent do not surpass 24%.

The correlation analysis shows the strength and direction of the relationship between sympathy and other variables. The results are reported in Table 3 and they suggest the existence of a clear relation between sympathy and any of the pursuit forms (attendance, television viewing, reading of the press and socialization). Likewise, the results of this kind of analysis also suggest a clear link between sympathy and any of the variables that reveal willingness to pay (the consideration of the team as a public good, willingness to pay and the derived product purchase). By contrast, the income variable is related neither with the willingness to pay nor with the sympathy. On the other hand, while age positively affects the sympathy level, the level of studies affects it negatively<sup>6</sup>

Table 3. Correlations (Spearman's rho)

	Sympathy-identification	Public Good	Willingness to pay	Quantity DAP
Stadium attendance	-0,301 **	-0,0619	-0,250 **	0,286 **
TV watching	-0,536 **	-0,244 **	-0,338 **	0,322 **
Press reading	0,427 **	0,155 **	0,262 **	-0,255 **
Socialization	0,493 **	0,219 **	0,320 **	-0,297 **
Sympathy-identification		0,285 **	0,294 **	-0,288 **
Public Good	0,285 **		0,167 **	-0,157 **
Willingness to Pay	0,294 **	0,167 **		-0,731 **
Willingness to Pay level	-0,288 **	-0,157 **	-0,731 **	
Product purchase	-0,362 **	-0,168 **	-0,236 **	0,281 **
Pay per view TV	-0,323 **	-0,114 **	-0,272 **	0,299 **
Age	-0,132 **	-0,175 **	0,0174	-0,035 **
Level of studies	0,157 **	0,139 **	0,124 **	-0,103 **

<sup>6</sup> It is logical if we consider that the sympathy relations can be similar to a form of social capital and, at the same time, there is a degree of stratification regarding the leisure activities and the education levels.

Level of income	0,010	0,086 *	0,0136	0,0522
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\*\* The correlation is significant at level 0.01 (bilateral).

\* The correlation is significant at level 0.05 (bilateral).

The estimation of a binary model of logistic regression allows us to emphasize the explanatory capacity of social and mass media variables (e.g. television viewing, reading the press, as well as the key factor of group socialization) on the existence of bonds of sympathy. Table 4 shows the results of this kind of estimation. At this point, some comments are worth noting. The age is a significant explanatory factor for a greater level of sympathy. In contrast, the level of studies represents an obstacle for the appearance of this bond with sport clubs. In the same way and derived from socio-cultural patterns of conduct, sex is a variable with an important explanatory weight.

Table 4. Sympathy determinants

Dependent Variable: sympathy-identification  
 Method: ML - Binary Logit  
 Included observations: 800 after adjusting endpoints  
 Covariance matrix computed using second derivatives

Variable	Coefficient	STD.Error	z-Statistic	Prob.
Attendance	0.286647	0.072879	3.933216	0.0001
TV watching	0.366110	0.068468	5.347174	0.0000
Press reading	-0.227965	0.073273	-3.111164	0.0019
Socialization	-0.326299	0.087582	-3.725630	0.0002
Public good	-0.490681	0.122530	-4.004583	0.0001
Age	0.017308	0.004945	3.500260	0.0005
Educational Level	-0.219070	0.078755	-2.781665	0.0054
Sex	0.802613	0.188718	4.252981	0.0000
C	-1.061922	0.674582	-1.574193	0.1154
Log likelihood	-408.4692	Schwarz criterion		1.096375
Restr. log likelihood	-544.8689	Mcfadden R-squared		0.2503
LR statistic (8 DF)	272.7993	Cox-Snell R-squared		0.2894
Probability(LR stat)	0.000000	Nagelkerke R-squared		0.3882
Akaike info crit.	1.043673			

In order to test the link between willingness to pay and sympathy another binary logistic explanatory model is estimated. Table 5 provides some evidence of the strength of this relationship. In general, it is very clear that those individuals showing high levels



of sympathy also declare a higher willingness to pay. In fact, this type of relations would significantly foster the appearance of negotiation-free transfers free of negotiation. This result could be explained by the excess of the consumer surplus - derived from a direct consumption (attendance) or indirect (TV watching), but strongly conditioned by the existence of relations of sympathy-identification and socio-cultural factors (educational level...).

The estimation of this model confirms once again that income does not constitute a determinant factor of the existence of transferences nor of their amount.

Table 5. WTP Determinants

Dependent Variable: Willingness to pay.

Method: ML - Binary Logit

Included observations: 800 to after adjusting endpoints

Covariance matrix computed using second derivatives

Variable	Coefficient	STD.Error	z-Statistic	Prob.
Attendance	0.251883	0.072326	3.482614	0.0005
TV watching	0.314164	0.059682	5.263934	0.0000
Sympathy	-0.342181	0.103946	-3.291919	0.0010
Educational level	-0.204350	0.067132	-3.043997	0.0023
C	-0.093521	0.362131	-0.258253	0.7962
Log likelihood	-476,8340	Avg.log likelihood		-0.596043
Restr. log likelihood	-546.9312	Mcfadden R-squared		0.1281
LR statistic (4 DF)	140.1944	Cox-Snell R-squared		0.1612
Probability(LR stat)	0.000000	Nagelkerke R-squared		0.2163
Hannan-Quinn crit.	1.215833			

## 5.- Conclusions.

The explanatory models of sports loyalty by consumers to certain clubs from a psychosociological perspective reveal the appearance of interdependence bonds (like BIRG) between the subject and the club of reference, which can be interpreted as the generation of sympathy links.

In this sense, the analysis and modelling of these relations (interdependence of utility functions) allow us to explain sport consumer behaviors, apparently irrational, in



connection with clubs, by means of the derivation of effects generated by this type of bonds in the conducts of consumption and donation.

From a model of sympathy in bins two basic hypotheses are derived. On the one hand, the existence of a direct relation between this type of bonds and transfers without conflict, which would be understood in terms of willingness to pay. On the other hand, this disposition bears no relation with levels of income. Both affirmations have been contrasted empirically.

Although the study centers on the scope of the contingent valuation of sport clubs, we found evidence that covers the valuation of public goods and non-market goods in general, and have an explanatory capacity for both problems found in the analyses of contingent valuation: embedding and the purchase of moral satisfaction as a motivation of willingness to pay.

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