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The role of the informal and formal organisation in voice about concerns in healthcare: A qualitative interview study

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ABSTRACT

The importance of employee voice—speaking up and out about concerns—is widely recognised as fundamental to patient safety and quality of care. However, failures of voice continue to occur, often with disastrous consequences. In this article, we argue that the enduring sociological concepts of the informal organisation and formal organisation offer analytical purchase in understanding the causes of such problems and how they can be addressed. We report a qualitative study involving 165 interviews across three healthcare organisations in two high-income countries. Our analysis emphasises the interdependence of the formal and informal organisation. The formal organisation describes codified and formalised elements of structures, procedures and processes for the exercise of voice, but participants often found it frustrating, ambiguous, and poorly designed. The informal organisation—the informal practices, social connections, and methods for making decisions that are key to coordinating organisational activity—could facilitate voice through its capacity to help people to understand complex processes, make sense of their concerns, and frame them in ways likely to prompt an appropriate organisational response. Sometimes the informal organisation compensated for gaps, ambiguities and inconsistencies in formal policies and systems. At the same time, the informal organisation had a dark side, potentially subduing voice by creating informal hierarchies, prioritising social cohesion, and providing opportunities for retaliation. The formal and the informal organisation are not exclusive or independent: they interact with and mutually reinforce each other. Our findings have implications for efforts to improve culture and processes in relation to voice in healthcare organisations, pointing to the need to address deficits in the formal organisation, and to the potential of building on strengths in the informal organisation that are crucial in supporting voice.

1. Introduction

Deficient quality, unsafe systems, or inappropriate conduct in healthcare organisations are potent sources of risk and harm to patients. Those working at the sharp end of care often become aware of the problems through their everyday work (Edmondson, 2003; Hackman and Wageman, 1995; Tucker et al., 2008). Improving safety and quality depends on employees giving voice to these concerns (Milliken and

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Morrison, 2003), since systems for monitoring are unlikely to detect the full range of risks. But, in common with other industries, healthcare personnel may not always raise concerns in real-time, as incidents are unfolding, or after the event, through formal reporting systems, to the extent that under-reporting of concerns is the norm (Martin et al., 2015, 2018). Failures of voice pose challenges for healthcare organisations and agencies seeking to form a comprehensive view of quality and safety, and have been implicated in healthcare scandals worldwide (Casali and Day, 2010; Mid Staffordshire NHS Foundation Trust Public Inquiry, 2013; Newdick and Danbury, 2015).

One response is to focus on institutional design. This might, for example, include incorporating commitments to openness and candour into policy and formal organisational mission statements, and creating a corresponding apparatus intended to support voice, including procedures, reporting systems, and organisational roles to support voice, such as Freedom to Speak Up Guardians in the English National Health Service (Martin et al., 2020). Similarly, an important recent focus of academic and some organisational attention has been improving organisations' ability to listen: to improve their ability to access, process and act upon the panoply of sources of intelligence that are available to them, not all of which will be framed as intentional acts of voice (Jones and Kelly, 2014a; Martin et al., 2015). A notable finding of many investigations into apparent failures of healthcare worker voice, however, is the frequent dissonance between formally espoused values of openness and listening, and the realities of raising concerns as they are experienced by those at the sharp end (Jones and Kelly, 2014b).

The gap between formal policy and individuals' actual voice behaviours is often explained by invoking pathological organisational cultures. Defined as the "values, beliefs and assumptions," "shared way of thinking" and "shared narratives and sense making" that underpin organisations (Mannion et al., 2009, p. 152), organisational culture is undoubtedly consequential. Discussing failures in clinical governance and oversight associated with shortcomings in patient safety at Bundaberg Hospital in Australia in the early 2000s, for example, Casali and Day (2010, p. 78) highlighted the incongruence between public claims of organisational values of integrity, openness and honesty, and an unhealthy organisational culture that promoted "fear, tokenistic consultation, bullying and the abuse of power." Similarly, inquiries and investigations into high-profile healthcare crises in the United Kingdom have repeatedly found that unwillingness or inability to raise concerns was strongly linked to perceptions that, whatever the official organisational position, exercising voice was likely to be risky and ineffectual (Dixon-Woods et al., 2014; Ehrich, 2006; Walshe, 2018; Walshe and Shortell, 2004). As Mannion and Davies (2018, p. 1) note, such inquiries and investigations (e.g. Mid Staffordshire NHS Foundation Trust Public Inquiry, 2013) frequently posit organisational culture as "the primary culprit" in healthcare scandals. Yet simplistic diagnoses of cultural defects and subsequent prescriptions for "cultural reform" often lack depth and specificity (Mannion and Davies, 2018, p. 1).

