

# A 'special attachment': Voice and the relational aspect of loyalty

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## Abstract

Extending Hirschman's 'Exit–Voice–Loyalty' framework, the authors distinguish between attitudinal and relational aspects of loyalty. They hypothesize that co-workers' support for voice will moderate the effect of relational, but not attitudinal loyalty on voice. In line with the study's hypotheses, multilevel analyses of survey data on 204 voice actions (concerning three issues) of 121 employees in a Dutch public sector organization showed that the effect of relational loyalty (operationalized as social relations) on voice depended on context and issue. When department members perceived serious problems, relational loyalty *decreased* the likelihood of voice for one of the issues. For another issue, relational loyalty *increased* the likelihood of voice when department norms encouraged voice. By contrast, attitudinal loyalty (operationalized as organizational commitment) had no effect on voice.

## Keywords

employee voice, loyalty, norms, organizational commitment, problem perception, social relations

## Introduction

In his book *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (1970), Hirschman examined how members of organizations respond to problems

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they perceive with their organization. He distinguished two possible responses: leaving the organization ('exit'), or speaking up about the problem ('voice'). In this article, we focus on employee voice in reaction to perceived problems within the organization. We define voice, or speaking up, as actions in which employees point out problems, and/or make suggestions for improvements to others within the organization.

Voice, like exit, forms an important feedback mechanism for the organization (Hirschman, 1970; Morrison and Milliken, 2000). Not surprisingly, therefore, there has been much research on its antecedents (Dowding et al., 2000). According to Hirschman, individuals' response to a problem depended on their 'loyalty' to the organization, defined broadly as 'special attachment to an organization' (1970: 77).<sup>1</sup> He argued that those who were loyal to an organization would be more likely to speak up about a problem than to leave the organization. In subsequent research, loyalty has received particular attention.

Empirical studies on the effects of loyalty on voice revealed two difficulties. First, Hirschman's definition of loyalty remained vague, leading some critics, like Barry (1974), to argue that the concept merely served as an '*ad hoc* equation filler' that functioned as an 'error term' (Barry, 1974: 95). The imprecision in Hirschman's concept was never really resolved. In research on employee voice, loyalty has typically been conceptualized as an attitude, and operationalized in terms of organizational commitment (Dowding et al., 2000). Researchers within this tradition have argued that loyalty entails concern for the welfare or fate of the organization, thus providing a motivation for voice (Barry, 1974; Graham and Keeley, 1992; Luchak, 2003; Saunders et al., 1992). This argument suggests a consistently positive effect of loyalty on voice. However, and this is the second difficulty, this is at odds with the results of empirical studies. Empirical findings have been inconsistent: some studies found positive effects, suggesting that loyal employees are more likely to speak up about problems (Leck and Saunders, 1992), others found no effects (Saunders et al., 1992: Study 1), or negative effects (Boroff and Lewin, 1997). While some of these inconsistencies may be due to differences in the conceptualization and measurement of voice (Luchak, 2003; Olson-Buchanan and Boswell, 2002), they also raise questions about the nature and role of loyalty.

Arguably the presence of contextual moderator effects could provide an intuitive explanation for these inconsistent findings. Thus, Tangirala and Ramanujam (2009) proposed to consider variables that affect the perceived costs and effectiveness of voice as contextual moderators of the relation between loyalty and voice. However, the underlying theoretical mechanism remains unclear. Further, conceptualizing loyalty as an attitude motivating voice, their argument contradicts previous theoretical work (Ashford et al., 1998; Miceli et al., 2008; Milliken et al., 2003) where employees' motivation for speaking up, the perceived effectiveness and the costs of voice are considered to *directly* affect employees' decision whether to speak up.

The effect of loyalty on voice is not only of academic interest, but may be of practical importance as well (Tangirala and Ramanujam, 2009). For an organization, both employee voice and employees' attachment to the organization can be valuable (Hirschman, 1970; Legge, 2005). However, given the inconsistent results of previous research on loyalty and voice, the question arises whether increasing employee attachment and promoting voice might not be mutually exclusive goals. That is, do attachment and voice go hand in hand, or does promoting one inadvertently curtail the other?

The purpose of this study is to test a possible way of accounting for the inconsistent findings concerning the effects of loyalty on voice. This involves re-examining the conceptualization of loyalty, and taking into account the possibility of interactions between loyalty and the organizational context. We make two interrelated arguments. First, following Tangirala and Ramanujam (2009), we argue that for predicting voice, it matters *what* employees are attached *to*. That is, we consider potential interactions between loyalty and the organizational context, notably other organizational members' support for voice.

Second, we argue that these interactions hinge on what we call the 'relational' aspect of loyalty, defined as employees' attachment to the organization through close social relationships with other members of the organization. Relational loyalty can provide opportunities or constraints for voice, depending on the organizational context.

Our study extends previous research in several ways. First, we reconsider the concept of loyalty in light of earlier sociological research on employees' attachment to their organization (Burt, 2001; McPherson et al., 1992). This research suggests that attachment has not only an attitudinal, but also a relational aspect. Second, we consider interactions between loyalty and the organizational context as a possible way of accounting for inconsistent findings concerning the effect of loyalty on voice. In doing so, we advance recent work by Tangirala and Ramanujam (2009) by providing a theoretical explanation of interactions between loyalty and aspects of the organizational context. This explanation hinges on the relational aspect of loyalty. Third, we examine interactions between loyalty and aspects of the organizational context not yet considered by Tangirala and Ramanujam (2009), namely other organizational members' support for voice.

Data come from an employee survey in a large public sector organization in the Netherlands. Respondents provided information on their reactions to one or two of three issues (an incomplete 'repeated-measures' design). Whereas most previous studies did not specify the issue, or considered only one issue, this design allowed us to test our hypotheses across different issues, providing insights into the situation-specific nature of reactions to problems at the workplace.

We start with our theoretical argument. Then, we present the results of a survey among employees of a public sector organization in the Netherlands. We conclude with a discussion of our findings and their implications for future research.

