

Voluntary engagement in sports clubs: A behavioral model and some empirical evidence

International Review for the

Sociology of Sport

2014, Vol. 49(2) 227–240

© The Author(s) 2012

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1012690212455554

irs.sagepub.com**Eike Emrich**

Universität des Saarlandes, Germany

Werner Pitsch

Universität des Saarlandes, Germany

Jens Flatau

Christian-Albrecht-Universität zu Kiel, Germany

Christian Pierdzioch

Helmut-Schmidt-Universität, Germany

Abstract

Voluntary engagement is an important prerequisite for the production of club goods. Although unpaid, the individual decision for or against voluntary engagement can be regarded and formally modeled as a deliberate act of social exchange using elements of behavioral economics. We lay out a simple behavioral model that captures in a stylized way several motives (consumption of the club good, social recognition, human capital, etc.) that may explain why individuals volunteer. We then use results from an interview study to assess the quantitative importance of the different motives, and to shed light on dimensions along which the model can be extended in future research.

Keywords

Behavioral economics, social exchange, social recognition, sports clubs, voluntary engagement

With regard to the production of collective goods, Heckathorn (1989) described the difficulty in reconciling, on the one hand, the fact that the free-rider problem represents an

Corresponding author:

Eike Emrich, Universität des Saarlandes, Campus, 66123 Saarbrücken, Germany.

Email: e.emrich@mx.uni-saarland.de

important paradigm in economics and, on the other hand, the empirical observation that cooperation is a common, real-world phenomenon: '*In the real world, cooperation is neither rare nor fragile. Sustained patterns of cooperation frequently arise even under what might appear to be exceedingly inhospitable circumstances*' (Heckathorn, 1989: 79; italics added by the authors).

Vanberg and Buchanan (1988) described how 'cooperative clusters' form spontaneously and realize cooperation benefits (see also Popitz, 1968: 19pp. on 'solidarity cores'). This is primarily true and *rational* in the case of repeated interactions where actors can react to the action of others (see Axelrod, 1984: 11). At the same time, there is much experimental evidence to support Simon's (1957) assumption that rationality is 'bounded'. This has led to the development in recent years of a research approach called 'behavioral economics' (Fehr, 2002; Fehr and Gächter, 2002; Kahneman and Tversky, 1973; Kunreuther et al., 1978; for useful surveys, see Diekmann, 2008; Altman, 2006).

We use a behavioral-economics approach to set up a theoretical model of voluntary engagement in sports clubs. Our model features classical rational and behavioral elements. Methodologically, we opt for what Williamson (2006: 6) calls a 'pragmatic methodology' in order to cope with the complexity of the factors that may influence an individual's decision to do voluntary work in a sports club. We keep our model simple by identifying important factors that may help to explain voluntary engagement and by deliberately leaving other factors out of our model. To this end, we set up the model by including only a small number of variables that help to explain voluntary engagement. Finally, we bring the model to the data by means of a calibration exercise that uses results from an interview study that sheds light on the relative importance of the various elements of our model and thereby recovers why members of sports clubs do voluntary work.

State of research

Behavioral economics

Behavioral economics tries to explain human behavior by extending the classical economic model of a rationally acting *Homo Oeconomicus* to include psychological and sociocultural factors (Altman, 2006: XV). Behavioral economists do not reject mathematical modeling per se; rather, they modify the classical model *Homo Oeconomicus* in such a way that deviations from this benchmark model observed in experimental settings or the 'real world' (the paradox of voting, participation in demonstrations, etc.) can be reconciled with the rational behavior of actors. To rationalize behavior that is apparently at odds with predictions of the baseline *Homo Oeconomicus* model, it is necessary to modify, or extend, the preferences of *Homo Oeconomicus* (see also Opp, 1986) such that the resulting behavior no longer needs to be termed irrational but rather becomes explicable while maintaining the assumption of full rationality. For example, Field (2006: 169) discussed from an anthropological point of view the extent to which pro-social behavior can be interpreted as a selective advantage at a collective level ('group selection') by applying new approaches from evolutionary biology evolution-biology approaches. A partially inherently and partially culturally mediated preference

for cooperative behavior in groups is then rational because it supports individual gene transfer and stabilizes a position within a group (see also Ridley, 1997). The observability of this kind of 'altruistic' behavior towards group members, however, may require observability by third parties as a prerequisite.

