

worker. Variation concerning sanction strength enters these models in the form of an abstract interval scale from zero to one (Flache and Macy, 1996; Heckathorn, 1990, 1993; Kandell and Lazear, 1992; Macy, 1993).

Second, despite a flourishing literature on influence tactics and compliance-gaining strategies inside and outside organizations (Kellerman and Cole, 1994), virtually no efforts have been made to operationalize the notion of sanction strength by linking it to the variety of compliance-gaining behaviours as they are found in real life. The bulk of the compliance-gaining literature generates nominal classifications of different types of sanctioning strategies, without modelling or measuring which of the strategies can be expected to be more 'severe' than the other. This leaves the research community in a highly ambiguous situation (for example, should we consider shouting angrily at a colleague in private a stronger sanction than calmly pointing out the mistake to the colleague during a company meeting?).

Finally, there is a gap between the theoretical literature on collective goods and informal control on the one hand and the vast social-psychological literature on influence strategies on the other. The former shows a strong emphasis on the second-order free-rider problem, that is, the fact that it is individually rational but collectively detrimental not to invest in sanctions, but makes little effort to operationalize the theoretical construct of 'sanction strength'. The latter offers a huge body of literature on influence strategy choice and classifications of compliance-gaining behaviour (ibid.), but most of this fails to incorporate the option of not sanctioning as a possible behavioural alternative.

As a result, the link between variations in the type of trouble, the willingness to sanction, and sanction strength, so far remains largely unexplored. It is the purpose of the present study to address this gap. Its goal is twofold: first, to develop an instrument to measure sanction strength; second, to model the impact of different types of trouble or grievances on informal control behaviour in high-trust organizations. The research problem that will be addressed can be stated as follows: how can the willingness to sanction and the choice of a sanction level in organizations be explained by differences in the severity, frequency and scope of grievances?

In what follows, we will first sketch a theoretical framework and, from this, derive some empirically testable hypotheses. A description of the research design and method, and a preliminary exploratory empirical test of the hypotheses, follow this. The chapter concludes with some observations for future research.

9. Norm violations and informal control in organizations: a relational signalling perspective

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INTRODUCTION

Processes of informal social control play a crucial role in the functioning of organizations. This is particularly relevant for so-called 'high-trust' settings in which governance of the employment relationship is achieved primarily through mutual adjustment in teams rather than by hierarchy. Consequently, organizational scholars have allocated much attention to the question of how informal control and peer pressure come about and what are the consequences both for the behaviour of individuals in organizations and for organizational performance. Informal control is conceived by many as the ultimate remedy for the flexible and efficient resolution of problems, whether caused by external (market) forces or by work-related processes inside the organization (Pennings and Woiceshyn, 1987). However, the question of which types of problems occur and how members of such high-trust organizations actually deal with them has, surprisingly, received little attention. The few studies which do tackle the role of grievances distinguish between the type, scope, seriousness and frequency of grievances and have found mixed effects on control strategy choice (for a brief review, see Wittek, 1999, pp. 40–42). More generally, previous research focusing on the link between grievances and informal control behaviour has three major flaws.

First, it is highly *undertheorized* when it comes to modelling sanction strength. Many researchers seem to assume implicitly that informal sanctions can be ordered according to their 'strength', but despite this hardly any efforts have been made to model the choice of different sanctioning levels. This is particularly disappointing since sanction strength is an essential explanatory variable in much formal work on the provision of collective goods and social dilemmas. These studies search for conditions that might stimulate or inhibit actors to bear the costs of sanctioning a co-

MODELLING SANCTIONING BEHAVIOUR: INCENTIVES OR SIGNALS?

At first sight, modelling the link between types of grievances and sanction strength seems to be a straightforward issue. Following the economic theory of incentives, one could argue that the willingness to perform a particular action or to refrain from it is a linear function of the size of rewards or punishments. One could call this the *incentive approach* to sanctions: (a) it assumes a single continuum of sanction strength, ranging from negative (punishments) to positive (rewards); (b) it assumes that the stronger the grievance (in terms of costs or losses), the stronger the (negative) sanction will be.

Like most theoretical frameworks inspired by neoclassical economic reasoning, the incentive interpretation of the link between grievance size and sanction strength has the advantage of being both parsimonious and rooted in a well elaborated micro-theory of action. The incentive approach therefore provides a useful starting point for theorizing about sanctions. Yet as research in (neoinstitutional) economics and other social sciences has repeatedly shown, empirical studies often yield results that are at odds with the predictions following from neoclassical economics. Many scholars in the social sciences therefore propose discarding economic reasoning as a whole. Others suggest retaining the theoretical core of the rational choice framework of economics, but to extend it with a theoretical framework which models individual actors as boundedly rational and socially embedded. The present chapter is an attempt to contribute to the development of such an extended theoretical framework.

Research in the bounded rationality framework suggests limitations to the straightforward incentive interpretation as it was outlined above. The first limitation is related to the single-continuum assumption of sanction strength. Evidence suggesting that it is not only the strength of a sanction that matters goes as far as the experiments related to operational behaviourism in the 1930s and reinforcement theory in the 1950s. Another shortcoming of the single-continuum assumption is that individuals are assumed to treat punishments and rewards similarly. An overwhelming body of research on the role of loss frames (Kahnemann and Tversky, 1979) and retributive justice (Griffith, 1989) shows that this assumption is questionable, to say the least. Thus there is reason to believe that people categorize negative and positive sanctions differently.

The second limitation of the incentive approach relates to the fact that the salient feature of a grievance is, above all, its severity in terms of costs to the offended person. The problem with this assumption is that it does not take into consideration various cognitive and attribution processes that were

found to fundamentally influence the interpretation of events (for a succinct overview, see, for example, Augoustinos and Walker 1995, pp. 60–96). As a result, the incentive approach cannot explain why grievances, despite being minor, nevertheless cause surprisingly high levels of escalation and emotional reactions. Likewise, it has difficulties in explaining why behaviour that causes considerable trouble often either is not sanctioned or only elicits a comparatively weak punishment (for ethnographic examples of such situations, see, for example, Wittek, 1999, pp. 105–109). Hence there is reason to believe that the incentive approach neglects some important factors that are considered to affect the perception of grievances and their severity.

In what follows, an alternative approach will be developed which is able to tackle these two problems. We will refer to this perspective as the relational signalling approach (see also Siegwart Lindenberger, 1997, 1998, in Chapter 3, this volume; Mühlau, 2000; Wielers, 1997). In a nutshell, it argues (a) that the crucial quality of grievances as well as of informal sanctions is not their seriousness, or their strength, respectively, but whether or not they convey relational signals; and (b) that individuals categorize negative sanctions into two independent cognitive dimensions, depending on whether the sanction conveys negative or positive relational signals.

Relational signals are cues in the behaviour of other persons that tell us something about the salience of their solidarity frame; that is, their willingness to maintain a mutually rewarding relationship with us in the future. Given the important role that social relations play in achieving our goals, we not only constantly screen the actions of others for their potential relational signalling character, but we also anticipate the potential relational signalling aspects of our own behaviour. This implies that, when we are evaluating each other's behaviour, the human mind classifies it into one of three cognitive categories: behaviour that conveys positive relational signals, behaviour that conveys negative relational signals, and behaviour that has no signalling character. Consequently, it can be hypothesized that negative sanctions will not be perceived along a single continuum, ranging from weak to strong – as the incentive approach would argue – but rather will be cognitively represented along two mutually exclusive dimensions representing positive, negative or no relational signals. That is, negative sanctions are first evaluated according to their quality (positive or negative relational signal). It is within these qualitative dimensions that their strength or intensity will be assessed. The hypotheses of both approaches can be summarized as follows.

Unidimensional sanction hierarchy hypothesis (IN-1): negative sanctions represent a single latent hierarchy of escalation, ranging from weak to strong.

Multidimensional sanctioning hierarchy hypothesis (RS-1): negative sanctions represent two latent hierarchies of escalation, one reflecting positive and the other negative relational signals.