To address this problem, explain divergences between official declarations of the importance of voice and what happens in practice, and formulate potentially more effective ways of promoting voice, value may lie in exploring a construct that has commanded sociological attention since the first half of the twentieth century: the "informal organisation". The idea of organisational culture builds on the concept of the informal organisation (Parker, 2000); we propose that by paying closer attention to the informal organisation and its relationship with the formal organisation, we might reach a better understanding of how to support voice. We use data from a large qualitative interview study covering three healthcare organisations in two countries to illustrate our analysis of the dynamic interplay between the formal and informal organisation.

1.1. The informal organisation and its relationship with the formal

Formalisation in organisations is characterised by the use of explicit policies, rules and procedures, providing mechanisms for control, coordination and standardisation (Sandhu and Kulik, 2019). Early understandings of organisations focused largely on these rationalised, formal elements (Weber, 1946). Represented in schemas such as organograms identifying organisational structures and hierarchical relationships, the formal organisation also includes human resource practices, job design, and governance arrangements (Scott and Davis, 2007). This ongoing codification of how individual parts are intended to do the work of coordinating and controlling activities, and how these elements relate to one another, is the defining attribute of the formal organisation. But organisations' formal role definitions and written rules are subject to interpretation, and their influence on members' behaviour has limits (Gouldner, 1954). More broadly, multiple gaps tend to appear between formalised structure and actual day-to-day activities, since many relationships and actions in a work setting are not part of, visible to, or governed by any aspect of the formal organisation. An informal system of work practice, social connections, and methods for making decisions, mobilising resources and coordinating activities (Lincoln and Miller, 1979) typically emerges, which can be understood as the informal organisation.

A large literature has emerged on the idea of the informal organisation. It describes what arises from ongoing personal contacts or interactions that occur without conscious or explicit joint purpose, but are nevertheless crucial to the processes of organising (Barnard, 1938). Founded in the personal characteristics and relationships of organisational participants, it strongly influences the behaviour of individuals and how the organisation operates. The informal organisation can include emergent characteristics such as norms and values, social networks, and power and politics (Scott and Davis, 2007). For some theorists, the informal organisation is central to organisational life, since informal norms and behaviour patterns are crucial to accomplishing the work of organisations. Such scholars have questioned both the importance and the effectiveness of highly formalised structures within organisations, highlighting the limitations and unintended consequences of formalisation, and pointing to informal structures which often supplement, erode or transform such structures (Blau, 1963; Gouldner, 1954; Scott and Davis, 2007).

More recently, there has been renewed interest in Barnard's (1938) insights into the interdependence and interaction between formal and informal organisation (du Gay, 2020). This stream of research views formal and informal organisational elements as jointly influencing key organisational outcomes and each other (McEvily et al., 2014; Soda and Zaheer, 2012). This work recognises that employees' formal position, in a specific unit, with attributed responsibilities, and with lines of reporting and accountability, drives much of their interaction and behaviour—but that the informal organisation also influences behaviour and other organisational outcomes by enabling, augmenting and transforming work that is only partially codified by the formal organisation. Gulati and Puranam's (2009, p. 423) study of informal organisation, for example, shows how the informal organisation may both "supplement" the formal organisation (building on formal prescriptions by "emphasizing the same set of employee behaviors") and "compensate" for its deficiencies (by promoting complementary behaviours).