Camerer (2003: 43) provided numerous references that illustrate how rational choice models can be extended to incorporate various forms of theoretically derived 'social preferences'. For example, a model accounting for a 'social preference' reflecting the desire to be treated fairly can help to explain rejection in dictator games (Camerer, 2003: 43pp.). A formal utility model by Fehr and Schmidt (1999) takes such social preferences into account in the form of weighted subtrahends of material benefit that assume the value nil in case of ('fair') uniform distribution of benefits. The subtrahends increase as the distribution of benefits becomes less uniform.

Modeling volunteering

On the side of theoretical analysis, the following motives for volunteer work have been discussed in the economics literature (Prouteau and Wolff, 2008: 316f.):

1. Volunteering as a means of producing common goods (Schiff, 1990; endogenous, pure *altruistic* motivation).
2. Volunteering as a means to have 'warm glow' experiences (Andreoni, 1990) or pleasure from the activity in itself (Deci, 1975; Deci and Ryan, 2000; endogenous, intrinsic motivation).
3. Volunteering as reflecting selfish motives. In this sense volunteer work can be viewed as, (a) an investment in human capital and social contacts that may help to produce future material labor income (Badelt, 1985: 69ff.; Day and Devlin, 1998; Erlinghagen, 2003) and (b) as a means to acquire immaterial goods, such as social recognition or prestige (Harbaugh, 1998).

Researchers have developed various formalized economic decision-making models that account for the different motives for why economic agents may decide to volunteer (Andreoni, 1990; Duncan, 1999; Harbaugh, 1998; Lipford and Yandle, 2009; Ziemek, 2006, to name just a few). The majority of these models, however, are tailored to capture important facets of volunteering in North America. Additionally, many of the models describe volunteer work in large, mainly public organizations or in organizations that produce public goods, such as, for example, the Red Cross. However, the very specific social setting of a sports club is likely to result in very specific motivation for its members to engage voluntarily, requiring the development of a specific model, as is done in this article.

In earlier sociological research, formalized microeconomic models of volunteer work in sport clubs have been developed by Flatau (2009), Emrich et al. (2010), and Schlesinger and Nagel (2011). The former applied an orthodox SEU model and emphasized the aspect of *socialization* and, thus, the duration of past membership in sports clubs as crucial for the decision to begin voluntary engagement. Schlesinger and Nagel (2011), in contrast, chose the frame-selection approach developed by Esser (1996, 2009). Deviating

from the economic approach of exclusively including utility and cost considerations into their model, they added the variable *specific involvement* as a relevant factor for the individual decision to volunteer. Thus, both approaches take into account sociological considerations to explain voluntary work in sports clubs (see also Esser, 2010: 45pp.; Opp, 2010: 63pp.; Esser and Kroneberg, 2010: 79pp.).

The social situation and the relevance of soft incentives

As Granovetter (1985) pointed out, economic action is always embedded in a social situation. The consequence is that, even for an elementary analysis, the logic of the situation has to be taken into account (Popper, 1957). This concerns not only the social micro-sphere as it is described and theoretically analyzed in the next section but also the social macro-sphere – that is, the societal conditions under which an individual lives and decides about her/his actions. When it comes to the characteristics of social embeddedness in modern Western societies, perhaps the most significant property of such societies is their high degree of individualization. Family and clan structures have increasingly dissolved. However, man has lived in small groups at most stages of human evolution. Consequently, man experiences some sort of inherent tension, facing individual needs, on the one hand, and the demands of a modern society, on the other hand. In particular, the needs for ‘belongingness’, ‘a place in his group’, and ‘the esteem of others’ (Maslow, 1943: 380p.) remain unsatisfied. Because these needs are not only natural but also seem to become stronger under conditions of economic prosperity and safety (Maslow, 1943: 380p.) – both highly realized for many in modern Western societies – individuals living in such a social situation are very susceptible to social incentives.