## The relational aspect of loyalty

Hirschman (1970: 77) defined loyalty as a 'special attachment to an organization', a definition that left much room for interpretation (Dowding et al., 2000). Since the publication of Hirschman's (1970) book, a large number of studies has examined the ways in which employees can be attached to their organization. These studies come from several streams of research in psychology and sociology, including research on organizational commitment (Meyer et al., 1993; Mowday et al., 1979) and social network analysis (Burt, 2001; McPherson et al., 1992). Taken together, these studies suggest that employees' attachment to an organization is not only an attitude, but has a strong relational component as well. Applying these insights to Hirschman's concept of loyalty, we propose that Hirschman's definition of loyalty as a 'special attachment' can be read in two ways: attachment as an attitude towards the organization and attachment as a social relationship.

To date, the former interpretation of loyalty as an *attitude* has been most common. Most researchers defined loyalty as an attitude that reflected investments in the organization, or, more commonly, an emotional or affective attachment (Dowding et al., 2000; Luchak, 2003). In research on employees' reactions to problems at work, this attitudinal aspect of loyalty has typically been operationalized as organizational commitment (e.g. Boroff and Lewin, 1997; Leck and Saunders, 1992).

Here we wish to draw attention to the relational aspect of loyalty, i.e. attachment to the organization through close *social relationships* between an employee and other members of the organization. This interpretation is based on research on social networks in organizations (Burt, 2001; Krackhardt, 1992; McPherson et al., 1992), where employees' attachment to their organization has been defined in terms of their close social relations, or friendships, with other members of the organization. This is in line with employees' own definitions of loyalty, as reported by Withey and Cooper (1989: 536) and Hoffmann (2006). From this perspective, the organization is not an abstract entity, but the set of its members. Employees' attachment to the organization then consists of their close social relations to other members of the organization. In line with this, we operationalize the relational aspect of loyalty in terms of the number of close social relations with other members of the organization.

Empirically, the relational and attitudinal aspects seem closely related. Good social relations with colleagues and supervisors have been found to be associated with higher levels of organizational commitment (Morrison, 2002; Payne and Huffman, 2005). Further, there are striking parallels between findings concerning the effects of organizational commitment and social relations: both had negative effects on exit (e.g. Feeley et al., 2008; Withey and Cooper, 1989), and, of particular relevance for the present article, both had inconsistent effects on voice (e.g. Boroff and Lewin, 1997; Krackhardt, 1999; Leck and Saunders, 1992; Saunders et al., 1992; Van Dyne et al., 2008).

Theoretically, the shift in perspective has important implications. As noted in the introduction, in previous research, loyalty (as an attitude) was considered to provide employees' motivation for voice. By contrast, emphasizing the relational aspect of loyalty suggests that loyalty may enable or constrain action, depending on characteristics of the organizational context. In the following section, we elaborate this argument. We start with a brief review of previous research on employee voice. This provides a general framework and insights on characteristics of the organizational context that are likely to affect employees' decision whether to speak up or not. We then turn to relational loyalty, and the ways in which it may interact with the organizational context in affecting employee voice.

## Relational loyalty and voice

We consider voice the outcome of a decision that is influenced by the opportunities and constraints provided by the context (Morrison and Phelps, 1999). Three main considerations have been found to be important in employees' decision to speak up (Ashford et al., 1998; Hirschman, 1970; Miceli et al., 2008; Milliken et al., 2003): a motivation for considering to speak up, expected effectiveness of voice and perceived low costs of voice. Typically, employees' dissatisfaction with, or, more generally, employees' desire to improve the status quo is considered the main reason for speaking up. Effectiveness and

costs reflect contextual constraints and opportunities for speaking up. Effectiveness refers to the voice recipient's willingness and ability to take action in response to voice. Potential costs include opportunity costs, i.e. the time and effort required to speak up, as well as potential formal sanctions (e.g. negative performance evaluations, loss of job) and/or informal sanctions (e.g. negative reputation, social isolation).

Organizational research on employee voice suggests that the organizational context – notably, other organizational members' support or lack of support for voice – can affect employees' expectations concerning the effectiveness and costs of voice, and hence encourage or inhibit their decision to speak up (Graham, 1986; Miceli et al., 2008; Morrison and Milliken, 2000). Previous research suggests two possible sources of others' support for voice.

First, others' support for voice may be based on their norms regarding voice (Greenberger et al., 1987; Morrison and Milliken, 2000). Thus, they may be against voice as a matter of principle when speaking up violates norms that are important to them. Or, conversely, if speaking up conforms with their norms, they may generally encourage voice. Such norms can be reflected in formal procedures for speaking up (Spencer, 1986), management's openness to employee voice (Ashford et al., 1998; Edmondson, 2003), or the expectation of sanctions for speaking up (Milliken et al., 2003). Several studies support the idea that organizational norms encouraging voice increase the likelihood of voice (Detert and Burris, 2007; Edmondson, 2003; Milliken et al., 2003; Piderit and Ashford, 2003; Saunders et al., 1992).

Second, others' support for voice may depend on their perception of the particular issue at hand. Here, the idea is that others will encourage voice if they agree that something is a serious problem, but not when they consider it trivial. The importance of others' perception of an issue is suggested by experimental studies of minority dissent and research on public opinion formation ('spiral of silence', Noelle-Neumann, 1974). They suggest that the extent of agreement among group members affects the extent to which information or opinions are discussed: group members are more likely to mention shared than unshared information or opinions (Scheufele and Moy, 2000; Wittenbaum et al., 2004).