The informal organisation may, for example, help in performing vital organisational functions, perhaps relating to communication, maintenance of cohesion, and safeguarding individuals against the dehumanising aspects of formal organisation. It may do this through social networks, which rely not only on formally prescribed ties and connections between individuals, but also on informal connections, including friendships and coalitions (Tichy et al., 1979). As well as offering a buffer against the alienation of formal organisation, such features can be crucial to the way the organisation functions: expediting decision-making, working around excessive administrative requirements, or getting things done in the face of complex or contradictory external expectations (Greenwood et al., 2011).

This is not to say, however, that the informal organisation has an

exclusively or necessarily positive influence on organisational life. While it is pervasive and necessary to smooth organisational functioning, the informal organisation is also prone to malign behaviours and consequences. The dark side of informal organisation may emerge in a range of ways. For one thing, the informal organisation may generate subgroups and cliques who deviate from formal organisational rules and norms (Casali and Day, 2010), sometimes with catastrophic results (Kirkup, 2015). Another problem is that people may seek to secure advantage and privilege through informal positions that offer status, respect and esteem beyond that bestowed by the formal organisation (Tajfel and Turner, 2004). Here, the informal organisation may create its own hierarchies, or magnify the hierarchies of the formal organisation to ill effect. Individuals located lower in formal hierarchies tend, for example, to experience low self-efficacy, undervalue their contributions or ideas, and routinely yield to higher-ranking employees in social situations (Nembhard and Edmondson, 2006).

Acknowledging these insights, which to date have been drawn largely from fields outside healthcare, our study addresses the following question: how does the informal organisation interact with the formal organisation to make voice more or less likely in hospital settings? In answering this question, we draw out implications for how best to intervene to support people in raising concerns in healthcare quality and safety.

2. Methods

We conducted a qualitative study involving semi-structured interviews in three large hospital systems, examining policy, practice and culture around giving voice to concerns about issues relating to quality, safety and behaviour. Site selection was initially pragmatic; the first site, located in a high-income country, had commissioned a study to understand how to improve employee voice after experiencing a patient safety incident. The second and third sites were purposefully selected to test the generalisability of constructs. While fieldwork in the first site covered an entire integrated academic health system, in the second and third sites we focused on specific organisational units within their wider systems. All three were academic medical centres with affiliations with nearby university medical schools. The third site shared similar organisational characteristics with the first and was located in the same country; the second site was located in a different high-income country but was otherwise similar in size and profile. Organisational anonymity was agreed as a condition of participation in the study, but summary characteristics of the organisations and their contexts are provided in Table 1.

The study was submitted for ethical review at each participating organisation. It received approval in two sites and was deemed quality improvement (and thus exempt from ethical review) in the other. Participants in all three sites completed a verbal consent process. Because of the sensitivity of the focus, our approach to recruiting individual participants emphasised confidentiality, and included several processes to protect participants' identities. Emails describing the study and assuring confidentiality were sent from the leadership of departments covered by the study, providing a link to a confidential response website. Both senior leaders and managers at the "blunt end", and frontline staff at the "sharp end" of care and other day-to-day hospital activities, e.g. physicians, nurses, technical/administrative staff, building and housekeeping staff, were included. Interviewers provided additional study information to interested individuals who provided contact information through the response website, and telephone interviews were arranged with all who agreed to participate and with whom interviews could be arranged.

Semi-structured interviews were conducted using a topic guide that included questions about how personnel raised concerns about situations or practices that they felt might not support patient safety and service quality. In the interviews, we distinguished between activities depending on the target audiences of voice. We used the heuristic distinction between "speaking up" and "speaking out" first drawn by Liu et al. (2010), and since deployed in other settings, including in healthcare (e.g. Ng et al., 2019; Tarrant et al., 2017). "Speaking up" relates to voice behaviour oriented towards supervisors or management (raising concerns through formal channels such as line managers, reporting systems and hotlines) and "speaking out" relates to voice behaviour toward peers, usually in the moment when an issue that could affect quality or patient safety occurs (Liu et al., 2010). While the two terms are often used interchangeably in the wider literature, a key focus for

Table 1
Summary characteristics of the three participating sites.