If sanctions convey relational signals, rational actors can be assumed to anticipate the signalling character of their sanctions. This implies that models of sanctioning behaviour need to predict under which circumstances an individual selects sanctions with a negative or a positive relational signalling character in order to react to a grievance. Attribution research (Hewstone, 1983; Jaspars *et al.*, 1983; Augoustinos and Walker, 1995) has shown that the interpretation of events and behaviour of others is subject to numerous biases, and that the related attribution processes matter in terms of how we behave towards others. However, despite its accomplishments, attribution theory is still criticized because 'The model ignores how individuals may differ in how they attribute, and ignores how interpersonal relations, affect and evaluate... and the relative group memberships of the attributer and the object of attribution all might affect the attribution process' (Augoustinos and Walker, 1995, p. 93). Thus, though attribution theory points to the importance of incorporating cognitive processes that filter our interpretations of other people's behaviours and thereby are likely to shape our subsequent behavioural responses, it still offers little guidance for the development of hypotheses on how interpersonal relations and relational signals might affect sanctioning behaviour.

A more promising solution to this problem can be found in a closer examination of framing processes. Relational signalling theory assumes that individuals define ('frame') the situation in terms of only one overriding goal (Lindenberg, 1993; Braspenning, 1992). This goal is called the salient goal. Other goals may be present at the same time. However, such background goals do not define the situation, but have a negative or positive influence on the salience of the main goal. The stronger the background goal becomes, the more likely it is that it will replace the main goal. Such a situation is called a frame switch. Though the number of possible frames may be unlimited, framing theorists have concentrated much of their efforts on the study of two interrelated classes of frames: gain and loss frames on the one hand and relational frames on the other.

In a number of experiments concerning the loss frame, it could be shown that actors tend to take more risks in situations described in terms of losses rather than gains. In other words, people weigh losses as being heavier than gains of the same amount. Two important conclusions have been drawn from research on the loss frame. They have been summarized in the so-called 'loss hypothesis', which states (Lindenberg, 1993, p. 24): '(a) the likelihood that avoidance of uncompensated loss dominates other possible

frames in any given situation grows disproportionately with the size of the loss; and (b) the costs incurred in pursuing this goal may be higher than the (subjective) value of the assets before the loss occurred'.

Studies dealing with the effects of relational frames on economic transactions have been mainly interested in how different solidarity frames reduce the salience of the gain frame (Ligthart, 1995; Ligthart and Lindenberg, 1994). This branch of framing theory distinguishes two different types of solidarity frames (Lindenberg, 1988). If norms of strong solidarity are present, the salient goal of an actor is to conform to group norms. In the case of weak solidarity, gain seeking is the dominant frame, but it is tempered by norms of strong solidarity. In both cases, 'keeping the relationship going' will be present as a goal. However, whereas in strong solidarity the obligation of individuals will be to the group rather than to a specific other individual actor, in weak solidarity obligation is bilaterally defined. Finally, opportunism is a situation where the goal of pure gain seeking is not tempered by solidarity considerations.

While the link between solidarity relations and the gain frame has received much attention, this does not hold for the interrelationship between losses and solidarity relations. However, it is exactly this combination which provides the key for modelling the interrelationship between grievances and sanctioning behaviour. A solidarity relationship will sensitize both transacting parties not to inflict losses on each other. Moreover, in a functioning solidarity relationship, each party will constantly screen the other's behaviour for cues that tell them something about the other party's intentions to maintain the relationship and to refrain from opportunistic behaviour. Nevertheless, owing to incomplete information and complex interdependencies, negative externalities may actually occur even within very strong solidarity relationships. Negative externalities create losses for the affected person. Consequently, one would expect that the salient frame of the offended party would be the loss frame. If the loss hypothesis is correct, relatively small increases in the size of the loss will trigger disproportionately harsh reactions. In the extreme case, the affected individual will be willing to invest more resources to reach compensation than the value of the lost assets. However, within a solidarity relation, two conditions hold: (a) the solidarity frame tempers the gain frame. Therefore, actors are strongly inclined and expected to avoid actions that could produce losses for the other party; (b) the solidarity frame tempers the loss frame. As long as an externality is not seen as evidence for a decreased general inclination of its producer towards loss avoidance, losses are less likely to produce a loss frame. That is, he or she will receive the 'benefit of the doubt'.

From these assumptions the following conclusions can be drawn. First,

in a functioning solidarity relationship, the person confronted by a loss caused by an externality of the other actor will assess whether the behaviour is an accident or an indication of a decreasing solidarity frame of the offender – a negative relational signal. In the first case, solidarity considerations will temper the loss frame, and consequently the offended party will take care that any subsequent sanctioning does not convey a negative relational signal. In the second case, solidarity considerations will switch into the background, so that relational signalling considerations will be less salient in the selection of a sanction. Sanctioning behaviour is thus likely to escalate.

Second, where the offender and the offended do not have a functioning solidarity relationship, they will not screen each other's behaviour for relational signals. This implies that an offended person will evaluate the grievance purely according to the losses it causes. Since there are no solidarity considerations to temper the evaluation, the likelihood that the offended party will experience a loss frame increases, and so does the tendency to use disproportionately harsh sanctions with a high negative relational signalling value. Figure 9.1 gives a simplified graphical representation of the proportionality and the escalation hypothesis.

Proportionality hypothesis (IN-2): the larger the perceived loss, (a) the more likely active sanctioning becomes, and (b) the higher the level of negative sanctions, independent of the signalling character of the loss.

Escalation hypothesis (RS-2): The stronger the negative relational signalling character of a loss, (a) the more likely active sanctioning becomes, and (b) the higher the level of negative sanctions, independent of the strength of the loss.

Finally, the incentive approach and the signalling approach yield different predictions about losses that affect the group as a whole and losses that are limited to a single individual. In the incentive approach, individuals are considered as calculating how particular events or decisions will affect their cost-benefit equation. From this perspective, the fact that somebody else may be confronted by a similar problem or loss does not feature. The person affected by a negative externality will evaluate whether it pays to sanction the offender, and to select the type of sanction that will yield the highest net benefit. However, this reasoning can be refined. Building on insights from economic theories of collective action, it can be argued that, in settings where more than one person is affected by the negative externality of a third party, the collectivity has to solve the second-order free-rider problem, that is, the dilemma that everybody hopes that somebody else will allocate a sanction. Thus it can be argued that compared to situations in

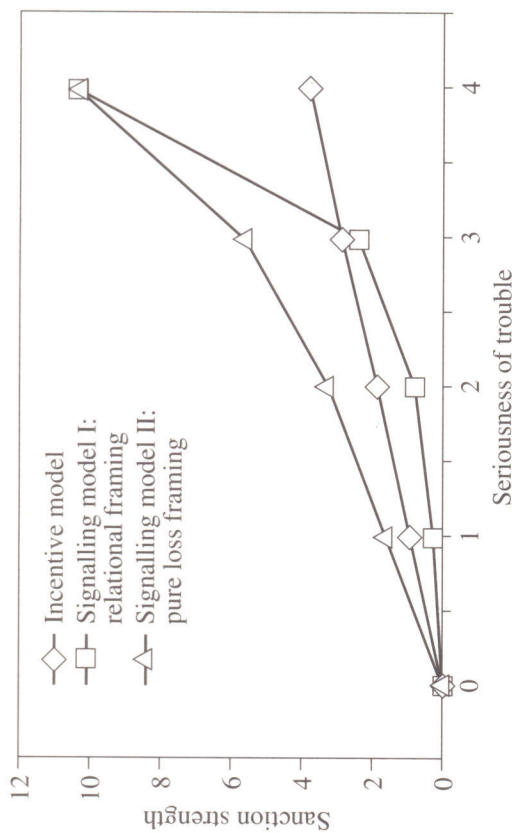


Figure 9.1 Incentive and signalling models of sanctioning behaviour

which only a single individual is confronted by an externality, losses affecting a group will less often lead to active sanctioning efforts, and the strength of the sanction will be weaker.