The preference structure of volunteers in sports clubs

The formalized exchange relationships in modern working life, with its function-specific exchange, rely on money as a generalized medium of exchange for all kinds of material goods. Economic agents face each other in their function-specific roles and thus have a *specific functional* relationship. Mutual recognition is not a necessary component of the exchange, which may be entirely limited to a person’s function or role (see Messing and Emrich, 2003, on the embedding of function-specific exchange in generalized exchange). However, in *generalized* exchange relationships, which are typical for smaller groups of agents like sports clubs, mutual recognition is very important as it consolidates the interdependent bonds of group members and thus helps to realize group targets (Molm et al., 2007). In smaller groups like sports clubs, the importance of mutual recognition, thus, can be assumed to reinforce the role played by social incentives for the emergence of voluntary engagement. This assumption is supported by the empirical findings reported by Michelutti and Schenkel (2009: 94), who find that ‘volunteers... seem to be particularly satisfied if they personally donate their service’.

At this stage of our analysis, it is important to differentiate between two forms of volunteer work: first, volunteer work that may help to produce goods for persons whom the volunteer usually does not know (for example, The Red Cross); second, volunteer work that may help to produce club goods for other club members, all of whom

contribute to the production of the club good at least by paying their membership fees (only club members can access the produced good/utility). In the second case, it is natural to assume that a volunteer knows the other club members or at least regularly meets them.

In the first case, altruism is a prerequisite for volunteer work because there is no return for the work unless there is another party that recognizes and values the voluntary work. In the second case, a volunteer produces goods for a small social group of acquaintances, some of whom might even be regarded as friends. In other words, the members of this social group, including the volunteer, can reap the benefits from the volunteer work. Thus, the volunteer can expect to receive gratitude, recognition, and esteem from the other members of the social group. Especially in small groups, the utility derived from the gratitude, recognition, and esteem of the other members of the social group is likely to be an important motive for volunteer work. In other words, soft incentives are likely to be particularly useful for explaining egoistically motivated voluntary work in sports clubs. A sports club, thus, can be interpreted as a special social structure, as defined by Coleman (1990: 274–282), in which people can achieve cooperation gains because mutual trust (that is, the result of gratitude, recognition, and esteem) reduces transaction costs independently of the closeness of the social structure (for ‘trust rules’, see Vanberg and Buchanan, 1988: 147p.).

Voluntary work as a result of mutually compatible individual rational decisions and social structures in a sports club: A simple model

The club form we consider is a type of organization in which members decide to pool resources (Vanberg, 1992), coordinate their subsequent distribution by the delegation of power to a specific authority, and thus ensure a certain degree of distributional fairness with respect to the produced good and services (for example, football). The purpose of founding a club is to produce a club good at a low price with the help of volunteers and to provide the good exclusively to its members. A formal membership is required to consume the club good (that is, consumption of the club good by non-members can be completely ruled out).

Economic studies of clubs typically limit the analysis to the link between the costs and benefits of club membership and the optimal club size as measured by the number of members that are necessary for financing the club services through payment of membership fees (Buchanan, 1965; for a comparison of the various economic approaches, see Sandler and Tschirhart, 1980). The institutional economic relationship between the recipients of services (club members) and the provider of the services (the club) is therefore reduced to the exchange of money (that is, membership fees) for services. The optimum size of the user collective can then simply be characterized by balancing the marginal utility and the marginal costs of hiring a new member.¹ In such a model, other types of utility that are being generated and enjoyed by becoming member of a club and, thus, elements of the theory of soft incentives that may help to explain the emergence of volunteer work in sports clubs, remain unexplored.

Accounting for soft incentives, we deduce a formal model of a sports club to set the stage for the empirical analysis in the succeeding section. Our purpose here is not to set up a model that provides a full-fledged explanation of individual decision-making in sports clubs. Rather, we use the formal model as a vehicle to structure our empirical analysis. For our study of volunteering in sports clubs, we choose a general decision-theoretic approach in the tradition of the SEU model (Becker, 1976; Coleman, 1990; Savage, 1954). Our model is tailored to clarify the different sources of costs and utility derived from volunteering and how costs and utility depend on social embeddedness. For simplicity, we also leave aside considerations regarding framing phenomena that are common in decision-making psychology but whose effects have so far almost only been studied in high-cost situations.²

As for the notation, p_{ij} denotes the probability of various alternative actions A_i , which result in utility U_j . We further make the following assumptions:

1. The purpose of the sports club is to produce services for the exclusive use of its members. We do not consider sports clubs that produce saleable services for nonmembers.
2. Members wish to (a) consume the services that are being produced by the sports club and (b) acquire social capital.
3. If it is not possible to consume the services in the long term, a member will leave the sports club after a period of time that is determined by loyalty because membership is usually associated with higher costs than nonmembership (see Hirschmann, 1970).³

To formalize the subjectively anticipated utility derived from voluntary work, we first formulate the core model of volunteer work before we study individual elements and special cases in more detail.