	Site 1	Site 2	Site 3
National context			
Country classification[a]	High-income country	High-income country	High-income country
Healthcare system categorisation[b]	Private health system (privately funded, market-regulated, privately provided)	National health insurance (taxation-funded, government-regulated, privately provided)	Private health system (privately funded, market-regulated, privately provided)
Organisational attributes			
Organisation characteristics	Integrated academic health system including medical school, acute and community hospitals, and primary care	Academic hospital including medical school, acute hospital and community services	Academic medical centre covering a wide range of acute specialties, part of a wider integrated health system
Annual admissions (to nearest 10k)	100,000	70,000	50,000
Inpatient beds (to nearest 500)	2500	500	1000
Employment model	Non-medical staff directly employed; physicians predominantly independent or university-employed	Most staff directly employed	Non-medical staff directly employed; physicians predominantly independent contractor
Organisational context			
Prevailing infrastructure for voicing concerns	Range of formal mechanisms including incident-reporting system for behavioural as well as clinical matters. Confidential hotline. Policies codifying behavioural expectations and responsibilities. Guidance on how to escalate concerns.	Range of formal mechanisms including incident-reporting system. Central group responsible for responding to cross-departmental concerns identified. Drop-in sessions for staff with concerns. Policy for appropriate escalation of concerns raised.	Range of formal mechanisms including incident-reporting system. Formally specified remedial interventions to clinicians where behaviour has caused problems. Training in human-systems interaction.
Additional relevant background	Widely publicised, recent case of long-running abuse by a prominent physician	Widely publicised case of poor quality care and mistreatment of whistleblowers	Longstanding emphasis on just culture approach to incidents and concerns

[a] According to World Bank country classifications (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups).
[b] Classification based on Böhm et al.'s (2013) typology.

our study was examining whether the dynamics of speaking up differed from the dynamics of speaking out, given their divergent characteristics in terms of speed of decision-making, audience, degree of formality, and implications for consequent action. Most interviews covered both forms of voice. Interviews were conducted by three authors. All interviews were digitally audio-recorded and interview transcription was conducted by third-party professional transcription services. Transcripts were not shared with participants or their organisations.

Data analysis was based on the constant comparative method (Charmaz, 2006), and took place in two stages. In the first stage, a selection of interviews was coded line-by-line to develop an initial coding frame, which was then applied to subsequent transcripts, and iteratively refined as new codes were defined. The second stage involved a further analysis of this inductively coded dataset, oriented specifically towards the role of informal processes and their relationship to formal organisational policies, and informed by literature on the informal organisation. This process involved a further round of refinement, combination and disaggregation of codes in light of themes deriving from the theoretical and empirical literatures described above. NVivo software was used to assist both stages of coding and analysis.

In presenting our findings, we occasionally alter minor details of quotations to preserve anonymity. We attribute quotations to either frontline staff (FL) or senior leader participants (SL) in each of the three sites (S1–S3). These broad designations were chosen to protect participants' identities, and consequently they conceal heterogeneity in both groups. Senior leaders from clinical backgrounds, for example, generally continued to undertake frontline duties, and often recounted examples of frontline activities in interviews. However, even in such examples of their work at the sharp end of care, participants' positions within the organisational hierarchy remained important, and the labels we use in reporting our findings reflect these standpoints.

3. Findings

Across all three sites, we interviewed 165 participants in total: 57 were identified as senior leaders at the blunt end of care (SL), and 108 were in frontline roles at the sharp end of care (FL) (Table 2).

3.1. An elaborate but often ambiguous formal organisation

In interviews, participants across the three healthcare organisations typically described an elaborate formal organisation in relation to issues of voice. They gave accounts of clear expectations about the importance of speaking *out* in the moment about immediate dangers to patient safety and quality, and procedures for speaking *up* about ongoing risks and concerns. Accounts were given of many formal opportunities for voice, including monthly staff or provider meetings, multidisciplinary safety rounds, and safety huddles, as well as formally mandated roles such as patient safety officers who had specific focus on facilitating voice.

