Time versus Money: The Willingness to Exchange Membership Fees and Volunteering in Dutch Sport Clubs

Discussion Paper

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ABSTRACT

This study investigates the willingness of members in Dutch voluntary sport clubs to substitute financial resources (membership fees) for human resources (volunteering) and vice versa. Amidst declining subsidies and volunteer shortages, clubs are exploring if labor shortages can be solved by financial buy-outs, or financial deficits by increased volunteering. Drawing on the labor-leisure trade-off model and social exchange theory, this research analyzes data from 3,723 members of Dutch voluntary sports clubs (mainly tennis and volleyball).

Using ordinal and binary logistic regressions, the study identifies a significant socio-economic divide. Results support the economic trade-off hypothesis: members with higher household incomes are significantly more willing to pay increased fees to avoid volunteering (the 'buy-out' option). Conversely, members with lower incomes are more willing to perform more volunteer work in exchange for lower fees. However, this economic rationality is not universal; members with high club satisfaction and current volunteers generally resist these trade-offs, preferring the status quo. The findings suggest that while monetizing volunteer duties is a viable strategy for affluent segments, it may risk undermining the social cohesion and reciprocity central to the associative nature of voluntary sport clubs.

Keywords: voluntary sport clubs; volunteering; membership fees; labor-leisure trade-off; social exchange theory; resource substitution.

INTRODUCTION

In the Netherlands 24% of the total population is a member of a voluntary sport club (RIVM, 2014). Moreover, many people do volunteer work for voluntary sport clubs; of the Dutch adult population 14% is involved in volunteer work for a voluntary sport club (Dekker & De Hart, 2009; Tiessen-Raaphorst, 2014). The importance of volunteering in sport has been widely acknowledged (Vos et al., 2012). Curtis, Baer & Grabb (2001) have demonstrated that volunteering plays an important part in sport in many developed countries and, for instance, Taylor, Panagouleas and Nichols (2012) showed that sport participation in England relies heavily on the involvement of volunteers.

In recent years the financial crisis has contributed to a reduction in the sponsor revenues of many clubs (Hoekman, Straatmeijer & Breedveld, 2014). Additionally, local governments have cut their spending and in many cases sport has not escaped these budget cuts (CBS Statline, 2015). This has led to many voluntary sport clubs facing higher costs, lower revenues or both. Tiessen-Raaphorst and Van den Dool (2012) demonstrate that volunteer work is an important means for many of voluntary sport clubs to keep the costs for the club at a low level, for instance by contributing to organizational or maintenance activities. Volunteering may also be helpful in generating more income, for example by organizing benefit events. This in turn can help in keeping the membership fee at a modest level.

In order to compensate for diminishing revenues and higher costs, voluntary sport clubs may increase the membership fee, as has been argued by Wicker (2009). Another option, which has gained much less attention, is to increase the amount of volunteer work by the clubs members. However, one in every five voluntary sport clubs in the Netherlands has a shortage of volunteers (Van Kalmthout, De Jong & Lucassen, 2013). Breuer, Wicker and Von Hanau (2012) have shown that for German voluntary sport clubs human resources, including volunteer work, have become more scarce. They also suggest that volunteering may be substituted for other resources that the sport club has at its disposal, such as income. This implies that club members may need to pay an increased membership fee, in order for the club to employ professionals. However, recognizing that club members contribute two main resources—money and time—some clubs are exploring alternative models. This raises the question whether these resources can be substituted: can financial deficits be solved by increasing human input, or can labor shortages be solved by financial buy-outs?

From an economic perspective, the decision of a club member to contribute either money (fees) or time (volunteering) can be analyzed using the labor-leisure trade-off model (Becker, 1965;

Downward, Dawson & Dejonghe, 2009). According to this framework, individuals maximize their utility subject to time and budget constraints. Volunteering is not 'free'; it carries an opportunity cost. For a member, the time spent volunteering is time not spent on paid labor or leisure. Consequently, the 'shadow price' of volunteering is higher for individuals with higher wage rates (Gratton & Taylor, 2000). This theory suggests a substitution effect: members with higher incomes (and thus higher opportunity costs of time) would theoretically prefer paying higher fees to avoid volunteering, while members with lower incomes might prefer 'paying with time' to reduce their financial burden.

Despite the theoretical grounding in sports economics, empirical evidence on the direct willingness of members to substitute fees for volunteering—and vice versa—remains scarce. The aim of this paper is to investigate this trade-off within Dutch voluntary sport clubs. Specifically, we analyze (1) the willingness of members to substitute time for money (more volunteering for lower fees) and money for time (higher fees for less volunteering), and (2) how socio-economic factors, particularly income and the opportunity cost of time, determine this willingness. By doing so, we aim to validate whether the labor-leisure trade-off holds true in the semi-commercialized context of modern amateur sport.

LITERATURE REVIEW

To understand the willingness of members to substitute between fees and volunteering, we must look at individual resource allocation. The theoretical starting point is the neoclassical theory of time allocation, often referred to as the labor-leisure trade-off (Becker, 1965). In this economic model, individuals allocate their limited time across market work (paid labor), non-market work (such as household production or volunteering), and leisure. Following Downward, Dawson, and Dejonghe (2009), participation in sport and volunteering can be viewed as time-intensive consumption activities. An individual’s decision to volunteer is therefore constrained by their budget of time and money, implying a direct trade-off: time spent at the club is time not spent earning income.