As noted in the introduction, considering aspects of the organizational context as moderators, as proposed by Tangirala and Ramanujam (2009), seems an intuitively appealing way of resolving previous inconsistent findings concerning the effect of loyalty on voice. However, the conceptualization of loyalty as an attitude motivating voice created a theoretical impasse when it came to explaining why aspects of the organizational context might moderate the effect of loyalty on voice. This is because in theoretical work, both employees' motivation for voice and the perceived effectiveness and costs of voice are considered to provide 'pro' and 'contra' arguments as employees deliberate whether to speak up or not. Thus, they *directly* affect employee voice: perceived high costs and low effectiveness of voice directly decrease the likelihood of voice, whereas loyalty, when conceptualized as an attitude that motivates voice, should directly increase the likelihood of voice.

We argue that this theoretical impasse can be resolved when considering the relational aspect of loyalty. Research on the effects of social relations on individuals' behaviour (Borgatti and Foster, 2003; Brass et al., 2004; Lindenberg, 1997) suggests that through

their social relations with other members of the organization, employees become embedded in particular organizational contexts. Their social relations with other members of the organization entail interdependence with these others. In order to achieve their goals, employees need to take into account the goals, norms and opinions of others. Thus, focusing on relational loyalty highlights employees' embeddedness in the organizational context, and suggests how this context may affect the relation between relational loyalty and voice.

In the following, we draw on research on social relations to suggest two contrasting ways in which relational loyalty and others' support for voice may interact: relational loyalty making individuals subject to social control, and relational loyalty as buffer from lack of support. We discuss each of them in turn.

### *Social control*

In their actions, individuals often follow the norms and beliefs of their group. Norms are rules for behaviour that are shared by the members of a group, reflected in group members' expectations regarding the behaviour of others (Homans, 1950), while beliefs refer to group members' perceptions and interpretations of particular situations or events. One might think of the workers at the Western Electric Company's Hawthorne Works, and their norms regarding 'a fair day's work' (Homans, 1950); managers' ways of dealing with conflicts (Morrill, 1995); or the social pressures against voting for unionization in a small company (Krackhardt, 1999).

There are several possible reasons why people might act according to the norms and beliefs of their group. From a socialization perspective, employees may have come to share and internalize the beliefs, norms and values of those with whom they have social relationships (Piaget, 1975). In consequence, voice may or may not even be considered as an option. From a social control perspective, individuals are bound to values, beliefs and norms that are important to other group members, through social control (Coleman, 1990). When other group members oppose voice, individuals are less likely to speak up, knowing that their actions will be closely monitored, and possibly sanctioned. By contrast, when other group members encourage voice, individuals who speak up will be less likely to face sanctions. Instead, they may even be able to count on the tacit or active support of other group members. This may shield them from sanctions from third parties, and/or increase the effectiveness of voice.

This suggests that the effect of relational loyalty may depend on the extent of other group members' support for voice. If others oppose the idea of speaking up, relational loyalty will decrease the likelihood of voice; if others encourage speaking up, relational loyalty will increase the likelihood of voice. This effect can be expected to be stronger the stronger an individual's relational loyalty (Ehrhart and Naumann, 2004; Krackhardt, 1999; Seashore, 1977 [1954]).

### *Buffering*

Alternatively, social relations may provide a source of informal power within the organization. Employees with many social relations may therefore be *less* subject to group

pressure from norms and/or group perceptions of the issue – this is the opposite of a ‘social control’ type interaction effect.

Employees’ informal power in the organization has been defined as the ability to get things done (Brass and Burkhardt, 1993; Emerson, 1962). It can derive from a central position in the informal network, that is, from having social relations with many other members of the organization (Brass and Burkhardt, 1993; Burt, 1992; Freeman, 1978/9). Central employees are more likely to be informed about problems at work, who is affected by them and to whom they may turn for support. Further, central individuals will be perceived by their colleagues and management as being able to mobilize support, influence the opinions of their colleagues and form powerful coalitions (Krackhardt, 1992).

Employees with informal power may be less subject to influence from their surroundings. They are often allowed to deviate more from group norms than less powerful group members (Ehrhart and Naumann, 2004; Rehg et al., 2008). Flache and Macy (1996) argued that this is because the enforcement of social norms breaks down when group members value others’ social approval more than their compliance with group norms. When this is the case, an individual’s compliance with group norms is no longer a precondition for his or her social approval by other group members. Instead, he or she can ‘get away’ with non-compliance by offering his or her approval of other group members in exchange for their approval. Social approval of powerful individuals tends to be regarded as especially valuable (Blau, 1964; Thye, 2000). Consequently, powerful individuals are especially likely to ‘get away’ with non-compliance: their power provides a buffer from the influence of group norms and/or group opinions concerning the issue at hand.

## Hypotheses

In sum, we propose that the effect of relational loyalty on voice will depend on others’ support for voice. The nature of this interaction (‘social control’ or ‘buffering’) remains to be determined empirically.

Although such interaction effects may be found in any group, they are likely to be strongest in groups where members interact regularly and face-to-face. In an organizational context, departments may be the most relevant groups. As discussed earlier, others’ support for voice may be based on norms encouraging voice, and/or their perception of the seriousness of the problem. Hypothesis 1a concerns the former, Hypothesis 1b the latter:

*Hypothesis 1:* The effect of employees’ *relational* loyalty on their likelihood of speaking up depends on (a) the norms of other department members and (b) other department members’ perception of the seriousness of the problem.

Because our argument hinges on the relational aspect of loyalty, we do not expect that others’ support for voice will moderate the effect of attitudinal loyalty on voice:

*Hypothesis 2:* The effect of employees’ *attitudinal* loyalty on their likelihood of speaking up will *not* depend on (a) the norms of other department members, or (b) other department members’ perception of the seriousness of the problem.

## Research design

Data came from an employee survey conducted in a large public sector organization in the Netherlands. We asked respondents about their attitudes and voice behaviour regarding two of three issues: work pressure, everyday problems and an ongoing organizational change ('regionalization'). The organization provided information on employees' demographic characteristics.

### *The organization*

The organization provided specialized medical services to hospitals, general practitioners and patients. It consisted of three units, with about 550 employees in total: an administrative unit (six departments), a laboratory unit (six departments) and a patient-care unit (seven departments). The last provided medical services to patients at their homes and at a number of local service points.