Relational signalling theory yields a different prediction. Here it is assumed that in settings in which, owing to high levels of functional interdependence, individuals are likely to be confronted with negative externalities that simultaneously affect more than only a single person, strong solidarity norms will emerge in order to prevent the production of these negative externalities (Lindenberg, 1993). Norms of strong solidarity favour a collectivist orientation by putting a premium on generalized exchange and limiting restricted exchange. Because of the vital role that norm conformity plays in avoiding the production of negative externalities, members of such strongly solidary groups have an interest in maintaining their own frame stability. Opportunity costs of sanctioning are pushed into the background. Since active social control will also yield peer approval, it will actually become an attractive alternative to passivity. Hence relational signalling theory predicts that problematic behaviour that troubles a whole group will be more likely to result in active sanctioning efforts and higher levels of escalation than problems that only affect a single individual.

Free-rider hypothesis (IN-3): Losses affecting the whole group will (a) either have no effect on sanctioning behaviour or be less likely to evoke

active sanctioning efforts, and (b) result in weaker sanctions than losses that only affect a single individual.

Group obligation hypothesis (RS-3): Losses affecting the whole group will (a) be more likely to evoke active sanctioning efforts, and (b) result in stronger negative sanctions than losses that only affect a single individual.

Note that the group obligation hypothesis holds only in settings in which strong solidarity defines the relationships in a group. In business and organizational settings, strong solidarity is probably the exception rather than the rule. The group does not play a role in weak solidarity relationships, the latter being far more common in business settings. In such cases, group-level externalities will have no effect on the willingness and strength of sanctioning behaviour.

Table 9.1 provides an overview of the hypotheses of the signalling and the incentive approaches.

Table 9.1 Overview of hypotheses

Variable	Incentive approach	Signalling approach
Sanctions	Unidimensional Proportionality	Multidimensional Escalation
Grievance severity	+	0
Grievance frequency	0	+
Grievance scope	Free-rider –	Group obligation +

DATA AND METHOD

Given that previous attempts to assess the cognitive dimensions and signalling character of grievances and sanctions are scarce, the empirical part of this study is exploratory in nature. A research design was needed that could capture *intra*-individual variations in the perception of grievances and subsequent behavioural choices. Vignette analysis (Rossi, 1979) fulfils this requirement. The data consist of the aggregated responses from 19 managers, each of whom indicated for eight hypothetical grievance situations to what degree he considers using 12 different types of sanctions. Thus the study should be considered as an attempt to uncover the cognitive representations of sanctions and grievances through an in-depth investigation of a single group, rather than as an effort to achieve generalizable conclusions.

The Organization

Data were gathered from all members of the management team of a German paper factory (Wittek, 1999). The 19 managers described their team as a 'trust culture'. The factory is situated in a village with 800 inhabitants in southern Germany. When fieldwork started in 1995, the organization had 170 employees and two paper machines. After a bankruptcy in 1993, the company was taken over by a German multinational, which decided to invest 40 million German Marks to enlarge the site by adding a new production hall and a third paper machine. During the observation period this project – and the realization of the deadline of 1 September 1995 – comprised the most central event in the factory. During this phase the managers had to cope with a double workload. Besides their individual function in the daily production process, they were now also responsible for the successful realization of the project. Interdependence between them and the necessity to coordinate and cooperate reached heights that, heretofore, were unknown. Stable membership, frequent unscheduled lateral and vertical communication, and weekly meetings characterize the team in which most of the managers participated on a regular basis. The average team member was 41 years old (SD 10.9) and had worked 13.2 years (SD 11.8) for the factory. All of them were male. Two-thirds of the managers had a degree in engineering. There were seven departments: production, the chemical lab, maintenance, logistics, personnel, technical customer service and a project department. Data collection was carried out when the joint project was in full operation. Evidence from participant observation and a survey confirms the self-perceptions of the team members as a highly solidary work unit operating on the basis of trust rather than hierarchical control (see Wittek, 1999, pp. 86–100, 122–34).

Independent Variables

Vignette analysis (Rossi, 1979) was used to gather data on grievances and sanctioning. Eight vignettes, each one printed on a separate card, were distributed to 19 managers. Each vignette contained a hypothetical situation. They had in common that a hypothetical member of the team made a mistake.

The situations, though hypothetical, should reflect events that could happen in real life. They were based on background knowledge gathered during the first three months of participant observation. Four types of events were chosen:

Situations 1 and 2 ('Passed over in Decision', strong bilateral externality)
A group member (once/repeatedly) has been passed over in the decision-

making process by another colleague. The passed colleague, consequently, has to cancel a booked holiday.

Situations 3 and 4 ('Delayed Information', weak bilateral externality) A group member (once/repeatedly) failed to receive, in sufficient time, relevant information from another colleague. He therefore has to cancel a long-planned personal date.

Situations 5 and 6 ('Breach of Trust', strong group externality) A group member (once/repeatedly) passed confidential information to a person outside the group. This created conflicts in every department and (once/repeatedly) culminated in the refusal of the workers to work during the Easter holiday.

Situations 7 and 8 ('Collective Decision', weak group externality) A group member (once/repeatedly) took a decision that should have been a collective decision. The result is that two additional meetings had to be held, lasting long into the night.

The situations sketched in the vignettes varied along three dimensions, which represent the three independent variables of this study.

Grievance severity

This is the major variable used to test the predictions of the incentive approach. It covers whether the consequences of the problem were relatively serious or relatively trivial. Two situations were assumed to be experienced as relatively serious. The first one – having to cancel a booked holiday because a colleague took an important decision without consulting you – was considered by the managers to be a very extreme situation which would most probably affect only the highest ranks of the company. They did not, however, consider it a completely impossible scenario. The second – a team member passing confidential management team information to the shopfloor, and this resulting in a factory-wide conflict with the shopfloor refusing to work overtime during Easter holiday – was considered to be much closer to real life, since the union representative and the chief operating officer were actually negotiating this issue during the observation period. The remaining two situations – having to cancel a long-planned personal appointment, and having to attend two additional evening meetings – were assumed to represent relatively less severe grievances, since they were found to occur frequently during the observation period.

Grievance frequency

Each of the four situations was presented twice. The text was identical and differed only in the use of the word 'once' or 'repeatedly'. The former

denotes that it was the first time that the member had caused the problem, whereas the latter indicates that the same person had caused the same trouble at least once in the past. This factor intends to manipulate the relational signalling character of the grievance. It is based on the idea that the repeated production of the same type of externality by the same person will be seen as evidence that the actor's willingness to avoid the production of losses is decreasing. The actor violates the rule of loss avoidance despite earlier sanctions; that is, he is aware of the negative consequences of his action for others but nevertheless makes no effort to change his behaviour. Hence, in the present study, the repeated occurrence of the same type of troublesome behaviour is seen as a negative relational signal, whereas a single incidence is seen as not having a negative relational signalling value.

Grievance scope

The third dimension covers whether the mistake had negative consequences only for a single group member (situations 1–4) or for the group as a whole (situations 5–8).

Dependent Variables

Control strategy choice

Having looked at the eight cards with the vignettes, respondents then received a questionnaire. In randomized order, each page contained one of the eight situations, followed by the list of 12 control strategies, again in randomized order. Each respondent was asked to imagine that the situation at the top of the page had recently occurred in their team, and that he was playing the role of the victim or one of the victims. For each control strategy the respondent then had to rate on a scale from one to five whether he regarded this reaction as being very likely, likely, unlikely, very unlikely or nearly impossible to occur in such a situation.¹ Thus, for eight different types of grievances, each of the 19 respondents indicated his inclination to make use of 12 different sanctions, resulting in $n = 1824$ observations. The complete list of control strategies and the items are listed in Table 9.2.