A central concept in this allocation decision is the 'opportunity cost' of time. For individuals with a higher wage rate, the cost of an hour spent volunteering is relatively higher than for those with a lower wage rate (Gratton & Taylor, 2000). Consequently, economic theory suggests a substitution effect based on income. High-income members are predicted to be more willing to substitute 'time for money'—paying a higher fee to avoid the time-cost of

volunteering (the buy-out option). Conversely, members with lower incomes (e.g., students, part-time workers) have a lower opportunity cost of time and may prefer to substitute 'money for time'—volunteering more to reduce their financial expenditures. This mechanism suggests that volunteering and membership fees can act as communicating vessels depending on the member's socio-economic status.

However, viewing the relationship between member and club solely as an economic transaction oversimplifies the reality of the voluntary sector. Social exchange theory suggests that volunteering is also driven by reciprocity and social rewards, such as prestige, social interaction, and enjoyment (Blau, 1964; Emerson, 1976). Unlike a commercial contract, the 'psychological contract' in a sports club relies on affective commitment (Cuskelly, 2004). Members who are highly integrated into the club community may view volunteering not as a cost, but as a benefit (leisure in itself). Therefore, the willingness to trade fees for volunteering is likely influenced not just by income, but also by the degree of satisfaction and engagement with the club (Taylor et al., 2012).

Prior research has firmly established that membership fees represent the financial backbone of voluntary sport clubs in Europe. Unlike commercial providers that price services to maximize profit, these clubs typically set fees based on a cost-recovery principle, often subsidizing youth participation with adult fees or bar revenues (Wicker, Breuer, & Hennigs, 2012). Historically, these fees have been kept artificially low, a feat made possible only by the significant input of unpaid labor which suppresses the organization's operating costs (Gronbjerg, 1993; Wicker & Breuer, 2011).

From an economic standpoint, the viability of increasing membership fees—or introducing 'buy-out' options—depends on the price elasticity of demand. Wicker (2009) demonstrated that the willingness to pay for the membership fees in German sport clubs is relatively high and price elasticity of the sport club membership is low (inelastic). This inelasticity is often attributed to the high switching costs associated with leaving a club and the non-monetary benefits of membership, such as social capital and community belonging (Downward, Dawson, & Dejonghe, 2009). Consequently, Wicker (2011) argues that many clubs have unused pricing potential and could theoretically raise fees to professionalize services without alienating their base. However, this economic logic often clashes with the democratic and social inclusivity missions of voluntary sport clubs, creating a tension between financial rationality and social accessibility (Thiel & Mayer, 2009).

While fees provide the financial capital, volunteering constitutes the essential human capital of sport clubs. Research has consistently shown that the decision to volunteer is complex, driven

by a mix of altruistic values and egoistic benefits, such as personal skills development or social interaction (Cuskelly, 2004; Taylor et al., 2012). However, members seem to be increasingly reluctant to commit to structural, time-intensive roles (like board positions) due to increasing pressures in their professional and domestic lives (Breuer et al., 2012; Cuskelly, 2004). This "time squeeze" supports the labor-leisure theoretical perspective: as the opportunity cost of leisure time rises, particularly for the working population, the willingness to supply unpaid labor diminishes, potentially making the option to pay a higher fee in exchange for exemption from duties an attractive alternative for time-poor members (Schlesinger et al., 2013).

The relevance of examining the tradeoff between money (membership fees) and time (volunteering) is heightened by the changing nature of sports participation. Several scholars have noted a shift towards 'consumerism' in voluntary sport clubs (Enjolras, 2002; Bodet, 2009). As modern lifestyles become more pressured, members increasingly view the club as a service provider rather than a mutual aid association. This 'customer' attitude may erode traditional solidarity, making members more susceptible to treating volunteering as a tradable commodity (Van der Roest, Van Kalmthout & Meijs, 2015). If members perceive their membership primarily as purchasing a service, the barrier to 'buying off' their volunteer duties lowers. Empirical research on this specific substitution remains limited. Nagel et al. (2004) argued that while professionalization is increasing, the willingness of members to pay for professional services (instead of volunteering) varies significantly. It remains unclear whether the 'buy-out' option with regard to volunteering is a viable strategy for all members, or if it creates a divide within the club. By applying the labor-leisure framework to new empirical data, this study aims to identify which member characteristics—specifically income and current engagement—drive the willingness to enter this exchange.

METHOD

To empirically test the substitution between membership fees and volunteering, a quantitative research design was employed. The central construct of this study is the 'willingness to substitute,' defined here as the member's stated preference to alter their resource contribution mix. Following the logic of the labor-leisure trade-off, members of voluntary sport clubs were asked to what extent they are willing to do more volunteer work in exchange for a lower membership fee and, conversely, to what extent they are willing to pay an increased membership fee in order to do less volunteer work.