> "We have multiple joint conferences and joint meetings, collaborative practice meetings here where everybody is encouraged to speak. Each hospital has its own policies and procedures as well as those that are system wide. We have basically made it clear that anybody who has a significant safety concern or quality concern can stop a process whether it is a surgery or a procedure in the ICU […] The other venues are: each department or each section has its M&M [morbidity and mortality review] process, so there is an M&M structure there so [concerns get] referred into that process and then gets put on the roster to be reviewed. There is also a root cause analysis process here. When you see something that really is a root system issue you can escalate it to the level of root cause analysis." (S1-FL-014)

Table 2
Breakdown of interview participants by site.

Site	1	2	3	Total
Responses to invitation	118	78	133	**329**
Interviews with senior leaders	20	16	21	**57**
Interviews with frontline personnel	47	31	30	**108**
Total interviews conducted	**67**	**47**	**51**	**165**

The formal organisation, by its nature, depends on rules that specify what should happen and who is responsible, and participants at all levels appreciated its necessity. They reported that elements of the formal organisation, such as policies, systems, procedures, processes and various forums, mattered greatly for their behaviours in relation to voice. But they also emphasised the difference between rules and processes as formally documented, and rules and processes in practice. In particular, they reported that voice actions were not the work of straightforward application of rules: they often required interpretation in the context of the specific issue of concern, and also an intimate knowledge of the informal organisation.

One frequently reported challenge was that the formal rules governing voice were not always well designed, complied with, or consistently interpreted. Participants were, unsurprisingly, critical of formal procedures that were difficult-to-follow, ill-suited to the types of concerns people routinely encountered, or erratically applied. A frequently raised problem, for example, was ambiguity about what counted as a reportable concern requiring an organisational response. Notwithstanding statements about valuing staff voice and about professional obligations to raise concerns, the formal organisation did not always offer clarity about what should be reported. Inconsistency in how concerns were classified and acted upon was also evident: participants reported that using the formally prescribed mechanisms for some types of concern was unlikely to result in action, or sometimes even acknowledgement.

> "[The response to issues raised via the incident-reporting system] is highly subjective so there is no process for that. To a certain extent you don't have to respond and that might be one of the issues with [incident-reporting system]. Even though there are [incident-reporting system] coordinators that look at them and send them to every man and their dog that they think are interested, there is no actual requirement on me to respond or anyone else." (S2-SL-009)

The gaps between the formal organisation's commitment to voice and the realities as experienced at the sharp end were especially evident in relation to less-than-critical concerns. Day-to-day throughput of patients required expediency, and less-than-critical concerns were seen to be at risk of lukewarm or even punitive responses.

> "I think the smaller corrections, that are not so much medical error, but are more improving the atmosphere, improving the efficiency of the system, there is a little bit more kind of punitive feeling right now coming out." (S3-FL-025)

The response of the organisation, then, could be a strong influence on voice behaviour, regardless of formal declarations supportive of voice, as could the expected response or perceive receptiveness of the organisation (cf. Jones and Kelly, 2014a; Martin et al., 2019).

3.2. The informal organisation and the etiquette of speaking up

To make sense of the concerns that troubled them, to form a sense of how likely or unlikely the formal organisation was to take them seriously, and to gauge the potential personal risks that might arise from a decision to speak up, individuals negotiated the knowledge and networks of the informal organisation. The informal organisation provided clues and cues about what mattered, and the 'etiquette' (as opposed to procedures) governing the raising of concerns (cf. Goffman, 1982). Social ties that allowed participants to discuss concerns with colleagues in a low-key, low-stakes environment were crucial to working out what

might count as a concern and how it might be addressed.

> "The classic example is a new nurse and before she would ever get to the chain, she'll talk to her colleagues first, then she'll talk to the charge nurse, then the nurse manager and rally the forces around her. […] So, 'Is this the right thing?', and, 'How should I say it?' And planning and scripting it as opposed to 'let me just pull you aside and have a cup of coffee', kind of thing […] and that suggests to me that she doesn't feel protected in doing it herself." (S1-SL-006)

Besides informally triaging their concerns in this way, employees also described strategies to enlist the support of their colleagues in moving issues forward, particularly in relation to speaking *up*. Forming coalitions helped to enhance credibility, make use of the formal position and informal networks of a wider range of individuals, force the formal organisation to take the concern seriously, and diffuse the personal risk associated with voice among a wider group.