Control Variable

To control for the potential influence of position in the hierarchy, the formal position of a manager is included as a control variable. It has two levels: superior (applying to department heads) and subordinate (applying to their subordinates and assistants).

Table 9.2 *Typology of control strategies*

Type	Label	Translation of item
Public	Public negotiation	Soberly discussing the problem during a meeting
	Public arguing	Accusing deviator during a meeting
Formal	Vertical mediation	Asking the superior to talk to deviator
	Authority enforcement	Complaining to superior about deviator
Indirect	Information seeking	Asking opinion of colleagues
	Lateral mediation	Asking a colleague to talk to the deviator
Direct	Gossip	Complaining to a colleague
	Bilateral negotiation	Personally asking deviator to change behaviour
Unilateral	Bilateral arguing	Personally complaining to the deviator
	Retaliation Avoidance	Retaliating, when the opportunity arises
No sanction	Resignation	Avoiding interaction
		Keeping one's temper and doing nothing

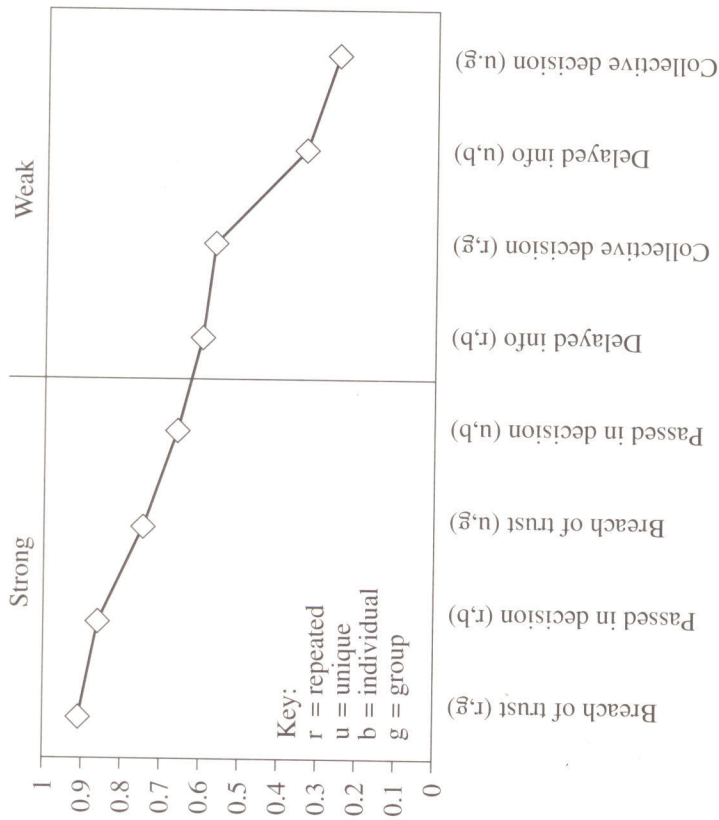
Manipulation Checks

Grievance severity

In order to assess the perceived severity of the eight types of grievances, after completing the questionnaire respondents were again given the cards with the vignettes and asked to rank the eight situations according to the severity they attached to each event. They were then asked to rate every situation on an interval scale. For that purpose the situation with rank number 1 was fixed as 100 per cent 'severe' on a unipolar scale. The mean ratings of the eight situations in Figure 9.2 give a first indication of the relative weight attached to each type of grievance. The events 'repeated breach of trust' and 'repeatedly being passed when a decision was taken' received the highest scores. Ranks three and four are occupied by their unique equivalents. Repeatedly withholding information is regarded as being a worse offence than that of repeatedly making a decision based only on one's own authority. For further analysis, the first four strategies are considered as strong externalities, the last four as weak externalities.

Appropriateness of sanctioning strategy

In order to assess the relational signalling character of sanctions, respondents were also handed cards with the 12 control strategies, which they first

Figure 9.2 *Severity of grievances*

ranked according to the criterion, in general, how appropriate were each of the strategies to their work context. They were then asked to rate the appropriateness of each strategy on an interval scale. For that purpose, the strategies with rank number 1 and rank number 12 were fixed at +100 per cent 'appropriate' and -100 per cent 'inappropriate', respectively, on a bipolar scale. The mean appropriateness ratings are represented in Figure 9.3.

ANALYSES AND RESULTS

Unidimensional versus Multidimensional Sanctioning Hierarchy

Technically speaking, the existence of a sanctioning hierarchy implies that it is possible to represent the preferred reactions of all members of the population on at least one latent dimension. Though there are different ways to test this assumption, multidimensional unfolding was chosen (van Schuur and Post, 1990). The rationale underlying this choice is a theoretical one.

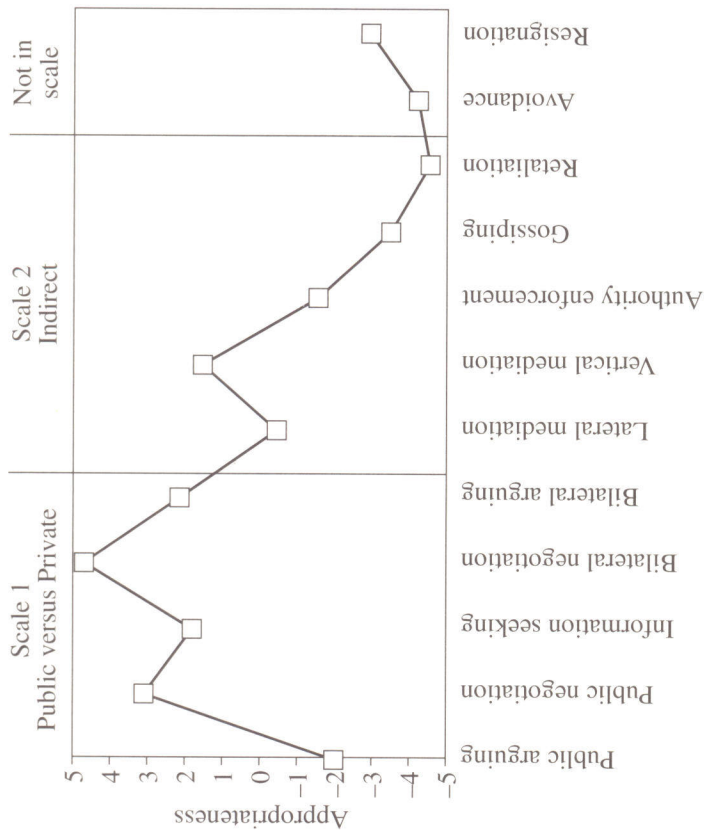


Figure 9.3 Appropriateness of sanctions

First, the theory predicts that under certain circumstances, such as the repeated occurrence of a loss, actors will not consider positive strategies to be adequate, but will immediately prefer negative ones. In a cumulative model like that of Mokken, actors choosing negative strategies will first have to 'pass' positive control strategies. Second, the technique has to be able to identify more than only one latent dimension in the data. Multidimensional unfolding satisfies both conditions.

The eight matrices (one for each situation) containing the 12 responses of 19 subjects were stacked, so that each respondent appears eight times in the data set. Values 1 (very likely) and 2 (likely) were coded as preferred values. MUDFOLD detected two scales (see Tables 9.3 and 9.4). The algorithm dropped the items 'Avoidance' (preferred in 5 per cent of the cases) and 'Resignation' (preferred in 7 per cent of the cases); that is, they do not form part of the scales.

The first scale consists of five items. It clearly shows the transition from public to private modes of sanctioning. That is, public control is perceived as representing a lower level of escalation than private strategies. Scale two

Table 9.3 MUDFOLD scale 1, 'Public versus Private Control'

Control strategy with scale score	P(I)	H(I)	OBS.	EXP. Error	SD(H) Error	T(H)
1 Public arguing	0.23	0.80	10	49.3	0.1434	5.5613
2 Public negotiation	0.68	0.55	44	97.5	0.0863	6.3536
3 Information search	0.61	0.51	49	100.5	0.0799	6.4158
4 Bilateral negotiation	0.87	0.55	35	77.6	0.0813	6.7505
5 Bilateral arguing	0.70	0.64	24	65.9	0.0948	6.7065

Note: N = 152, H = 0.59, T(H) = 7.51; P(I) = percentage of respondents who mentioned stimulus; H(I) = scalability value for stimulus.