A questionnaire was constructed in which respondents were asked to what extent they agreed to the following two statements: (1) 'I would like to do more volunteer work for the club in exchange for a lower membership fee'; and (2) 'I would like to pay an increased membership fee in exchange for doing less volunteer work'. In this survey, we included several individual background variables, such as age, sex, educational level and household income level. Also, some sport specific indicators were included: type of sport (which the respondent most frequently played), the levels of engagement and satisfaction with the sport club and the current level of the annual membership fee of the respondent.

Members of Dutch voluntary sport clubs were asked to fill out this questionnaire which was available online. The ten largest national sporting associations (NSA's) were asked to cooperate by mailing their members. Of these ten NSA's the national volleyball association agreed to mail all their members of which it had an e-mail address (approximately 29.000) and the tennis association sent an e-mail to a share of their members (a random sample of 5,000). Other associations were either unable or unwilling to participate. For both the volleyball association the response rate was 11% and the tennis association the response rate was 12%. Additionally, sport club members were approached through social media and online sports forums to participate in this research. The data was gathered in from October 15, 2012 to December 31, 2012. In total 4,690 questionnaires were filled in. Incomplete questionnaires were removed from this dataset. Also, respondents aged below 16 were omitted, as well as respondents that paid less than 25 euros for the membership fee, leaving 3,723 questionnaires for the analysis. It is important to note that this sample is not representative of the entire Dutch sporting population; compared to national averages, our respondents are relatively highly educated and have an above-average household income. While this limits generalizability, it provides a robust dataset for testing the trade-off hypothesis.

Since the first aim of this research was to establish whether voluntary sport clubs members are willing to do more volunteer work in exchange for a lower membership fee we define two separate, dependent variables: (1) More Volunteer Work or 'MVW', on which a club member answered to what extent he or she agreed with the statement 'I would like to do more volunteer work for the club in exchange for a lower membership fee'; and (2) Increased Membership Fee 'IMF' with the same ordinal scale (also 5-point Likert) on which a club member answered to what extent he or she agreed on the statement 'I would like to pay an increased membership fee in exchange for doing less volunteer work'.

Respondents answered both the 'MVW' and the 'IMF' question using a 5-point Likert-scale with the following response set: 1 = totally disagree, 2 = disagree, 3 = neutral, 4 = agree and 5

= totally agree. For these dependent variables, we retained the original 5-point Likert scale for the primary analysis. Additionally, we constructed binary variables, where respondents answering 'Agree' or 'Totally Agree' were coded as 1 (willing), while all others were coded as 0 (not willing). To ensure robust statistical power, several of the other variables were also recoded into broader categories. Education was collapsed into three levels: Low (primary/lower secondary), Middle (secondary/vocational), and High (higher vocational/university). Work situation was categorized into four groups: Paid work, Retired, Student, and Other (including unemployed and homemakers). Household income was aggregated into five categories ranging from 'Minimum' (less than €12,000) to 'High' (2x modal income or more), with the Middle Income group having an income around the modal income, between € 30,500 and € 36,500.

To explain the variation in willingness to substitute, several independent variables were included based on the theoretical framework. Household income (measured in 7 categories plus a 'don't know / don't want to say' option) serves as a proxy for the opportunity cost of time. Current volunteering frequency and current membership fee were included to establish the respondent's starting position. To account for the social exchange perspective, we included club engagement and satisfaction (5-point scales) as control variables, hypothesizing that highly engaged members might resist commodifying their relationship. Demographic control variables included age, sex, and the educational level.

Given the ordinal nature of the dependent variables, Ordinal Logistic Regression (OLR; Agresti, 2010) was employed as the primary analytical method. Separate models were estimated for 'MVW' and 'IMF'. The Proportional Odds Assumption was tested to ensure model validity. To validate the findings and ensure the results were not driven by the specific distribution of the 'neutral' category, a Binary Logistic Regression was conducted as an alternative analysis.

Data were analyzed using STATA. We utilized a forced-entry method, including all theoretically relevant variables simultaneously. For the analysis of the willingness to pay to do less work (IMF), respondents who currently perform no volunteer work were excluded (n=209), as it is impossible to reduce their labor supply further. Results are reported as Odds Ratios (OR). An OR greater than 1 indicates a positive relationship between the predictor and the willingness to substitute, while an OR less than 1 indicates a negative relationship. Finally, to facilitate the interpretation of the non-linear regression results and to visually inspect the labor-leisure hypothesis, predictive margins were calculated. While Odds Ratios indicate the direction and strength of an effect, they do not quantify the absolute probability of an event. Therefore, we estimated the predicted probability of a respondent answering 'Totally Agree'

across the different income categories, holding all other covariates at their means. These marginal effects are visualized in two plots to illustrate the distinct slopes of the willingness to substitute time versus money.

RESULTS

Descriptive Analysis

Table 1 presents the sample characteristics (N=3,723). The sample reflects the specific context of the study, with a high representation of volleyball (71%) and tennis (16%) players. The respondents are relatively highly educated (63% high education) and affluent, with over 54% earning an above-average or high income.

Willingness to Substitute

First, we analyzed the distribution of the dependent variables. Table 2 illustrates the willingness to do more volunteer work in exchange for a lower fee (MVW). In total, 29.3% of respondents agreed or totally agreed with this proposition. A clear income gradient is visible: 18.2% of the lowest income group 'totally agreed' with the trade-off, compared to only 5.1% of the highest income group. Similarly, over half (51%) of the Minimum Income group agreed with MVW, while less than one in five of the High Income group agreed.