The core model: The decision for or against volunteering

In the core model, we consider the decision of a club member to provide volunteer work. The alternative action that a club member can take is passivity, that is, to not provide any volunteer work. For the moment, we leave aside the possibility to quit membership. The following two equations describe a member's benefits from the two actions:⁴

$$SEU_{vol} = U_{cg} (p_{pas} + p_{evol}) + U_{rec} + U_{con} - C_{vol} - C_{mf} \quad (1)$$

$$SEU_{pas} = U_{cg} p_{pas} - C_{mf} \quad (2)$$

where

SEU_{vol} : expected utility of the 'volunteering'

SEU_{pas} : expected utility of 'passivity'

U_{cg} : utility from consuming the club goods

U_{rec} : utility from the social recognition that comes with volunteering

- U_{con} : utility from contacts made through club membership (network creation, social capital)
- C_{mf} : membership fee
- C_{vol} : costs (mainly time and effort) of volunteering (measured in units of (dis-)utility)
- p_{pas} : probability that the club good will be produced even if the member does not volunteer
- p_{evol} : change in probability p_{pas} due to the member's commitment to volunteer⁵

Structural conditions

In addition to the assumptions made in the core model, some additional structural conditions play an important role in the decision for or against providing voluntary engagement. A special situation arises if, for example, the aim is to provide a volunteer service on an informal basis, such as in the form of baking a cake or helping to set up a tent for a club party. A member then has the option either to refuse to provide the voluntary service or to provide it zealously by, for example, baking a cake but not attending the club party and not consuming the cake. If the member refuses to provide the voluntary service once, he/she will encounter hardly any sanctions. Sanctions are likely to be imposed on this member only if he/she often refuses to provide a voluntary service and/or refuses to provide a voluntary service but, at the same time, consumes the service (Coleman, 1990: 269–282; Heckathorn, 1989: 79p.). In this regard, a club constitutes an institutional framework that makes it relatively easy to invoke emotionally supported sanctions, which Coleman termed ‘incremental sanctions’ (1990: 278–282; see also his example of a club member who refused to clean up on page 281p.; for experimental findings on emotionally supported sanctions, see Fehr et al., 2002: 20), and which make it difficult to refuse the provision of services *in the long* run. At the same time, exactly the same social structure may promote ‘zeal’ in others depending on the emotional connection to the social structure. In the end, the closeness of the social structure may increase the cooperation of its members, which is a prerequisite for the provision of volunteer services (Oliver et al., 1985: 525–528). In this respect, sports clubs illustrate Coleman’s theory (1990: 273–278) that social structures may exist in which free-riding and zeal coexist. As did Weber (1968), Coleman (1990: 356–358, pp. 284) emphasizes that the incentive to be zealous may stem from the positive motivation arising from sanctions imposed by more encouraging characters. These sanctions emerge easier in closed than in open structures. Concerning an individual club member, the effectiveness of such sanctions depends on the attitude towards the club. The higher the individual’s commitment to and identification with the club (Bhattacharya et al., 1995; Bussell and Forbes, 2007: 26), the higher his/her inclination to undertake a voluntary job. The development of this inclination is certainly the result of club internal socialization and thus depends on the club-specific values (that is, the structural conditions at the organization level) that can, for example, be perceived as the other members’ expectations concerning one’s actions.

Once the individual has reached a decision to provide voluntary work, the resulting voluntary engagement may become habitual (Handy et al., 2006). In economics, such habitual preferences have been explored in the literature on ‘habit formation’. Habit formation is rational because an individual may wish to ‘smooth’ decisions over time. In

other words, one can imagine a situation in which individuals who provide voluntary work in a sports club continue to do so even though the option 'passivity' yields a larger utility simply because such an individual dislikes changing his status as a volunteer. Habitual volunteering, however, may also reflect bounded rationality on the part of volunteers if they do not reflect, or even are not willing to reflect, the intertemporal dimension of their decision to volunteer. Irrespective of whether an individual acts rationally, one can imagine that an individual may neglect the temporary utility advantages that can be reaped by opting for 'passivity' (Hirschmann, 1970). Still, when the imbalance between utility and disutility persists and becomes disproportionately large, an individual is most likely to terminate providing volunteer work.