Table 9.4 MUDFOLD scale 2, 'Indirect Control'

Control strategy with scale score	P(I)	H(I)	OBS.	EXP. Error	SD(H) Error	T(H)
1 Lateral mediation	0.14	0.88	1	8.6	0.3686	2.3981
2 Vertical mediation	0.58	0.95	1	19.7	0.1874	5.0673
3 Authority enforcement	0.37	0.90	2	19.4	0.1794	4.9994
4 Gossiping	0.16	0.89	2	18.6	0.1965	4.5411
5 Retaliation	0.05	1.00	0	10.0	0.2867	3.4874

Note: N = 152 responses (19 subjects rating 8 situations), H = 0.92, T(H) = 5.20; P(I) = percentage of responses in which stimulus was mentioned; H(I) = scalability value for stimulus.

also consists of five items. Four of them represent strategies of indirect social control, where the controller makes use of a third person to bring the target back into line.

The two-dimensional solution provides supporting evidence for the first relational signalling hypothesis (RS-1), and disconfirms the hypothesized unidimensional sanction hierarchy of the incentive approach (IN-1). This conclusion is further strengthened by the fact that four of the five strategies in the public-private control scale are regarded as appropriate, while four of the five strategies in the indirect control scale are perceived as inappropriate reactions.

Note that in the overall rating of the appropriateness of the strategies in the public-private scale, only public arguing received a negative score. This strategy occupies one extreme of the scale. At the other extreme one finds the analogous confrontational strategy for the private context, bilateral arguing. Both strategies are followed by their positive equivalent: soberly

discussing the problem during a meeting and discussing the problem personally with the trouble maker. The latter is also the most preferred stimulus in the whole set of reactions (87 per cent mentioned it as likely or very likely). The centre of the scale is occupied by the strategy 'asking colleagues for their opinion'.

As in the first scale, there is a gradual transition in the indirect control scale from strategies rated as appropriate to a final strategy that is rated as inappropriate. The first two items represent the activation of a mediator. In the first case, the mediator is a colleague at the same hierarchical level. In the second case, it is the superior. Note that vertical mediation is much more frequently chosen than lateral mediation: 58 per cent of the respondents mentioned the invocation of the boss as very likely or likely, compared to 14 per cent who regard lateral mediation as a viable option. Further, while lateral mediation received a slightly negative overall rating, vertical mediation is generally accepted as an appropriate strategy. From the items in scale two, vertical mediation is by far the most preferred control strategy. The last three items of the scale contain forms of indirect control that have a clearly negative character: complaining to the superior or to colleagues about the deviator, as well as retaliation. The latter is situated at the lowest end of the scale: only 5 per cent of the respondents mentioned it as a reaction that would be likely.

Two items have been dropped by the scaling algorithm: 'Avoiding further interaction with the trouble maker', and 'Keeping one's temper and doing nothing'. Both items are mentioned by only a very small fraction as likely reactions (5 per cent and 7 per cent, respectively). This is a significant finding because resignation reflects the absence of a control effort, and avoidance represents a unilateral action – and both strategies represent behaviour which, compared to the other items in the list, is not easily visible or recognizable, and therefore has no relational signalling value.

In sum, there are at least two latent dimensions underlying sanctioning behaviour, as predicted by the signalling approach (RS-1): one continuum ranging from public to private forms of social control, and another one ranging from constructive forms of indirect social control in the form of third party mediation to rather destructive manifestations like gossiping and retaliation. There seems to be a shared conception concerning the rank order of control strategies according to their appropriateness. However, these form not one but two unidimensional scales, dominated by either negatively or positively evaluated strategies. Overall, these results favour the relational signalling approach, and disconfirm the predictions of the incentive approach (IN-1).

Proportionality Effect versus Escalation Effect

In order to test the remaining hypotheses, the scale values of the two unfolding scales as well as the variables 'resignation' and 'avoidance' were used as the dependent variables in a multivariate analysis of variance.² A 'one between, three within' design was chosen. It contains the following factors and factor levels: (a) the first within subjects factor was the *severity* of the grievance (weak versus strong); (b) the second within subjects factor represents the *frequency* of the grievance (unique versus repeated); (c) the third within subject factor covers the *scope* of the grievance (affecting only a single individual or the whole group); (d) formal *rank* is included as a between subject control variable (superior versus subordinate).

Generally, the null hypothesis that the mean likelihood of choosing a strategy will be the same for each of the eight situations can be rejected for both scales and the item 'resignation', whereas no significant effects were detected for the item 'avoidance'. The results of the analysis are summarized in Tables 9.5–9.7.

The *proportionality hypothesis* of the incentive approach predicted that the likelihood of sanctioning as well as the sanction level are a direct function of the severity of the grievance, independent of the relational signalling character of the grievance. Translated into the current research design, this would require that grievance severity have (a) a negative main effect on resignation and (b) a positive main effect on both sanctioning hierarchies. Note that, from an incentive perspective, one would also expect that the repeated production of trouble by the same person will not have an impact on sanctioning behaviour: what counts for a rational actor is purely the costs that result from the current externalities produced by somebody else. Externalities that have occurred in the past and that have been sanctioned are irrelevant for the cost-benefit calculation of whether or not and how to react to a current grievance, since it does not matter who produced them.

The results provide only partial support for the *proportionality hypothesis*. First, the likelihood of resignation is in fact significantly lower for strong compared to weak grievances, as predicted by IN-2a. Second, grievance severity also has a significant impact on the public-private continuum of social control: the stronger the grievance, the more likely the choice of private control strategies becomes. However, no significant relationship could be detected between grievance severity and the continuum of indirect control. Thus, the second half of the proportionality hypothesis (IN-2b) could only partially be supported by the data.

The *escalation hypothesis* of the relational signalling approach predicted that the likelihood of sanctioning and the level of negative sanctions increase with the negative relational signalling character of the

Table 9.5 Results of MANOVA

Independent variable	Scale 1 Public-private		Scale 2 Indirect		Item Resignation	
	F	p	F	p	F	p
Hierarchy (between subjects)	0.00	1.000	0.03	0.872	1.45	0.245
Severity	6.63	0.020	0.30	0.593	13.69	0.002
Hierarchy * Severity	0.41	0.528	0.30	0.593	3.85	0.066
Frequency	0.01	0.914	16.22	0.001	13.37	0.002
Hierarchy * Frequency	5.07	0.038	2.03	0.172	13.37	0.002
Group	0.56	0.466	0.28	0.603	0.43	0.523
Hierarchy * Group	0.01	0.927	0.28	0.603	0.16	0.690
Severity * Frequency	5.23	0.035	2.14	0.162	0.81	0.381
Hierarchy * Severity * Frequency	0.66	0.428	1.34	0.263	2.34	0.144
Severity * Group	1.37	0.258	0.10	0.760	9.84	0.006
Hierarchy * Severity * Group	0.18	0.675	0.10	0.760	0.08	0.779
Frequency * Group	0.40	0.538	0.16	0.698	1.01	0.330
Hierarchy * Frequency * Group	0.08	0.785	0.97	0.338	2.88	0.108
Severity * Frequency * Group	0.00	0.981	2.42	0.139	1.28	0.274
Hierarchy * Severity * Frequency * Group	0.09	0.763	0.75	0.400	1.96	0.179

Notes: Between subjects factor: hierarchy (high v. low); within subjects factor: grievance severity (strong v. weak), grievance frequency (repeated v. unique), grievance scope (group v. individual); df = 1, n = 152 observations on each dependent variable (based on the responses of 19 respondents to 8 situations). Bold figures represent significant results ($p \leq 0.05$). Convention for degrees of freedom represented by df. Asterisks indicate interaction effects.

grievance, but do so independent of the size of the loss. This implies that the repeated occurrence of a grievance should have (a) a significant negative main effect on resignation, and (b) a significant positive main effect on the continuum of indirect control. The factor should either have no effect on the continuum of public-private control or be negatively associated with this variable, since it represents sanctions conveying positive relational signals.