Table 3 displays the willingness to pay a higher fee in exchange for doing less work (IMF). This 'buy-out' option appealed to a smaller segment (16.4%). Conversely to the MVW-scenario, the willingness here increases with income. While only 11.8% of the Minimum Income group totally agreed to pay more, this rose to 20% among the High Income group. However, the majority of respondents (61%) opposed this commodification of their duties. Hence, the descriptive results indicate a general preference for the status quo.

Table 1 : Summary Statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Age	3,723	40.0	13.8	18	86
Sex	3,723	0.443	0.497	0	1
Education					
Low	3,723	0.059	0.236	0	1
Middle	3,723	0.311	0.463	0	1
High	3,723	0.630	0.483	0	1
Income					
Minimum Income	3,723	0.100	0.301	0	1
Low Income	3,723	0.157	0.364	0	1
Middle Income	3,723	0.194	0.395	0	1
Above Average Income	3,723	0.282	0.450	0	1
High Income	3,723	0.267	0.442	0	1
Work situation					
Paid Work	3,723	0.761	0.426	0	1
Retired	3,723	0.068	0.253	0	1
Student	3,723	0.123	0.329	0	1
Other/Non-work	3,723	0.047	0.212	0	1
Membership fee	3,723	198.25	109.03	25	3500
Voluntary work					
Never	3,723	0.056	0.230	0	1
(Very) Rarely	3,723	0.139	0.346	0	1
Sometimes	3,723	0.317	0.465	0	1
Regularly	3,723	0.280	0.449	0	1
Very Regularly	3,723	0.208	0.406	0	1
Time of playing (current) sport					
0-1 year	3,723	0.019	0.138	0	1
1-5 years	3,723	0.112	0.316	0	1
5-10 years	3,723	0.133	0.340	0	1
More than 10 years	3,723	0.735	0.441	0	1
Duration of membership					
0-1 year	3,723	0.092	0.289	0	1
1-5 years	3,723	0.270	0.444	0	1
5-10 years	3,723	0.173	0.378	0	1
More than 10 years	3,723	0.465	0.499	0	1
Engagement (5p-Likert)	3,723	3.79	0.91	1	5
Satisfaction (5p-Likert)	3,723	3.99	0.70	1	5
Sport (most frequently)					
Other Sports	3,723	0.137	0.344	0	1
Tennis	3,723	0.156	0.362	0	1
Volleyball	3,723	0.708	0.455	0	1

Table 2: Response to 'Do More Voluntary Work for a lower membership fee' (MVW), by income group

		Do more voluntary work for a lower membership fee				
	n	Totally disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Totally agree (5)
Minimum Income	374	8.8%	19.3%	20.9%	32.9%	18.2%
Low Income	584	9.3%	27.6%	25.5%	27.4%	10.3%
Middle Income	722	10.4%	30.8%	24.8%	25.6%	8.5%
Above Average Income	1,050	14.7%	36.3%	25.4%	19.1%	4.6%
High Income	993	21.8%	36.7%	22.7%	13.8%	5.1%
Total	3,723	14.3%	32.2%	24.1%	21.6%	7.7%

Table 3: Response to 'Pay a higher membership fee to do less voluntary work' (IMF), by income group (persons doing no voluntary work excluded from the analysis).

		Pay a higher membership fee to do less voluntary work				
	n	Totally disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Totally agree (5)
Minimum Income	358	26.8%	45.8%	15.6%	8.7%	3.1%
Low Income	537	20.3%	43.8%	21.2%	12.3%	2.4%
Middle Income	685	17.7%	41.5%	25.3%	12.7%	2.9%
Above Average Income	991	20.2%	40.5%	23.0%	13.2%	3.1%
High Income	943	20.8%	35.7%	23.4%	14.4%	5.6%
Total	3,514	20.6%	40.4%	22.5%	12.8%	3.6%

Determinants of MVW and IMF

Models 1 and 2 in Table 4 present the ordinal and binary regression results for the willingness to trade time for money. Models 3 and 4 analyze the willingness to substitute money for time. The results show that age has a negative effect on willingness to trade between time and money in either way; older members are less interested in this trade-off.

Household income serves as a powerful predictor. Compared to the Middle Income reference group, members with a High Income are significantly less willing to trade time for a fee reduction (Ordinal OR=0.520, $p<0.001$). This implies that for affluent members, the opportunity cost of time exceeds the monetary value of the fee reduction, which provides support for the labor-leisure trade-off hypothesis. The Ordinal model for IMF reveals a significant negative effect for the Minimum and Low Income groups. This confirms the hypothesis that the less affluent members are less inclined to 'buy off' their duties.