Altogether, these considerations demonstrate that when one characterizes voluntary engagement as an act of economic exchange, it is of key importance to account for the social situation at the macro, meso, and micro levels. The decision to either provide or *not* provide voluntary work significantly changes the expected utility of a rationally deciding individual who takes into consideration the behavioral elements of utility that form the core elements of our simple model.

The interview study

Our simple behavioral model features various elements of utility and costs that a member of a sports club may account for when deciding on whether to volunteer. We now present the results of an interview study that help to assess the relative importance of the various utility and cost elements. In addition, the findings of the interview study help to recover elements missing from our model.

To study the relative importance of the various utility and cost components which volunteers may take into consideration when deciding on whether to volunteer, we constructed a manual for oral interviews, including a total of eight questions regarding when volunteer work was started, what are the costs of volunteer work, and what utility is derived from voluntary work. The interviews also accounted for the *perceived* costs and utility of other volunteers. One purpose of the interviews was to validate the model's independent variables (deduction). The other purpose was to possibly detect variables not yet included in the model (induction). Thus, the interviews were conducted in a semi-standardized way. On the one hand, we instructed the interviewers to ask all the questions in the manual in every interview. On the other hand, we instructed them to give the interviewees enough time to talk about issues not covered in the manual and to pay attention to statements dealing with motivational aspects of voluntary work. Thus, even though we had developed a manual, the interviewers were instructed to conduct the interviews in an open way, that is, (a) to let the interviewees talk about issues apart from the questions in the manual and (b) to ask open questions (such as, 'What else do you like about your voluntary work?'). Altogether, 26 interviews with voluntary workers (13 worked at the management and administration level of their sport clubs) in south-western German football clubs were conducted using qualitative content analysis (Mayring, 2000). The interview transcripts were coded by interpreting the meaning of the interviewees' statements.

Table 1 summarizes how often interviewees mentioned the various cost and utility categories. Accordingly, consumption of the club good (U_{cg}) and social recognition (U_{rec}) seem to be important motivational factors for voluntary engagement. The following typical statements of interviewees' illustrate the importance of U_{cg} (1) and U_{rec} (2) (translated into English):

- (1) '... and then our coach wanted to leave and so I declared my readiness to do the job because it is quite difficult to find a coach in women's football...'
- (2) 'Well, in the club, sure, yes, I have been an honorary member for many years. There is no greater honor for a club member than to be an honorary member. And last year I received the [so-called] *honorary letter* from our regional football association'.

Contacts (U_{con}), especially those that may be useful for labor market purposes, seem to play a minor role, implying perhaps that they could be dropped from the formal model or that their importance could be scaled down by multiplying U_{con} by a small weighting factor.

The results of the interview study also revealed avenues along which our simple model could be extended. Specifically, the interviews clearly showed that intrinsic motivation, the direct gratification (U_{dg}) from volunteering (3), and the accumulation of

Table 1. Individual utility and cost from voluntary engagement in football clubs.

		Utility component	No. of mentions
Deductive	consumption of the club good (U_{cg})	own consumption	24
		consumption by family members	9
	social recognition (U_{rec})	club-internal	15
		club-external	7
	contacts (U_{con})	private	8
		business	5
Inductive	(seemingly) intrinsic gratification	contribution to sporting success	14
		passing on of experience	7
		contribution to organizational work	5
		compensation of everyday life	4
	human capital (knowledge)	useful for club-internal purposes	19
		useful for club-external purposes	18
Cost (C_{vol})		Kind of opportunity cost	
Deductive	expenditure of effort		35
		expenditure of time	
		time available for private purposes	21
	time available for business purposes	2	

knowledge and skills (human capital, U_{hc}), which may turn out to be useful for a business career ('learning by doing') (4), are important determinants of the decision to volunteer. According to the number of interviewee statements, the last determinant (accumulation of human capital) seems to be among the most important motives for providing volunteer work (Table 1). The following statements illustrate this result of the interviews:

- (3) 'It is simply attractive. I like working together with other people no matter if they are young or old, and I also like to pass on my experience in sporting as well as in human interactions'.
- (4) 'Well, I improved in dealing with people. I have also become more open-minded in business relations, negotiating some contracts'.