The results lend support to both parts of the escalation hypothesis (RS-2a and RS-2b). The repeated occurrence of an externality decreases the likelihood of resignation and increases the likelihood of indirect control, indicating a stronger inclination to switch from mediation (the lower part of the scale) towards more confrontational indirect strategies and retaliation (the upper part of the scale). In fact, grievance frequency is the only factor that has a significant effect on the continuum of indirect control, which implies that the severity of the grievance does not affect the use of

Table 9.6 Means for the effects on scale 1 (public versus private control)

	Strong	Weak	Superior	Subordinate
Repeated	2.583	3.500	2.979	3.286
Unique	3.250	3.000	3.271	2.964
Total	2.917	3.250	3.125	3.125

Table 9.7 Means for the interaction effects on the item 'Resignation'

	Weak		Repeated		Unique
	Strong	Weak	Superior	Subordinate	Total
Group	4.111	3.429	4.313	4.313	4.313
Bilateral	4.500	3.857	4.321	3.643	3.643
Total	4.306	3.643	4.317	3.978	3.978

sanctioning strategies that are generally evaluated as inappropriate. This supports the claim made by relational signalling theory that forms of indirect control like gossiping or retaliation are activated by a different mechanism than direct bilateral or public sanctions.

The repeated production of trouble by the same individual does not have a direct effect on the public-private continuum of sanctioning, but there is a significant interaction effect between grievance severity and grievance frequency (see Figure 9.4). That is, repeated grievances that are perceived as weak elicit a *higher* level of escalation on this scale (that is, private, bilateral sanctions rather than public sanctions) than unique grievances of the same level of low severity. This finding is unexpected both from an incentive perspective (which predicted no association between the two variables) and from a relational signalling perspective, which predicted that grievance frequency, being an indicator of the negative relational signalling character of grievance, would have a negative or no impact on the public-private control continuum (since the latter measures sanctions with positive relational signalling value). While both predictions are correct in so far as the main effect of grievance frequency is not significant, the positive interaction with grievance severity is inconsistent with both theoretical explanations.

Overall, the results seem to be slightly in favour of the signalling approach, given the fact that grievance severity does not affect indirect control, and grievance frequency does increase the likelihood of sanctioning.

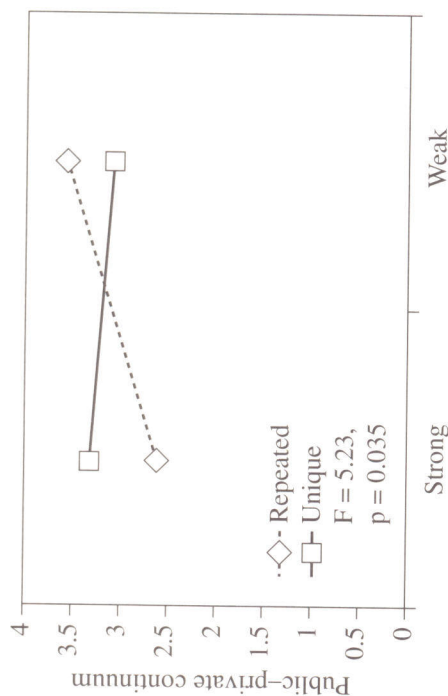


Figure 9.4 Impact of grievance severity and frequency on public-private control

Free-rider Effect versus Group Obligation Effect

The incentive approach argued that grievance scope has (a) either a negative or no effect on the likelihood of sanctioning, and (b) that group-related grievances would elicit weaker sanctions than grievances limited to a single individual. The signalling approach predicted that group-related grievances would increase both the likelihood and the strength of the sanction.

As can be seen in Table 9.5, grievance scope does not have a significant main effect on any of the dependent variables. However, there is a significant interaction effect between grievance scope and grievance severity on the item 'resignation': strong individual grievances are more likely to increase the willingness to allocate a sanction than weak group-related grievances. These results clearly confirm the first part of the *free-rider hypothesis* (IN-3a), and disconfirm the first part of the *group obligation hypothesis* (RS-3a). The fact that grievance scope does not have an impact on the other two dependent variables leads to the conclusion that the second part of both hypotheses (IN-3b and RS-3b) is not supported by the data.

Overall, the findings presented in this section are in favour of the incentive approach and contradict the relational signalling approach, since group-related grievances seem to decrease rather than to increase the willingness to sanction.

Formal Rank

The between-subject variable 'rank' has no main effect on the dependent variables. However, significant interactions were found between rank and grievance frequency on public-private control and resignation. When confronted by a repeated loss, superiors are both more likely to become active as agents of social control and to use public control strategies than subordinates (see Figures 9.5 and 9.6).

DISCUSSION AND CONCLUSION

The present research contributes to the study of informal control in two ways. First, theoretically, there is a disentangling of two alternative micro foundations of a theory of social control in organizations which link types of trouble and sanction strength. Second, empirically, the study develops a theoretically grounded instrument for the measurement of sanctioning hierarchies and provides further insight into the way grievances are handled in so-called 'trust cultures'. More specifically, a first comparative test of two alternative theories of informal control behaviour was conducted, the incentive approach and the relational signalling approach. Empirically, the major results of the analysis can be summarized as follows: (a) sanctions should be conceived in terms of at least two latent dimensions or escalation hierarchies; (b) the stronger and the more frequent the grievance, the more

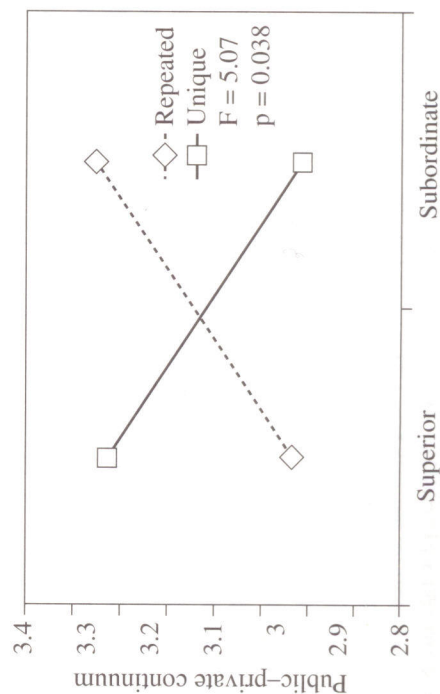


Figure 9.5 Impact of grievance frequency and rank on public-private control

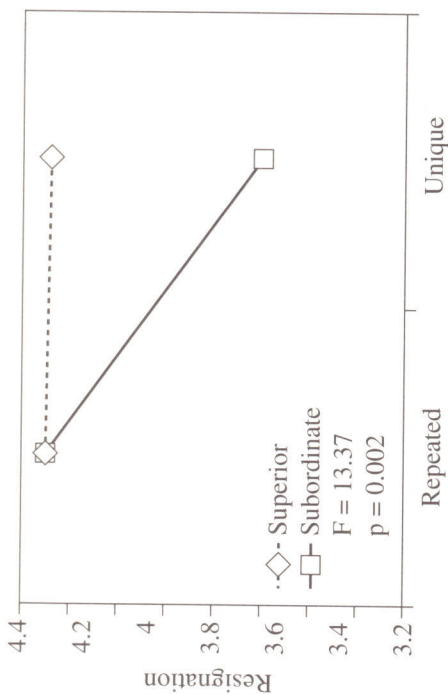


Figure 9.6 Impact of grievance frequency and rank on resignation

likely active control efforts become; (c) escalation from public to private control is primarily a function of grievance severity; (d) escalation from constructive to destructive forms of indirect control is exclusively a function of grievance frequency; (e) grievance scope and formal position of the controller have no independent impact on sanctioning behaviour, but they do interact with grievance severity and frequency, respectively.