Interestingly, members who are already satisfied with the club are significantly *less* likely to want this change (OR=0.830). Current volunteering behavior shows a strong pattern: members who already volunteer are willing to do more, and this willingness increases with the amount they do, although this is less convincing for the members volunteering the most, suggesting a saturation point. Members who currently volunteer 'Very Regularly' are significantly *less* willing to pay to do less (Ordinal OR=0.602; Binary OR=0.670). These results strongly support social exchang6e theory. For a core group, volunteering is likely a source of utility (enjoyment, status) rather than a burden to be bought off. Of the control variables, Satisfaction shows a negative relationship with both MVW and IMF, implying that satisfied members generally prefer the status quo over introducing financial buy-outs. The type of sport (Volleyball vs Tennis) did not yield significant differences, suggesting these economic mechanisms are universal across these club types. Students, typically characterized by lower cash reserves but more flexible time, are significantly more willing to volunteer for a discount (Ordinal OR=1.350; Binary OR=1.371) compared to members with Paid Work.

Table 4: Results for Ordered Logistic Regression and Binary Logistic Regression Analysis, with Odds Ratios (OR)

	(1) MVW (Ord) OR (s.e.)	(2) MVW (Bin) OR (s.e.)	(3) IMF (Ord) OR (s.e.)	(4) IMF (Bin) OR (s.e.)
Age	0.985***	0.974***	0.990**	0.981***
	(0.003)	(0.004)	(0.003)	(0.005)
Sex	1.085	1.138	0.868*	0.831
	(0.070)	(0.092)	(0.058)	(0.084)
Education				
Low	0.965	0.930	1.099	0.862
	(0.132)	(0.173)	(0.156)	(0.213)
Middle	1	1	1	1
	(reference)	(reference)	(reference)	(reference)
High	0.847*	0.963	1.002	1.026
	(0.058)	(0.084)	(0.072)	(0.112)
Income				
Minimum Income	1.066	0.943	0.656*	0.670
	(0.174)	(0.176)	(0.111)	(0.178)
Low Income	1.076	1.052	0.811*	0.850
	(0.109)	(0.129)	(0.086)	(0.140)
Middle Income	1	1	1	1
	(reference)	(reference)	(reference)	(reference)
Above Average Income	0.706***	0.665***	0.959	1.100
	(0.062)	(0.075)	(0.088)	(0.154)
High Income	0.520***	0.501***	1.121	1.439*
	(0.049)	(0.061)	(0.109)	(0.207)
Work Situation				
Paid Work	1	1	1	1

	(reference)	(reference)	(reference)	(reference)
Retired	0.984	0.761	1.057	0.838
	(0.141)	(0.173)	(0.157)	(0.220)
Student	1.350*	1.371	0.728*	0.748
	(0.201)	(0.236)	(0.113)	(0.176)
Other/Non-work	1.104	1.119	0.958	1.073
	(0.163)	(0.205)	(0.149)	(0.261)
Membership Fee	1.001***	1.002***	0.999*	1.000
	(0.000)	(0.000)	(0.000)	(0.001)
Volunteering				
Never	1	1	n/a	n/a
	(reference)	(reference)		
(Very) Rarely	1.300	1.140	1	1
	(0.195)	(0.237)	(reference)	(reference)
Sometimes	1.838***	1.673**	0.909	0.859
	(0.264)	(0.330)	(0.090)	(0.121)
Regularly	1.963***	1.883**	0.830	0.772
	(0.306)	(0.399)	(0.093)	(0.126)
Very Regularly	1.659**	2.054**	0.602***	0.670*
	(0.291)	(0.482)	(0.082)	(0.135)
Time of playing (current) sport				
0-1 year	1.059	1.250	1.235	2.058
	(0.264)	(0.402)	(0.393)	(0.856)
1-5 years	1	1	1	1
	(reference)	(reference)	(reference)	(reference)
5-10 years	1.274	1.377	1.213	1.226
	(0.169)	(0.228)	(0.170)	(0.270)
More than 10 years	1.177	1.393*	1.219	1.225
	(0.131)	(0.198)	(0.144)	(0.224)
Duration of membership				
0-1 year	1.085	0.944	0.819	0.804
	(0.134)	(0.143)	(0.110)	(0.165)
1-5 years	1	1	1	1
	(reference)	(reference)	(reference)	(reference)
5-10 years	0.928	0.945	0.858	0.774
	(0.095)	(0.119)	(0.090)	(0.127)
More than 10 years	0.874	0.830	1.065	1.217
	(0.079)	(0.094)	(0.100)	(0.167)
Engagement	1.046	0.977	0.863**	0.905
	(0.053)	(0.063)	(0.047)	(0.072)
Satisfaction	0.830***	0.853**	0.950	0.821**
	(0.041)	(0.052)	(0.049)	(0.061)
Sport (most frequently)				
Other Sports	1	1	1	1
	(reference)	(reference)	(reference)	(reference)
Tennis	1.069	1.040	0.906	0.982
	(0.123)	(0.159)	(0.110)	(0.190)
Volleyball	0.954	0.906	1.106	1.246
	(0.086)	(0.103)	(0.104)	(0.182)
N	3723	3723	3514	3514
Pseudo R2	0.034	0.081	0.013	0.030
Chi2	381.06	364.10	131.50	94.54

Significance levels: * P < 0.05; ** P < 0.01 *** P < 0.001

Predictive margins

To further illustrate the impact of the opportunity cost of time, Figures 1 and 2 display the predicted probabilities for the highest level of agreement ('Totally Agree') across income groups. Figure 1 (willingness to do More Volunteer Work) clearly visualizes a negative slope. As household income rises, the probability of a member being willing to trade time for a fee reduction declines sharply. For a member with a minimum income, the model predicts a probability of approximately 32% to fully agree with this trade-off, whereas this probability drops to 21% for high-income members, holding other factors constant.