### *Employee survey*

Data were collected by mail survey in spring 2008. Of the 506 employees and managers invited, 156 individuals from 16 departments responded (response rate 31 percent).<sup>2</sup> The present study was based on data from the non-managerial employees ( $N = 146$ ). Of these, 91.1 percent were women. Average age was 42.9 years ( $SD = 8.7$ ), average tenure was 11.5 years ( $SD = 11.0$ ) and 75.3 percent had a permanent contract. Most worked part-time, on average 21.7 hours per week ( $SD = 9.6$ ). With regard to education, 40.4 percent had completed higher education, another 0.7 percent held a university degree. By comparison, non-managerial non-respondents tended to be younger (mean = 40.5;  $t(479) = 2.524$ ,  $p < .05$ ) and the percentage of women was lower (84.2 percent women;  $t(479) = 2.235$ ,  $p < .05$ ). There were no significant differences between respondents and non-respondents with regard to tenure, contract type and hours worked per week.

### *Three issues*

In the survey, we asked respondents about their attitudes and voice behaviour concerning three issues. Each respondent received questions about two of these issues. This helped to limit questionnaire length and ensure the salience of the issues to the respondents. Issues were selected based on preliminary interviews with five managers and employees from different organizational units.

The first issue, high work pressure, was included for all respondents. This referred to high work pressure experienced by the respondents or other members of their department. In addition, employees of the laboratory and administrative units received questions about a set of everyday problems, such as problems with facilities or equipment, experienced by themselves or other members of their department. Employees of the patient-care unit received questions about the so-called 'regionalization'. This was perhaps the most salient of a series of interrelated changes that were implemented in the patient-care unit to increase its efficiency. Starting in autumn 2006, and still ongoing at



the time of the survey, it involved breaking up existing department structures and establishing several regional centres.

In the survey, items concerning a particular issue were presented in the same section, with the section's heading indicating the issue (e.g. 'Work pressure in your department'). For each issue, we first asked respondents to what extent they perceived problems with regard to the issue (cf. items on 'perceived problems' in the measures section). Then we asked about their behaviour (i.e. 'voice') in reaction to the issue.

While we used all available cases to construct scales and calculate department means, in the multilevel analyses we excluded respondents with missing values on any of the variables included in our analyses (however, we included incomplete cases where respondents had answered all questions concerning only one of the issues). This left an effective sample of 121 individuals who reported on one or two issues: 98 on Issue 1 (work pressure), 55 on Issue 2 (everyday problems) and 51 on Issue 3 (regionalization). Forty respondents reported on both Issues 1 and 2, 43 respondents on both Issues 1 and 3. Comparing the respondents included in the multilevel analyses with those excluded due to missing values, there were no significant differences, except that for Issue 1, those included perceived higher work pressure (mean = 2.47, SD = 0.73) than those excluded (mean = 1.61, SD = 0.78,  $n = 36$ ;  $t(132) = 5.918$ ,  $p < .001$ ), and for Issue 3, those included were more likely to have a permanent contract (72.5 percent) than those excluded (36.7 percent,  $n = 30$ ;  $t(79) = 3.350$ ,  $p < .01$ ).

## Measures

Voice and problem perception were measured separately for each issue; the variables were numbered 1 (work pressure), 2 (everyday problems) and 3 (regionalization) to indicate the issue. Other variables were measured only once. Unless stated otherwise, we used a seven-point response format, from 1 = 'strongly disagree', to 7 = 'strongly agree'. Items were averaged to form a scale, after checking that a sufficiently high Cronbach's alpha and a one-factor structure in a principal component analysis justified combining the items. For each variable, corresponding department-level measures were calculated as the mean score of the non-managerial members of a department, using all available responses. For norms and perceived problems, we calculated  $r_{WG}$  scores (LeBreton and Senter, 2008) to assess inter-rater agreement between respondents within the same department.

*Voice* concerning each of the three issues was measured with four items written for this study or adapted from previous studies (Podsakoff et al., 1997; Premeaux and Bedeian, 2003). The items were 'I have spoken up about problems with [the issue]', 'I have alerted others to problems or bottlenecks in connection with [the issue]', 'I have made constructive suggestions about how we can improve the situation with regard to [the issue]' and 'I have come up with ideas about how to resolve problems with [the issue]'. Respondents were asked to respond with their behaviour in the last three months in mind. Cronbach's alpha was .91 for voice concerning Issue 1, .85 for voice concerning Issue 2 and .90 for voice concerning Issue 3.

The relational aspect of loyalty was measured as the number of employees' close *social relations* with colleagues, using one question ('How many of the organization's non-managerial employees do you consider good friends?'). Answer categories ranged from 0 = 'none', to 5 = 'six or more'. We asked about friendship because this seemed a better indicator of 'special attachment' than job-related, instrumental interactions. Our

measure was adapted from questions commonly used in social network research (e.g. Krackhardt, 1992). Conceptually, it is comparable to a free-recall measure of outdegree (Freeman, 1978/9; Wasserman and Faust, 1994). To allow comparison with our measure of attitudinal loyalty, our question referred to friends within the organization, rather than the department. However, based on our interviews, and given that some departments were on separate locations, it seemed reasonable to assume that most, if not all of the friends mentioned were members of a respondent's department.

Attitudinal loyalty was operationalized as *organizational commitment*, using three items selected from Cook and Wall (1980), Meyer et al. (1993) and Mowday et al. (1979). The items were 'I feel like "part of the family" in this organization', 'I am proud to work in this organization' and 'I really care about what happens with this organization'. Cronbach's alpha was .79. To validate our three-item scale, a subsample of respondents received a version of the survey that included Meyer et al.'s (1993) affective commitment scale, one of the most frequently used measures of organizational commitment. In this subsample ( $n = 63$ ), the affective commitment scale ( $\alpha = .90$ ) and our three-item scale were highly correlated ( $r = .89, p < .001$ ). This suggested that the two scales were comparable. Examining the relation between social relations and organizational commitment, we found a moderate positive correlation (Table 1b,  $r = .35, p < .001$ ).