The empirical results of this study are summarized in Figures 9.7–9.9. It should be stressed that these results are based on data that were gathered in a team that was in a phase of high interdependence and trust, where solidarity was strong and the group goal salient.

On a theoretical level, these results lead to the following conclusions. First, they point towards the need to revise thoroughly the (often implicit) assumption of a *unidimensional* sanctioning hierarchy as made by incentive theories. Sanctions are evaluated not only in terms of their strength, but also according to some other criteria. They are cognitively *multidimensional* constructs. It was argued that the most important candidate for identifying these constructs is relational signals. This implies that there are at least two types of negative sanctions: those that convey negative relational signals, and those that do not. In the first case, the actor allocating a sanction not only punishes the offender by communicating behavioural disapproval, but also signals that he or she is increasingly less willing to view the relationship with the target as one of solidarity. In the second case, the sanction communicates disapproval, but at the same time signals to the offender that the person allocating the sanction is still interested in maintaining the status quo in the relationship and complying with solidarity norms.

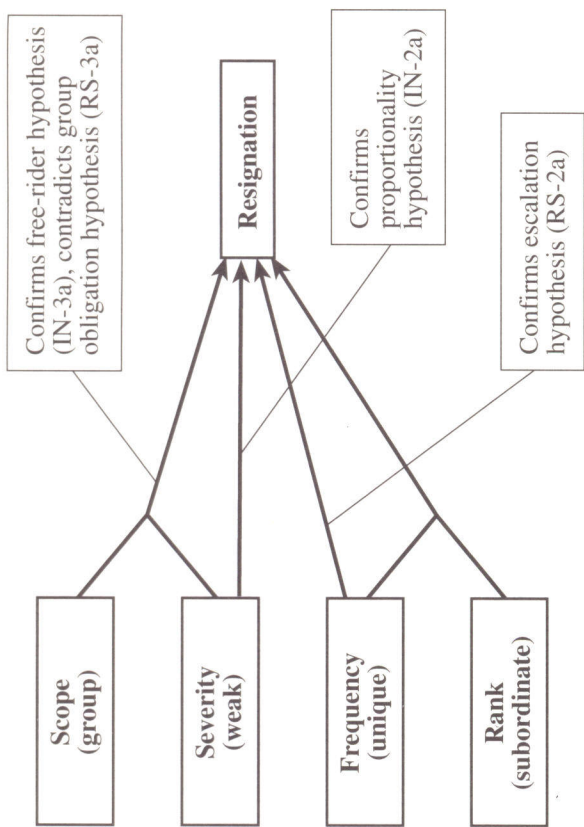


Figure 9.7 Empirical predictors of absence of control efforts

Second, the results provide mixed evidence for the incentive approach and the relational signalling approach. On the one hand, the confirmation of the *escalation hypothesis* favours the claim made by relational signalling theory that sanction strength is not a simple linear function of grievance strength, as argued in the *proportionality hypothesis* of the incentive approach, but is contingent upon the relational signalling character of the grievance. On the other hand, the negative impact of group-related grievances on the willingness to sanction and on the strength of sanctions clearly favours the *free-rider hypothesis* of the incentive approach and contradicts the *group identification hypothesis* of the signalling approach.

Taken together, this evidence shows that, while the social mechanisms underlying sanctioning behaviour are more complex than assumed by the incentive approach, the relational signalling approach only partially succeeded in generating empirical support for its refined perspective.

In this context, some shortcomings of the present study should be pointed out. First, the operationalization of sanctioning hierarchies and the measurement of the signalling character of grievances as well as that of sanctions are far from perfect. Though the application of multidimensional unfolding techniques produced interesting insights into the cognitive representation of sanctions, more systematic efforts need to be made to assess the robustness of the final scales.

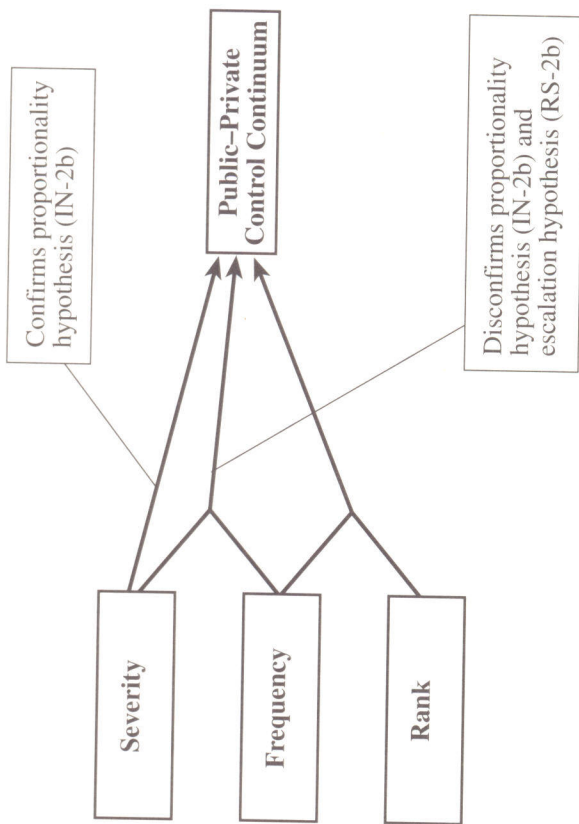


Figure 9.8 Empirical predictors of private-public control

At least five promising areas for future research emerge from these conclusions. First, it seems worth while to investigate the perception of grievances, in particular the degree to which they affect a whole group or only a single individual, and whether they are attributed to intentional norm violations or accidents. In the present study, the measurement of these perceptions in the form of manipulation checks remained very crude, as was the operationalization of the signalling value of grievances by distinguishing between repeated and unique misbehaviour. Second, by specifying how interpersonal relations affect the evaluation of behaviour of others, the relational signalling approach might contribute to tackling one of the major shortcomings of attribution theory. Both approaches might benefit from a more thorough exploration of the potential interrelationships between framing, signalling and attribution processes. Third, far more insights are needed regarding the cognitive representation of sanctioning strategies and their potential signalling character. The comparison with a general appropriateness rating as used in the present study yields only imperfect information about this dimension. Fourth, more theoretical work needs to be done to link aspects of grievances with the quality of the relationship between the offender and the person allocating a sanction. Here one could build on recent insights from studies linking social network characteristics to control behaviour (Black, 1984; Burt, 1992; Flap, 1988;

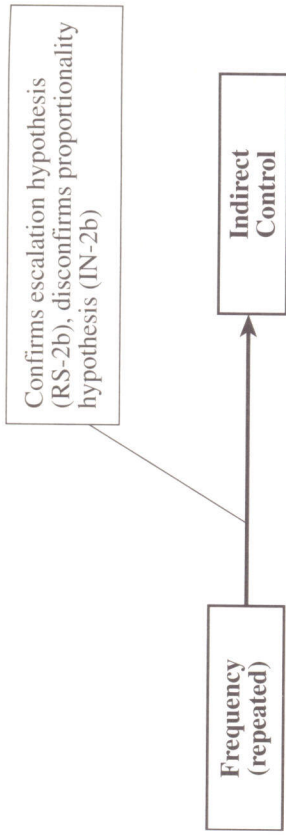


Figure 9.9 Empirical predictors of indirect control

Friedkin, 1983; Gargiulo, 1993; Lazega, 1992; Wittek *et al.*, 2001). Finally, more attention needs to be paid to forms, causes and consequences of indirect control.

In sum, it seems that the signalling approach offers a promising extension to the study of social control in small groups because it provides an explanation for effects that would be difficult to account for with the incentive perspective. Though far from complete, the evidence presented suggests that the idea that relational signals are a layer that will significantly influence how we interpret misbehaviour and how we react to it might be a fruitful way of extending our knowledge on informal social control and the functioning of workgroups in organizational settings.