Conversely, Figure 2 (willingness to Increase Membership Fee) highlights the 'buy-out' mechanism. The probability of wanting to pay extra to avoid volunteering rises with income. As shown in the graph, the predicted probability doubles from approximately 12% for the minimum income group to 20% for the high-income group. This reinforces the conclusion that the 'buy-out' option is primarily a luxury good appealed to by the more affluent segments of the club.

Figure 1: Margin plot for ‘Do more voluntary work for a lower membership fee’ (MVW), by income level (predicted probability of (totally) agree; with 95% confidence intervals).

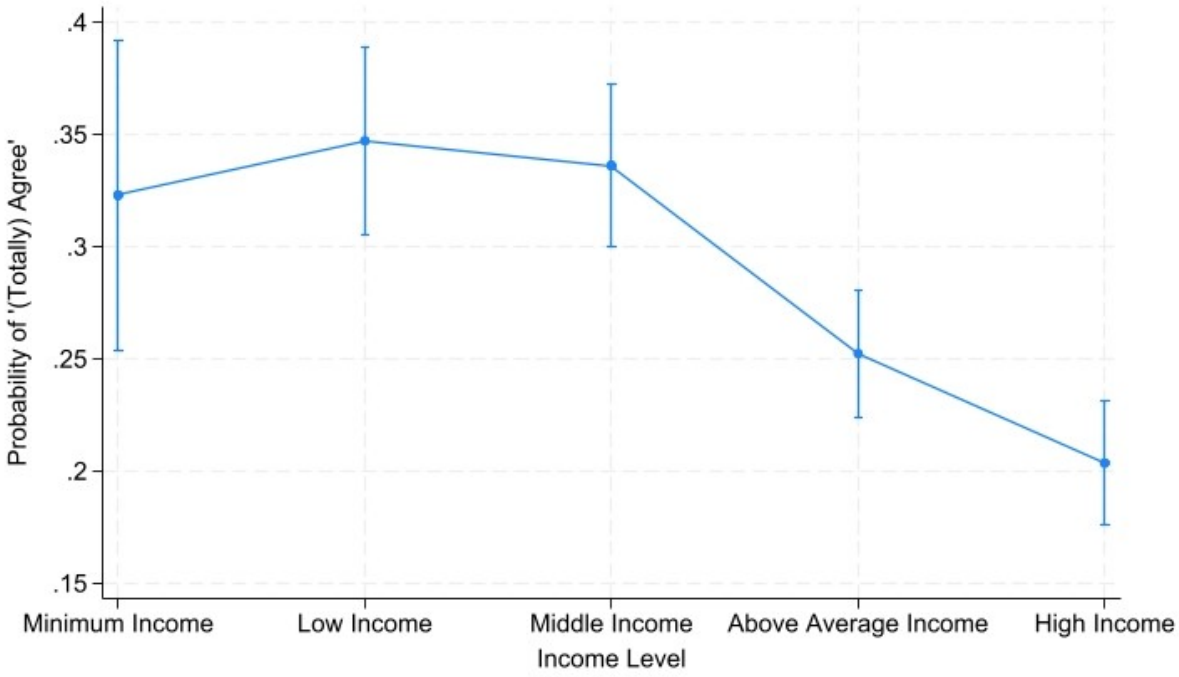
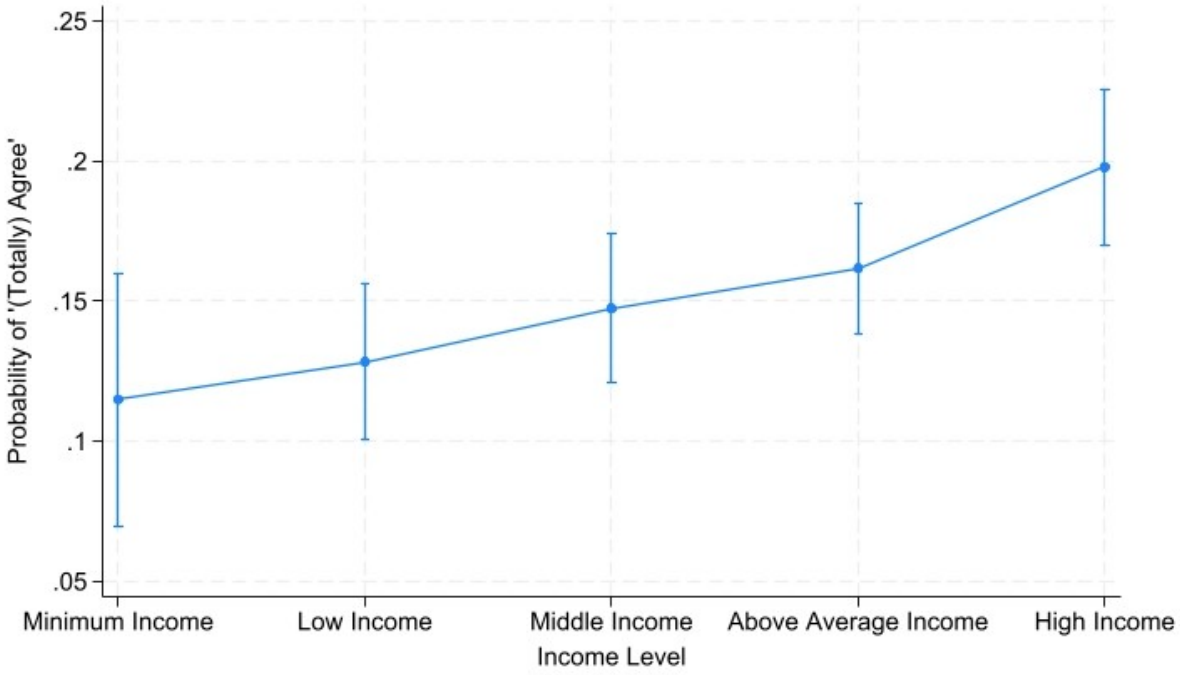