*Perceived norms* regarding voice were measured with four items written for this study. They reflected respondents' perception of the expectations of colleagues and management with regard to speaking up. The items were 'Employees in this department expect each other to speak up about problems', 'Employees in this department expect each other to make suggestions for improvements', 'The managers expect employees to speak up about problems' and 'The managers expect employees to make suggestions for improvements'. Cronbach's alpha was .68, mean  $r_{WG}$  was .62.

*Group norms* for each department were calculated based on employees' perceived norms.

*Perceived problem* was measured with different items for each issue. For Issue 1 (work pressure), we used two items written for this study, namely 'To what extent has there been high work pressure within your department in the last three months?' and 'To what extent did you personally experience high work pressure within the last three months?' Answer categories ranged from 1 = 'not at all', to 4 = 'very serious'. Cronbach's alpha was .76, mean  $r_{WG}$  was .72.

For Issue 2 (everyday problems), respondents were asked to what extent they or their colleagues had encountered eight types of problems within the last three months. We selected problem types based on our preliminary interviews and a study by Milliken et al. (2003). Examples were 'problems with facilities or equipment', 'problems with procedures (including division of tasks and coordination)' and 'concerns about the functioning or competence of colleagues'. Answer categories were the same as for Issue 1. Cronbach's alpha was .76, mean  $r_{WG}$  was .79.

For Issue 3 (regionalization), we used Oreg's (2006) five-item scale measuring negative attitudes to an organizational change. Sample items were 'I believe that the regionalization will benefit the organization' (reverse-scored) and 'I believe that the regionalization will make my job harder'. Cronbach's alpha was .74, mean  $r_{WG}$  was .73. On a seven-point scale (1 = 'strongly disagree', 7 = 'strongly agree'), only seven respondents

had scores above 4; these were recoded as '4' to facilitate comparison with the four-point scales for Issues 1 and 2.

Based on perceived problems, we calculated the *group perception of the problem* for each department.

We included gender, age and level of education to control for possible response biases of our sample. Gender was coded 0 for men, 1 for women. Age was measured in years. Level of education ranged from 1 ('primary school not completed') to 10 ('postgraduate education').

Table 1 shows descriptive statistics and Pearson correlations between the variables at the measured level and the department level.

## Analyses

Given the structure of our data – an incomplete repeated-measures design, where each respondent provided information on one or two issues in his or her department – we conducted multilevel analysis (e.g. Snijders and Bosker, 1999). A multilevel model accounts for interdependencies between responses concerning specific issues (level 1) nested in individuals (level 2) nested in departments (level 3). Moreover, multilevel analysis allowed us to distinguish individual-level effects from department-level effects. Our hypotheses concern so-called cross-level interactions between individuals' loyalty (organizational commitment, social relations) and the department-level context (group norms, group perception of problem).

We estimated fully multivariate models (Snijders and Bosker, 1999: Ch. 12) with voice as dependent variable, using IGLS estimation in MLwiN 2.11 (Rasbash et al., 2009). Models were specified in four steps. We started with the so-called empty model (Model 1), describing the mean and covariance structure of the three issues (over the respondents) and the variance between departments.

We then added main effects of loyalty (organizational commitment, social relations) and department-level context (group norms, group perception of problem), and, for Model 3, cross-level interaction effects. We included control variables to control for response biases and within- and between-group effects. These were demographic characteristics (gender, age, education) and individual-level context characteristics (perceived norms, perceived problem), which were included in all models. Department-level measures of demographic characteristics and loyalty were only included as control variables if this significantly improved the model.

In the next step, we tested for each model whether the effect of the variables included was different for the three issues. Differential effects were retained when they significantly improved the model, as indicated by chi-squared tests (d.f. = 2) on the improvement in deviance. When this was the case for a cross-level interaction term, differential effects for the corresponding main effects were included as well to allow a correct interpretation.

Finally, for reasons of parsimony, non-significant cross-level interaction terms were excluded from the final models.

To reduce potential multicollinearity problems and facilitate interpretation, we centred the independent variables (except gender), and calculated interaction terms from

centred variables. Age, education and social relations were centred around the rounded mean (i.e. 43, 7 and 2, respectively); organizational commitment was centred around the midpoint of the scale (i.e. 4). Corresponding department-level variables were centred around the same values. Department-level measures of perceived problems and norms were centred around the midpoint of the scale (i.e. 2.5 and 4, respectively), while the corresponding individual-level variables (perceived problem and norms) were centred around the department mean, in order to distinguish within-department from between-department effects (Snijders and Bosker, 1999).

Table 2 shows the resulting models. Model 1 is the empty model. Model 3 is the final model used to test our hypotheses. Model 2 is shown to monitor the change in main effects after adding the cross-level interaction effects.

**Table 1.** Descriptive Statistics and Pearson Correlations

**Table 1a.**

	1	2	3	4	5	6
1. Voice 1		.28	.30	-.01	-.12	.60
2. Voice 2	.64***		–	.70	.68*	–
3. Voice 3	.43**	–		-.67	–	-.22
4. Perceived problem 1	.34**	.38*	-.06		.78*	-.06
5. Perceived problem 2	.32*	.51***	–	.45**		–
6. Perceived problem 3	.11	–	-.14	.28	–	
Department-level mean (s.d.)	4.40 (1.11)	4.52 (0.93)	3.69 (0.42)	2.27 (0.62)	1.80 (0.37)	2.30 (0.75)
Issue-level mean (s.d.)	4.20 (1.70)	4.28 (1.52)	3.47 (1.85)	2.47 (0.73)	1.87 (0.46)	2.54 (0.94)

Notes: Above the diagonal: Department-level data for 16 departments (Issue 1:  $n = 14$ , Issue 2:  $n = 10$ , Issue 3:  $n = 5$ ); department means were calculated using all available cases. Below the diagonal: issue-level data, i.e. 204 actions reported by 121 respondents (Issue 1:  $n = 98$ , Issue 2:  $n = 55$ , Issue 3:  $n = 51$ ).