As discussed in the economics literature, volunteering may thus reflect, to a non-negligible extent, selfish motives as many volunteers seem to view their volunteer work as a form of investment in human capital that may help to produce future material labor income (Badelt, 1985: 69pp.; Day and Devlin, 1998; Erlinghagen, 2003). The acquisition of nonmaterial goods such as social recognition or prestige (Harbaugh, 1998), in contrast, seems to be relatively less important. Thus, skills in the form of human capital rather than social capital that comes in the form of contacts (U_{con}) seem to motivate individuals to provide volunteer work.

As expected, the costs of voluntary work (C_{vol}) mainly consist of time and effort spent on the provision of the voluntary work; the interviewees mainly responded that the opportunity costs of doing voluntary work come in the form of lack of time available mostly for private and very seldom for business activities (Table 1). Modeling opportunity costs in terms of an individual's foregone wage income thus seems to be of little importance in terms of the theoretical model.⁶

Conclusion and outlook

Against the background of our interview study, it is interesting to extend our formal model in future research by incorporating two additional utility components: intrinsic gratification (U_{dg}) and acquisition of human capital (U_{hc}). At the same time, to keep the model simple, utility from social contacts may be dropped:

$$SEU_{vol} = U_{cg}(p_{pas} + p_{evol}) + U_{rec} + U_{dg} + U_{hc} - C_{vol} \quad (3)$$

Thus, a key result of our study is that the expected utility of volunteers in sports clubs seems to comprise not only behavioral elements ($U_{rec} + U_{dg}$) but also 'neoclassical' elements (U_{hc}) and elements well known in the classic theory of club goods (U_{cg}). While derived from a small sample of interviews, this result illustrates that many strands of economic and sociological theory may be necessary to paint a picture of voluntary work in sports clubs that is as comprehensive as possible.

At the same time, however, care should be exercised regarding self-reported altruistic intrinsic motivation, as its self-attribution may be biased due to the higher social desirability of such behavior compared to a purely selfish motivation. With the interview technique that we used in our empirical study, it is not possible to distinguish whether contribution to

sporting success and the passing on of experience are ends in themselves or means to acquire recognition and esteem. Here, other methodological techniques should be applied. Moreover, given the limited scope of the sample of interviews we could analyze for the purpose of our study, further empirical research is necessary to gain additional insights into the relative importance of the various utility and cost components that our model features.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Notes

1. In the classic economic baseline model of clubs, the only modeling element that accounts for social embeddedness of club membership is a negative externality reflecting that, due to competition for the club good, an individual member's utility decreases as the total number of club members increases. See Mueller (2003) for a textbook exposition of the classic economic baseline model of clubs.
2. See Tversky and Kahnemann (1981, 1986) and Stocké (2002). For low-cost situations, see Diekmann and Preisendörfer (1998).
3. An exception arises in the case when the membership relates to goods in strictly limited supply (closed shop principle). Then the exit option could also involve higher costs than membership in this case.
4. We include the costs of membership fees in Equations (1) and (2) because we do not explicitly model the club member's budget constraint. Equations (1) and (2), thus, can be interpreted as a kind of indirect or 'reduced-form' utility function.
5. Voluntary work increases the probability that the club goods will be produced. If no more than one volunteer is needed to produce the club good, then $p_{\text{pas}} + p_{\text{vol}} = 1$.
6. Interviewees thus seem to view their voluntary work as a substitute for other private activities, where the total amount of leisure time being available is fixed.

References

- Altman M (ed.) (2006) *Handbook of Contemporary Behavioral Economics: Foundations and Developments*. New York and London: Sharpe.
- Andreoni J (1990) Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal* 100: 464–477.
- Axelrod R (1984) *The Evolution of Cooperation*. New York: Basic Books.
- Badelt C (1985) *Politische Ökonomie der Freiwilligenarbeit. Theoretische Grundlegung und Anwendungen in der Sozialpolitik*. Frankfurt and New York: Campus.
- Becker GS (1976) *The Economic Approach to Human Behavior*. Chicago, IL: The University of Chicago.
- Bhattacharya CB, Hayagreeva R and Glynn MA (1995) Understanding the bond of identification: An investigation of its correlates among art museum members. *Journal of Marketing* 59: 46–57.
- Buchanan JM (1965) An economic theory of clubs. *Economica* 32: 1–14.
- Bussell H and Forbes D (2007) Volunteer management in arts organisations: A case study and managerial implications. *International Journal of Arts Management* 9(2): 16–28.
- Camerer C (2003) *Behavioral Game Theory: Experiments in Strategic Interaction*. Princeton, NJ: University Press.