Figure 2: Margin plot for ‘Pay a higher membership fee to do less voluntary work’ (IMF), by income level (predicted probability of (totally) agree; with 95% confidence intervals).



DISCUSSION

The primary objective of this study was to examine the willingness of voluntary sport club members to substitute between human resources (volunteering) and financial resources (membership fees). By applying an economic framework to a sector traditionally viewed through a sociological lens, this research offers empirical evidence on how the labor-leisure trade-off (Becker, 1965) and social exchange theory (Blau, 1964) manifest within the Dutch non-profit sport context.

The Economic Rationality of Members

Our findings provide robust support for the application of the labor-leisure trade-off theory in voluntary sports. The results from both the ordinal and binary logistic regression models demonstrate a distinct income gradient in member preferences. Household income serves as a powerful proxy for the opportunity cost of time. Members with higher incomes are significantly more willing to pay an increased fee to avoid volunteer duties (the ‘buy-out’ option), while members with lower incomes are significantly more inclined to increase their labor supply in

exchange for a lower membership fee. The probability of a high-income member 'totally agreeing' to a buy-out is double that of a minimum-income member. This suggests that for a specific segment of the membership base—specifically the affluent—time has become a scarce commodity that they are willing to purchase from the club. This aligns with Wicker and Breuer's (2011) suggestion that scarcity of resources is not just an organizational problem, but an individual allocation problem. However, contrary to the assumption that *all* members might welcome more flexibility, our descriptive results show a strong preference for the status quo. The willingness to trade is not universal; it is a calculation made primarily at the socio-economic margins (students/low income vs. high earners).

The Limits of Commodification

While economic rationality explains the behavior of some, our results also highlight the relevance of social exchange theory (Blau, 1964; Giannoulakis, 2015). A purely economic model would predict that those who volunteer the most (and thus incur the highest time costs) would be most eager to pay to reduce this burden. Our data reveals the opposite: members who currently volunteer 'very regularly' are significantly *less* willing to utilize the buy-out option. This finding suggests that for many volunteers, participation is not a 'cost' to be minimized, but a source of intrinsic utility, social status, or enjoyment, akin to Stebbins' concept of 'serious leisure' (1992). Furthermore, members who reported high satisfaction with the club were generally opposed to substituting fees for volunteering. This implies that strong affective commitment buffers against the commodification of the member-club relationship. It supports the critique (e.g., Taylor et al., 2012) that treating volunteering as a perfectly substitutable economic input ignores the social capital and reciprocity that define the essence of a voluntary association.

Strengths and Limitations

A key strength of this study lies in its large sample size (n=3,723) and the methodological rigor applied through the use of both Ordinal and Binary logistic regressions. Unlike previous descriptive studies, this approach allowed us to isolate the unique effects of income and engagement while controlling for demographic factors.

However, several limitations must be acknowledged. First, as noted regarding the sampling strategy, the data is heavily skewed towards tennis and volleyball players and, consequently, towards a highly educated and affluent demographic. Although the sport-specific variable does not pick up a significant effect, the results cannot be generalized for other sports.

Second, the measurement of the 'willingness to substitute' relied on single-item attitudinal scales without specified exchange rates (e.g., "how *much* higher would the fee be?"). This introduces a hypothetical bias. Without a concrete price tag, respondents may overestimate their willingness to pay (Wicker, 2011). Future research should employ Discrete Choice Experiments (DCE) to determine the exact price elasticity of this substitution.

Finally, while we framed the potential for a 'buy-out' option, this study assumes a degree of substitutability that may not exist in practice. Financial capital cannot perfectly replace the specific human capital provided by volunteers, and vice versa, limiting the practical implementation of these findings.

Implications

Despite these limitations, the study points towards a shifting paradigm. The significant minority willing to pay for exemption (approx. 16%, rising to over 20% among the affluent) signals the emergence of a 'consumerist' segment within voluntary clubs (Bodet, 2009; Van der Roest et al., 2015). These members view the club primarily as a service provider. For club managers, this presents a dilemma: facilitating this trade-off could solve financial deficits and accommodate time-poor professionals, but it risks creating a two-tier membership structure—those who pay and those who serve—potentially eroding the solidarity upon which the Dutch associative model is built.