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Table 1b.**

	1	2	3	4	5	6
1. Gender		-.34	-.63*	-.24	-.38	.25
2. Age	-.06		.57*	.39	.57*	-.03
3. Education	-.07	.27**		.32	.78***	.07
4. Organizational commitment	-.11	.04	-.13		.56*	-.01
5. Social relations	-.09	.06	.11	.35***		-.04
6. Norms	-.08	.07	-.15	.34***	.13	
Department-level mean (s.d.)	0.78 (0.26)	42.04 (3.98)	6.77 (0.82)	4.91 (0.71)	2.27 (1.14)	5.07 (0.49)
Individual-level mean (s.d.)	0.90 (0.30)	42.74 (8.70)	6.64 (1.30)	4.61 (1.29)	2.26 (1.80)	4.93 (1.03)

Notes: Above the diagonal: Department-level data for 16 departments; department means were calculated using all available cases. Below the diagonal: Individual-level data from 121 respondents.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Table 1c.**

	Issue-level data					
	Voice			Perceived problem		
	Issue 1	Issue 2	Issue 3	Issue 1	Issue 2	Issue 3
<i>I. Individual-level</i>						
1. Gender	.09	-.03	– <sup>a</sup>	-.04	.13	– <sup>a</sup>
2. Age	.08	.06	.09	.09	-.24	.02
3. Education	-.15	-.30*	.04	-.02	-.27*	.27
4. Organizational commitment	.04	-.02	-.01	-.10	-.26	.02
5. Social relations	.12	-.07	.10	-.03	-.02	.22
6. Norms	.09	-.10	.07	-.02	-.32*	-.15
<i>II. Department means</i>						
7. Gender	.01	-.14	.18	-.23*	-.08	-.32*
8. Age	-.08	-.09	-.05	-.17	-.07	-.17
9. Education	.06	-.20	.11	-.03	-.20	.23
10. Organizational commitment	.04	.02	.13	-.29**	-.28*	-.10
11. Social relations	.10	-.22	.10	-.11	-.11	.42**
12. Group norms	-.01	-.03	.17	-.10	.22	-.02
13. Group perception of problem 1	.00	.08	-.14	.53***	.38*	-.09
14. Group perception of problem 2	.05	.28*	–	.44**	.65***	–
15. Group perception of problem 3	.32*	–	-.01	.01	–	.57***

Notes: Correlations between issue-level data (Issue 1: n = 98, Issue 2: n = 55, Issue 3: n = 51) and (I.) individual-level data, and (II.) means of individuals' departments. Department means were calculated using all available cases.

<sup>a</sup>For Issue 3, all respondents were women.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## Results

Differences in means at the measured and at the department level were small (Table 1). Voice was least likely for Issue 3 (regionalization), and most likely for Issue 2 (everyday problems). Moderate to high positive correlations between individuals' reactions to different issues suggested that individuals speaking up concerning one issue were likely to speak up concerning another issue as well. At the department level, the pattern was similar.

Correlations between the independent variables in our final models were small or moderate (Table 1), giving little reason for concern about potential multicollinearity problems. Norms had significant positive correlations with organizational commitment at the individual level, but not at the department level (Table 1b). Correlations between norms and social relations were non-significant at both levels, suggesting that high numbers of social relations were not associated with a particular content of norms (i.e. norms encouraging vs

**Table 2.** Multilevel Analyses

	Dependent Variable:Voice		
	Model 1	Model 2	Model 3
<i>Intercept (issue-level)</i>			
Issue 1	4.15 (0.19)	3.98 (0.53)	3.96 (0.50)
Issue 2	4.30 (0.21)	5.20 (0.70)	5.56 (0.67)
Issue 3	3.39 (0.27)	2.57 (0.72)	2.41 (0.68)
Control variables (individual-level)			
Gender		-0.11 (0.40)	-0.18 (0.37)
Age		0.04* (0.02)	0.04* (0.02)
Education		-0.22* (0.11)	-0.09 (0.11)
Control variables (department-level)			
Department: average age		-0.06 (0.05)	-0.09* (0.04)
Loyalty (individual-level)			
Organizational commitment		-0.01 (0.11)	-0.01 (0.10)
Social relations			
Issue 1		0.08 (0.09)	0.10 (0.18)
Issue 2		0.02 (0.09)	0.04 (0.26)
Issue 3		0.04 (0.16)	-0.47 (0.31)
Context (individual-level and issue-level)			
Perceived norms		0.01 (0.13)	0.00 (0.12)
Issue 1			
Issue 2			
Issue 3			
Perceived problem			
Issue 1		0.76*** (0.23)	0.70** (0.23)
Issue 2		1.49*** (0.44)	1.63*** (0.44)
Issue 3		-0.09 (0.30)	-0.17 (0.29)
Context (department-level)			
Group norms			
Issue 1		0.03 (0.33)	0.00 (0.32)
Issue 2		-0.17 (0.29)	-0.23 (0.27)
Issue 3		0.86 (0.65)	0.73 (0.61)
Group perception of problem			
Issue 1		0.10 (0.36)	0.51 (0.36)
Issue 2		1.12 (0.62)	1.40* (0.58)
Issue 3		-0.63 (0.47)	-0.45 (0.46)
Interactions: Loyalty (individual-level) x Context (department-level)			
Social relations x group norms			
Issue 1			-0.08 (0.16)
Issue 2			-0.22 (0.12)
Issue 3			0.67* (0.33)
Social relations x group perception of problem			
Issue 1			-0.62** (0.19)
Issue 2			-0.23 (0.27)
Issue 3			0.23 (0.28)
Variances and covariances			
Variance between departments	0.10 (0.14)	0.08 (0.11)	0.02 (0.07)