NOTES

1. In order to minimize effects of social desirability, it was initially planned to ask respondents to judge what they would expect their colleagues to do. Most respondents had said that they would have difficulties with such an evaluation. Consequently, the instruction was changed and the respondents were asked to indicate how they, personally, would react in such a situation.
2. Note that each actor has 16 scale values: one for each of the eight situations on the 'public-private control' scale and the 'indirect control' scale.

REFERENCES

- Augoustinos, M. and I. Walker (1995), *Social Cognition: An Integrated Introduction*, London: Sage.
- Black, D. (1984), 'Social control as a dependent variable', in Donald Black (ed.), *Toward a General Theory of Social Control. Vol. 1: Fundamentals*, Orlando: Academic Press, pp. 1-36.
- Braspenning, J. (1992), 'Framing: De Prospecttheorie en het Discriminatiemodel', doctoral dissertation, University of Groningen.

- Burt, R. (1992), *Structural Holes. The Social Structure of Competition*, Cambridge, MA: Harvard University Press.
- Erickson, B. and T. Nosanchuk (1984), 'The allocation of esteem and disesteem: a test of Goode's theory', *American Sociological Review*, **49**, 648–58.
- Flache, A. and M. Macy (1996), 'The weakness of strong ties: collective action failure in a highly cohesive group', *Journal of Mathematical Sociology*, **21**, 3–28.
- Flap, H. (1988), *Conflict, Loyalty and Violence. The Effects of Social Networks on Behaviour*, Frankfurt am Main: Peter Lang.
- Friedson, E. (1975), *Doctoring Together. A Study of Professional Social Control*, New York: Elsevier.
- Friedkin, N. (1983), 'Horizons of observability and limits of informal control in organizations', *Social Forces*, **62** (1), 54–77.
- Gargulo, M. (1993), 'Two-step leverage: managing constraint in organizational politics', *Administrative Science Quarterly*, **38**, 1–19.
- Griffith, W. (1989), 'The allocation of negative outcomes', *Advances in Group Processes*, **6**, 107–37.
- Heckathorn, D. (1990), 'Collective sanctions and compliance norms: a formal theory of group-mediated social control', *American Sociological Review*, **55**, 366–84.
- Heckathorn, D. (1993), 'Collective action and group heterogeneity: voluntary provision versus selective incentives', *American Sociological Review*, **58**, 329–50.
- Hewstone, M. (1983), *Attribution Theory. Social and Functional Extensions*, Oxford: Basil Blackwell.
- Jaspars, J., F. Fincham and M. Hewstone (eds) (1983), *Attribution Theory and Research: Conceptual, Developmental and Social Dimensions*, London: Academic Press.
- Kahnemann, D. and A. Tversky (1979), 'Prospect theory: an analysis of decision under risk', *Econometrica*, **47**, 263–91.
- Kandel, E. and E. Lazear (1992), 'Peer pressure and partnerships', *Journal of Political Economy*, **100** (41), 801–17.
- Kellermann, K. and T. Cole (1994), 'Classifying compliance gaining messages: taxonomic disorder and strategic confusion', *Communication Theory*, **4** (1), 3–60.
- Kipnis, D., S. Schmidt and I. Wilkinson (1980), 'Intraorganizational influence tactics: explorations in getting one's way', *Journal of Applied Psychology*, **65** (4), 440–52.
- Lange, E. (1975), *Strukturprobleme einfacher Interaktionssysteme. Eine empirische Untersuchung über Informationsdefizite, Nonkonformität, Dissens und ihre Abwicklung*, Berlin: Duncker & Humblot.
- Lazega, E. (1992), 'Analyse de réseaux d'une organisation collégiale: les avocats d'affaires', *Revue française de sociologie*, **XXXIII**, 559–89.
- Ligthart, P. (1995), *Solidarity in Economic Transactions. An Experimental Study of Framing Effects in Bargaining and Contracting*, Amsterdam: Thesis Publishers.
- Ligthart, P. and S. Lindenberg (1994), 'Ethical regulation of economic transactions: solidarity frame versus gain-maximization frame', in K. Wärneryd and A. Lewis (eds), *Ethics and Economic Affairs*, London: Routledge.
- Lindenberg, S. (1982), 'Sharing groups: theory and suggested applications', *Journal of Mathematical Sociology*, **9**, 33–62.
- Lindenberg, S. (1988), 'Contractual relations and weak solidarity: the behavioural

- basis of restraints on gain-maximization', *Journal of Institutional and Theoretical Economics*, **144**, 39–58.
- Lindenberg, S. (1992), 'An extended theory of institutions and contractual discipline', *Journal of Institutional and Theoretical Economics*, **148**, 125–54.
- Lindenberg, S. (1993), 'Framing, empirical evidence and applications', *Jahrbuch für Neue Politische Ökonomie*, Tübingen: Mohr (Siebeck), pp. 11–35.
- Lindenberg, S. (1994), 'Norms and the power of loss: Ellickson's theory and beyond', *Journal of Theoretical and Institutional Economics*, **150** (1), 101–13.
- Lindenberg, S. (1997), 'Grounding groups in theory: functional, structural and cognitive interdependencies', *Advances in Group Processes*, **14**, 281–331.
- Lindenberg, S. (1998), 'Solidarity: its microfoundations and macrodependence, a framing approach', in P. Doreian and T. Fararo (eds), *The Problem of Solidarity. Theories and Models*, Gordon and Breach, pp. 61–112.
- Macy, M. (1993), 'Backward-looking social control', *American Sociological Review*, **58**, 819–36.
- Marwell, G. and D. Schmitt (1967), 'Dimensions of compliance-gaining behaviour: an empirical analysis', *Sociometry*, **30**, 350–64.
- Morey, N. and F. Luthans (1991), 'The use of dyadic alliances in informal organization: an ethnographic study', *Human Relations*, **44** (6), 597–618.
- Morrill, C. (1989), 'The management of managers: disputing in an executive hierarchy', *Sociological Forum*, **4** (3), 387–407.
- Morrill, C. (1991), 'The customs of conflict management among corporate executives', *American Anthropologist*, **93** (4), 871–93.
- Mühlau, P. (2000), 'The governance of the employment relation. A relational signalling perspective', doctoral dissertation, University of Groningen.
- Noon, M. and R. Delbridge (1993), 'News from behind my hand: gossip in organizations', *Organization Studies*, **14** (1), 23–36.
- Penning, J. and J. Woiceshyn (1987), 'A typology of organizational control and its metaphors', *Research in the Sociology of Organizations*, **5**, 73–104.
- Richmond, V., L. Davis, K. Saylor and J. McCroskey (1984), 'Power strategies in organizations. Communication techniques and messages', *Human Communication Research*, **11** (1), 85–108.
- Rossi, P. (1979), 'Vignette analysis: uncovering the normative structure of complex judgements', in R. Merton, J. S. Coleman and P. Rossi, *Qualitative and Quantitative Social Research. Papers in Honour of Paul L. Lazarsfeld*, New York: Free Press, pp. 176–86.
- Thurman, B. (1979), 'In the office: networks and coalitions', *Social Networks*, **2**, 47–63.
- Van Schuur, W. (1993), 'The nonparametric proximity model', manuscript.
- Van Schuur, W. and W.J. Post (1990), *MUDFOLD Users Manual*, Groningen: iec ProGamma.
- Wielers, R. (1997), 'The wages of trust: the case of child minders', *Rationality and Society*, **9** (3), 351–71.
- Wittek, R. (1999), 'Interdependence and informal control in organizations', doctoral dissertation, University of Groningen.
- Wittek, R., M. van Duijn and T. Snijders (2001), 'Informeel netwerken en sociale escalatie van conflicten in een managementteam', *Sociale Wetenschappen*, **44** (1), 48–67.

The Trust Process in Organizations

Empirical Studies of the Determinants and
the Process of Trust Development

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