- Coleman JS (1990) *Foundations of Social Theory*. Cambridge, MA, London: Belknap.
- Day K and Devlin RA (1998) The payoff to work without pay: Volunteer work as an investment in human capital. *Canadian Journal of Economics* 31(5): 1179–1191.
- Deci EL (1975) *Intrinsic Motivation*. New York: Plenum.
- Deci EL and Ryan RM (2000) The ‘what’ and ‘why’ of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11: 227–268.
- Diekmann A (2008) Soziologie und Ökonomie: Der Beitrag experimenteller Wirtschaftsforschung zur Sozialtheorie. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 60(3): 528–550.
- Diekmann A and Preisendörfer P (1998) Environmental behavior: Discrepancies between aspirations and reality. *Rationality and Society* 10(1): 79–102.
- Duncan B (1999) Modeling charitable contributions of time and money. *Journal of Public Economics* 72(2): 213–242.
- Emrich E, Pitsch W and Flatau J (2010) Ehrenamtliche Leistungserbringung zwischen rationalem Kalkül und sozialer Verantwortung. *Sozialmanagement* 8(2): 11–32.
- Erlinghagen M (2003) Die individuellen Erträge ehrenamtlicher Arbeit. Zur sozioökonomischen Theorie unentgeltlicher, haushaltsextern organisierter Produktion. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 55(4): 737–757.
- Esser H (1996) Die Definition der Situation. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 48(1): 1–34.
- Esser H (2009) Rationality and commitment: The model of frame selection and the explanation of normative action. In: Cherkaoui M and Hamilton P (eds) *Raymond Boudon: A Life in Sociology*. Oxford: Bardwell, pp. 207–230.
- Esser H (2010) Das Modell der Frame-Selektion. Eine allgemeine Handlungstheorie für die Sozialwissenschaften? In: Albert G and Sigmund S (eds) *Soziologische Theorie kontrovers*. Wiesbaden: VS, pp. 45–62.
- Esser H and Kroneberg C (2010) Am besten nichts Neues? Replik auf Karl-Dieter Opp. In: Albert G and Sigmund S (eds) *Soziologische Theorie kontrovers* Wiesbaden: VS, pp. 79–86.
- Fehr E, Fischbacher U and Gächter S (2002) Strong reciprocity, human cooperation and the enforcement of social norms. *Human Nature* 13: 1–25.
- Fehr E and Gächter S (2002) Altruistic punishment in humans. *Annual Review of Sociology* 33: 43–64.
- Fehr E and Schmidt KM (1999) A theory of fairness, competition, and cooperation. *Quarterly Journal of Economics* 114(3): 817–868.
- Field AJ (2006) Group selection and behavioral economics. In: Altman M (ed.) *Handbook of Contemporary Behavioral Economics: Foundations and Developments*. New York and London: Sharpe, pp. 165–182.
- Flatau J (2009) Zum Zusammenhang von Sozialisation und ehrenamtlicher Mitarbeit in Sportvereinen – Erste Überlegungen unter Anwendung der Rational-Choice-Theorie. *Sport und Gesellschaft* 6(3): 258–281.
- Granovetter M (1985) Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91(3): 481–510.
- Handy F, Brodeur N and Cnaan RA (2006) Summer on the island: Episodic volunteering in Victoria, British Columbia. *Voluntary Action* 7(2): 31–46.
- Harbaugh WT (1998) The prestige motive for making charitable transfers. *AEA Papers and Proceedings* 88(2): 277–282.
- Heckathorn DD (1989) Collective action and the second-order free-rider problem. *Rationality and Society* 1(1): 78–100.
- Hirschmann AO (1970) *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.