**Table 2.** (Continued)

	Dependent Variable:Voice		
	Model 1	Model 2	Model 3
Variance between individuals, Issue 1	2.81 (0.41)	2.25 (0.33)	2.06 (0.30)
Variance between individuals, Issue 2	2.32 (0.44)	1.45 (0.29)	1.34 (0.26)
Variance between individuals, Issue 3	3.37 (0.68)	3.25 (0.65)	2.83 (0.56)
Covariance, Issues 1 and 2	1.79 (0.37)	0.87 (0.28)	0.66 (0.26)
Correlation, Issues 1 and 2	0.70	0.48	0.40
Covariance, Issues 1 and 3	1.38 (0.46)	1.27 (0.40)	1.05 (0.36)
Correlation, Issues 1 and 3	0.45	0.47	0.43
-2 log-likelihood	756.21	722.41	704.54
$\Delta$ -2 log-likelihood (df)		33.80 (18)** <sup>c</sup>	17.87 (6)** <sup>a,b</sup>

Notes: Data on 204 actions of 121 respondents in 16 departments.

<sup>a</sup>Compared to Model 1. <sup>b</sup>Compared to Model 2.

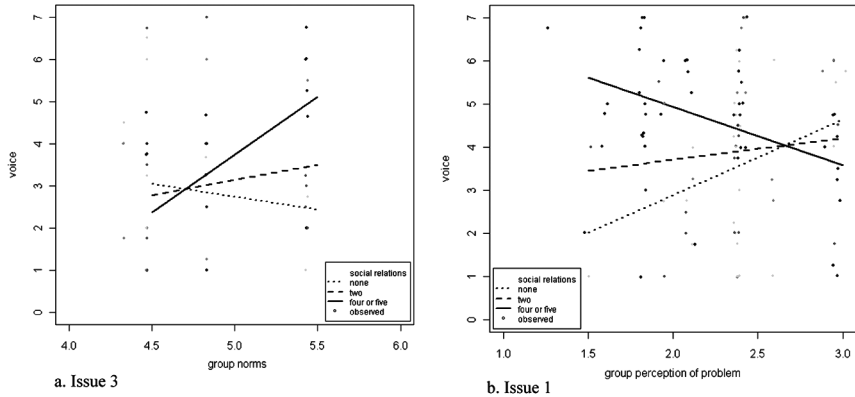
\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

discouraging voice). Department-level organizational commitment had significant negative correlations with perceived problems for Issues 1 and 2 (Table 1c), suggesting that in departments where average commitment was high, individuals tended to see less serious problems. Department-level social relations had non-significant negative correlations with perceived problems for Issues 1 and 2, but a significant positive correlation for Issue 3. This suggested that in departments where employees had many relationships, individuals perceived somewhat fewer problems concerning Issues 1 and 2, but significantly more problems concerning Issue 3. Individuals' own organizational commitment and social relations had similar, but less strong effects than the department-level variables.

We now turn to the results of the multilevel analyses (Table 2). The empty model (Model 1) largely reproduced the relations found in the simple means and correlations. The variances indicated that differences between individuals were larger than differences between departments. Adding first control variables and main effects (Model 2) and then cross-level interactions (Model 3) significantly reduced the variances, explaining virtually all between-department differences and a good portion of the individual differences.

Examining the effects of demographic characteristics, we found that respondents' education had a negative effect; age had a positive individual-level effect, but a negative department-level effect. The respondent's perception of a problem had a strong positive effect for Issues 1 and 2, but a non-significant negative effect for Issue 3; the pattern was similar at the department level. Perceived norms and group norms had no effect on voice. Most effects remained virtually unchanged when adding the cross-level interactions (Model 3).

Hypotheses 1a and b predicted that the effect of relational loyalty on voice depended on others' support for voice, as reflected in (a) their norms and (b) their perception of the problem. We found that social relations had a small, non-significant main effect on voice. The cross-level interaction with group norms was significant for Issue 3, while the interaction with group perception of the problem was significant for Issue 1. The interactions are visualized in Figure 1. For Issue 3, respondents with more social relations were more likely to act in line with group norms than respondents with fewer social relations ('social control'). For Issue 1, respondents with few social relations were *more* likely to speak up



**Figure 1.** Effects of social relations and (a) group norms and (b) group perception of problem on voice

*Notes:* Lines are based on predicted voice for covariate values equal to zero. The range of group norms, group perception of problem and the three values for social relations (representing low, medium and high numbers of friends) are based on the observed values for Issues 3 and 1, respectively. Observations for individual respondents (Issue 3:  $n = 51$ ; Issue 1:  $n = 98$ ) are indicated by dots, with light to dark shades reflecting none to many social relations.

when others perceived many problems, whereas respondents with many social relations were *less* likely to do so ('buffering'). For both issues the distribution of observed values suggested that these interactions reflected an overall pattern, rather than being due to a small number of extreme cases. For Issue 2, voice was largely predicted by perceived problem and group perception of the problem; none of the interactions was significant.

Our findings supported Hypothesis 1a with regard to Issue 3, while Hypothesis 1b was supported for Issue 1.

Hypotheses 2a and b predicted that there would be no interactions between attitudinal loyalty and others' support for voice, as reflected in (a) their norms and (b) their perception of the problem. As shown in Table 2, organizational commitment had a small, non-significant effect on voice. In line with Hypothesis 2, all of the cross-level interactions involving organizational commitment were non-significant.

## Discussion

The starting point of our argument was that for explaining voice, the effect of loyalty depends on the organizational context. Further, we argued that this hinged on the relational aspect of loyalty (i.e. attachment to the organization through close social relations with other organizational members). Data from an employee survey in a Dutch public sector organization, measuring employee voice in reaction to three issues (work pressure, everyday problems and 'regionalization', an ongoing organizational change), provided partial support for this argument. Compared to a measure of attitudinal loyalty (i.e. organizational commitment), the effect of the measure of relational loyalty (i.e. social relations) was indeed more sensitive to the organizational context. Interestingly, we also found notable differences between issues.