CONCLUSION

This study set out to explore the potential for substituting membership fees and volunteering in Dutch voluntary sport clubs. We conclude that a significant trade-off mechanism exists, but it is heavily stratified by socio-economic status. The willingness to substitute is not universal, as the majority of members prefer the status quo. However, the outcomes can be seen as the results of an economic calculation: the 'buy-out' may be a luxury good for affluent members, while 'volunteering for a lower fee' may to be a coping strategy for members with lower incomes.

The findings challenge the traditional "one-size-fits-all" membership model. There is unused pricing potential among high-income members who are willing to monetize their lack of time. However, the strong resistance from core volunteers and satisfied members suggests that introducing such market mechanisms should be approached with caution. While financially rational, a policy that allows members to buy off their duties risks undermining the social

cohesion and the intrinsic value of volunteering. Voluntary sport clubs must therefore balance their need for resources with the risk of crowding out the social exchange that binds their community together. Future research should focus on the long-term effects of such hybrid models on member retention and club culture.

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CONFLICT OF INTERESTS

The author declares no competing interests.

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DATA AVAILABILITY STATEMENT

Data is available upon request through the author.

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EDITIORIAL NOTE

This discussion paper represents a distinct chapter in the economic analysis of non-profit sports. The origins of this research date back to 2013, following a large-scale data collection effort in late 2012. While a robust draft was completed in 2015 (in cooperation with Jan-Willem van der Roest) and peer-reviewed in 2016, the manuscript remained in the archives until now. We publish this revised work in early 2026, but with the theoretical lens of 2016 (no publication after that was included), as to stay true to its original intentions and context at that time. Naturally, one might ask: why release a paper based on data that is over a decade old? The answer lies in the unique research design as well as the insights this dataset offers into the "labor-leisure trade-off" for Dutch voluntary sports clubs. This paper is the first to quantify the tensions between traditional solidarity and the emerging "consumerist" attitude among members, trend that seems to only have accelerated since. It would be a waste of valuable empirical information to keep these findings hidden, as they may provide a crucial knowledge for understanding the commodification of the club-member relationship.

Naturally, the landscape of sports economics and research methodology has evolved significantly between 2016 and 2026. From the perspective of 2026, we recognize limitations in this early work that new research must address. Substantively, the binary choice between "volunteering" and "paying" has become more fluid with the rise of flexible memberships models and platform-based sports consumption. Methodologically, we also know that single-item survey questions often suffer from "hypothetical bias"—participants say they are willing to pay for a buyout, but their actual behavior often differs when real money is at stake.

This research may serve as a new puzzle piece of knowledge on the relationship between time, money and sports participation in the Netherlands, as well as the current SPRINTS (Sports Pricing Research to Increase The Sports participation; www.han.nl/projecten/2025/sprints/) research project. We believe that therefore it warrants a Discussion Paper, even in hindsight. Building on the hypotheses generated here, SPRINTS will move beyond hypothetical survey questions to employ advanced Discrete Choice Experiments (DCE) and field interventions. We aim to investigate not just if members want to substitute voluntary work for membership fees for money, but also research trade-offs with and between other aspects of sports participation. By releasing this 2015/2016 analysis now, we also provide the necessary historical context to fully appreciate the complex, shifting dynamics in modern sport supply and demand.

Willem de Boer, January 2026

NEDERLANDSE SAMENVATTING (SUMMARY IN DUTCH)

Dit onderzoek analyseert de bereidheid van leden van Nederlandse sportverenigingen om financiële middelen (contributie) uit te ruilen tegen middelen in tijd (vrijwilligerswerk) en omgekeerd. In een tijd waarin gemeentelijke investeringen in verenigingen teruglopen en tekorten aan vrijwilligers oplopen, wordt onderzocht of arbeidstekorten kunnen worden opgelost door financiële afkoop, of dat financiële tekorten kunnen worden opgevangen door meer vrijwilligerswerk. Gebruikmakend van het 'labor-leisure trade-off' model en de 'social exchange theory', analyseert deze studie data van 3.723 leden van tennis- en volleybalverenigingen.

Uit de ordinale en binaire logistische regressies blijkt een duidelijke sociaaleconomische scheidslijn. De resultaten ondersteunen de economische uitruil-hypothese: leden met een hoger huishoudinkomen zijn significant vaker bereid om meer contributie te betalen om zo geen vrijwilligerswerk te hoeven doen (de 'afkoop'-optie). Daartegenover staat dat leden met lagere inkomens vaker bereid zijn meer vrijwilligerswerk te doen in ruil voor een lagere contributie. Deze economische rationaliteit is echter verre van universeel; leden met een hoge tevredenheid en actieve vrijwilligers wijzen deze uitruil doorgaans af en geven de voorkeur aan de status quo. De bevindingen suggereren dat het monetariseren van vrijwilligerstaken een haalbare strategie is voor welvarende segmenten, maar dat dit risico's met zich meebrengt voor de sociale cohesie en wederkerigheid die centraal staan in het verenigingsleven.

Trefwoorden: sportverenigingen, vrijwilligerswerk, contributie, uitruil van vrije tijd en arbeid, sociale ruil theorie, substitutie van tijd en geld.