- Kahneman D and Tversky A (1973) On the psychology of prediction. *Psychological Review* 80(4): 237–251.
- Kunreuther HC, Ginsberg R, Miller L, et al. (1978) *Disaster Insurance: Public Policy Lessons*. New York: Wiley.
- Lipford J and Yandle B (2009) The determinants of purposeful voluntarism. *The Journal of Socio-Economics* 38(1): 72–79.
- Maslow AH (1943) A theory of human motivation. *Psychological Review* 50(4): 370–396.
- Mayring P (2000) Qualitative content analysis. *Forum: Qualitative Social Research* 1(2). Available at: <http://nbn-resolving.de/urn:nbn:de:0114-fqs0002204>
- Messing M and Emrich E (2003) Sportsponsoring als Geschenksimulation und Status-Spiel. Diskussionsbeitrag zu einem anthropologischen Grundmuster. *Sportwissenschaft* 33(1): 17–32.
- Michelutti M and Schenkel M (2009) Working for nothing and being happy. Working for Nothing and Being Happy. The Determinants of the Satisfaction of Volunteers and Paid Workers. In: Destefanis S and Musella M (eds) *Paid and Unpaid Labour in the Social Economy*. Heidelberg: Physica, pp. 81–95.
- Molm LD, Collett JL and Schaefer DR (2007) Building solidarity through generalized exchange: A theory of reciprocity. *American Journal of Sociology* 113(1): 205–242.
- Mueller DC (2003) *Public Choice III*. New York: Cambridge University Press.
- Oliver PE, Marwell G and Teixeira R (1985) A theory of the critical mass. I. Interdependence, group heterogeneity, and the production of collective action. *American Journal of Sociology* 91(3): 522–556.
- Opp K-D (1986) Soft Incentives and Collective Action: Participation in the Anti-Nuclear Movement. *British Journal of Political Science* 16(1): 8–112.
- Opp K-D (2010) Frame-Selektion, Normen und Rationalität. *Stärken und Schwächen des Modells der Frame-Selektion*. In Albert G and Sigmund S (eds) *Soziologische Theorie kontrovers*. Wiesbaden: VS, pp. 63–78.
- Popitz H (1968) *Prozesse der Machtbildung*. Tübingen: Mohr.
- Popper KR (1957) *The Poverty of Historicism*. Boston, MA: Beacon.
- Prouteau L and Wolff C (2008) On the relational motive for volunteer work. *Journal of Economic Psychology* 29(3): 314–335.
- Ridley M (1997) *The Origins of Virtue*. New York: Penguin Books.
- Sandler T and Tschirhart JT (1980) The economic theory of clubs: An evaluative survey. *Journal of Economic Literature* 18(4): 1481–1521.
- Savage LJ (1954) *The Foundations of Statistics*. New York: Wiley.
- Schiff J (1990) *Charitable Giving and Government Policy: An Economic Analysis*. New York: Greenwood Press.
- Schlesinger T and Nagel S (2011) “Freiwilliges Engagement im Sportverein ist Ehrensache!” Ein Modell zur Analyse der Mitarbeitentscheidung in Sportvereinen. *Sport und Gesellschaft* 8(1): 3–27.
- Simon H (1957) *Models of Man: Social and Rational – Mathematical Essays on Rational Human Behavior in a Social Setting*. New York: Wiley.
- Stocké V (2002) *Framing und Rationalität. Die Bedeutung der Informationsdarstellung für das Entscheidungsverhalten*. München: Oldenbourg.
- Tversky A and Kahneman D (1981) The framing of decisions and the psychology of choice. *Science* 211: 453–458.
- Tversky A and Kahneman D (1986) Rational choice and the framing of decisions. *Journal of Business* 59(4): 251–278.
- Vanberg V (1992) Organizations as constitutional elements. *Journal of Constitutional Economy* 3(2): 223–253.

- Vanberg V and Buchanan JM (1988) rational choice and moral order. *Analyse und Kritik* 10(2): 138–160.
- Weber M (1968) *Economy and Society: An Outline of Interpretive Sociology*. New York: Bedminster Press.
- Williamson OE (2006) The Sociology and Economics of Organization: One View of the Dialogue. In: Bindseil U, Haucap J and Wey C. (eds) *Institutions in Perspective. Festschrift in Honor of Rudolf Richter on the Occasion of his 80th Birthday*, pp. 3–20. Tübingen: Mohr.
- Ziemek S (2006) Economic analysis of volunteers' motivations – A cross-country study. *The Journal of Socio-Economics* 35(3): 532–555.