In itself, relational loyalty had no effect on voice. Rather, its effect depended on the organizational context and the issue. For Issue 3 (regionalization), the positive effects of group norms on voice were stronger for employees with many close social relations ('social control'). The presence of this interaction for Issue 3, an organizational change, is in line with previous research suggesting that norms become more important in situations characterized by uncertainty, such as an organizational change (Ehrhart and Naumann, 2004). For Issue 1 (work pressure), employees with many close social relations were more likely to speak up when others did not perceive serious problems ('buffering'). In line with our argument, this suggested that these employees could 'get away' with acting contrary to group opinions. Interestingly, they were also less likely to speak up when others saw serious problems ('buffering'). Perhaps when several group members perceived high work pressure, well-connected employees with many social relations coordinated their actions, so that one employee spoke up for several others. By contrast, we found no significant interaction effects between attitudinal loyalty and the organizational context. In line with our argument, this suggested that the interactions indeed hinged on the relational aspect of loyalty.

Importantly, also, our findings highlighted the crucial role of perception of problems, both by respondents and by members of their department. For Issues 1 and 2, the main effects of these variables were among the strongest in our study; for Issue 1, the interaction involving group perception of problems was significant as well. An exception was voice concerning Issue 3, where individual- and department-level perception of problems had non-significant negative effects. Perhaps this was because, in contrast to Issues 1 and 2 where respondents reacted to existing problems, employees who perceived the change as beneficial might also speak up to contribute ideas for further improvements.

For research on Hirschman's (1970) 'Exit-Voice-Loyalty' framework, our findings imply that it may be important to distinguish between attitudinal and relational aspects of loyalty in future theorizing. Attitudinal loyalty has been considered a motivation for voice in previous theoretical work, but inconsistent empirical findings raised questions about this interpretation. Moderator effects might provide an explanation for these inconsistent findings (Tangirala and Ramanujam, 2009), however the underlying theoretical mechanism remains unclear and empirical support is weak at best. Tangirala and Ramanujam (2008) found that the effect of attitudinal loyalty (operationalized as organizational commitment) on voice was moderated by procedural justice climate. In our analyses, the interactions between organizational commitment and others' support for voice were non-significant. Although we considered a different aspect of the organizational context (i.e. others' support for voice), our analysis provided a stricter test by adopting a repeated-measures design, controlling for perceived problems as motivation for voice, and testing interactions involving organizational commitment and social relations directly against each other.

Our empirical findings suggest that interactions between the organizational context and loyalty may depend on the relational aspect of loyalty. Theoretically, this seems more plausible as well. Relational loyalty highlights employees' embeddedness in the organizational context through close social relations with other members of the organization. Because this entails a certain degree of interdependence with these other members of the organization (Lindenberg, 1997), employees need to take into account others' norms and opinions in order to achieve their goals. This could explain why the effect of relational loyalty may depend on the organizational context.

Taking interactions into account may help to clarify the relationship between loyalty and voice. Whether loyalty and voice reinforce each other or are mutually exclusive cannot be answered universally. Rather, this depends, first, on whether employees' loyalty makes them subject to group pressure (social control), or, contrarily, entails informal power (buffering). Second, it depends on whether the group supports speaking up, for instance through norms encouraging voice, or their perception of a particular problem. When loyalty entails being subject to social control, in organizations where members take a positive stance towards voice, loyalty may indeed entail speaking up about problems. In organizations where voice is discouraged, loyalty may entail quietly 'stand[ing] by the organization' (Farrell and Rusbult, 1992: 202). And in organizations where different subgroups take different stances concerning voice, there may be no clear association with voice at the organizational level. By contrast, when loyalty entails informal power, this may allow loyal employees to act independently of – and perhaps even against – group norms and opinions. Third, we found strong indications that issue characteristics matter as well.

Taken together, this suggests that future research on Hirschman's (1970) 'Exit–Voice–Loyalty' framework will benefit from a theoretical distinction between attitudinal and relational aspects of loyalty. The presence and nature of interaction effects should be examined as well. Here we examined group norms and group perceptions of the problem, but other factors may also play a role (Tangirala and Ramanujam, 2009). Finally, our study, along with the few existing studies that compared employees' reactions to different types of problems (Kassing and Armstrong, 2002; Near et al., 2004), highlights the importance of including individual- and group-level measures of problem perception, as well as comparisons between reactions to different types of problems.

Several limitations of our study are evident. Our data came from a cross-sectional study of a single organization; response was relatively low. More research, preferably longitudinal, will be needed to test the hypotheses in larger samples, and in different organizational settings. Further, in the organization we studied, group norms encouraged voice to a greater or lesser extent in all departments. A comparison between groups with norms discouraging and encouraging voice would be desirable as well, to provide a stronger test of our hypotheses. Another limitation of our study concerns the identification of relevant groups. Although it seems reasonable to assume that departments provide a relevant social context, this may not always be the case, especially in larger departments. Preferably, relevant groups should be identified empirically, for instance through social network analysis (Wasserman and Faust, 1994). However, this entails other trade-offs, such as non-anonymity of respondents.

In conclusion, our findings suggest the importance of considering relational loyalty, both in theorizing and empirical research. They also highlight the complexity of the factors affecting employees' decision to speak up. In particular, the effect of relational loyalty seemed to depend on the organizational context and the issue, supporting our argument that it not only matters *whether* there is relational loyalty, but also *what* one is attached to.

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## Notes

1. In research on Hirschman's 'Exit-Voice-Loyalty' framework, loyalty has been interpreted both as a behavioural response to a problem and as an antecedent of exit and voice. Here we adopt the latter interpretation, which seems most in line with Hirschman's overall argument (Dowding et al., 2000; Graham and Keeley, 1992).
2. On request by the organization, we did not collect data in one recently established department of the laboratory unit. In one department of the administrative unit, and one department of the patient-care unit, none of the employees responded.

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