> "I would probably try to politically pull in different constituencies to help move the issue along so that it wouldn't be just my reporting it, it would be having certain constituents in the organisation who are also strong leaders to be aware of it and to form alliances with them to move the agenda forward." (S1-SL-001)

> "I think when the nurses reported the attending, they were concerned about it and they were concerned that there would be verbal retaliation and it would be really unpleasant to work with them. […] They actually came as a group and I think they were fed up enough that they actually did it but I think there were concerns." (S1-SL-017)

For those in more senior positions, these kinds of informal coalitions could also prove helpful in overcoming the inertia that sometimes characterised the formal organisation, ensuring that any reluctance to pursue due process could be surmounted, and that concerns would be taken seriously. The informal organisation, when it operated in this way, "supplemented" (Gulati and Puranam, 2009) the formal organisation in processing a concern. The informal organisation, in this sense, was what helped the formal organisation to function.

> "I got six individual staff members' documentations of incidents that had happened in the workplace over a short period of time, so probably a three-to-four-month time. […] They emailed their manager, and their manager then emailed the [executive] their representation of the situations that had occurred. Some of them did that, and the [executive] documented other conversations that she'd had with other staff as well. So I ended up with probably about eight pieces of documentation from a group of staff about this individual's behaviour. […] I sought HR advice about the process moving forward, because I wanted to make it a formal process." (S2-SL-015)

3.3. The informal organisation and speaking out

Similar mechanisms operated in relation to speaking *out* in the moment about immediate dangers to patient safety and quality. Again, though formally encouraged, we found a heavy reliance on informal networks to navigate interactions with colleagues. Several participants reported that their ability to speak out was determined largely by features of the team environment in which they worked. Though teams are formally prescribed modes of organising, the more informal connections and interactions they occasioned seemed critical to speaking out in a team setting.

> "On some units it is the same group of people—nurses, physicians, techs, everyone—that function together every day, and that's the ideal situation. You get to know each other on a personal basis so it's much easier to say, 'Hey', you know, 'listen: can you do me a favour? Next time when this happens, could you do this?' And be civil to each other because you know each other. I don't think familiarity breeds contempt in this situation; in fact it breeds fondness and civility." (S1-SL-014)

> "You can have a more casual and laid-back attitude about things within the same group. You know, if I lean over and tell my co-intern that they're ordering something on the wrong patient, which we've all done, like it's not that big a deal. You're socially friends with a lot of who you work with, so it's not a big deal to send an email and saying, 'Hey, what happened last night?' or, 'Why did you order this?'" (S3-FL-027)

Aspects of the informal organisation, such as social relationships outside prescribed work roles, could facilitate voice by enabling insights into a person's character and intention and forming a better foundation for communication and exchange, allowing receptiveness rather than hostility or suspicion. Mutual respect and shared understanding helped in both the giving and the receiving of such feedback.

> "[It's not] here's somebody telling me I don't know how to do my job [but rather] that there's an underlying presumption that I respect and admire you, I think you're well-intentioned and that you're good at your job." (S3-FL-030).

Informal vertical networks, i.e. social relationships between superiors and subordinates in the formal hierarchy, appeared important in creating a positive environment for speaking out. When describing relative ease or comfort in giving voice to concerns, several participants noted the importance of the quality of their relationship with their manager: "get along well" (S3-FL-032), "have good relationship" (S1-FL-085), "is a friend" (S3-FL-021). Such positive relationships with line managers greatly aided individuals in raising issues with seniors. In some departments, in contrast, staffing patterns resulted in inconsistent team membership that presented a barrier to getting to know people—both functionally and personally.

> "Sometimes it's really hard when you're shuffled around a lot as a junior doctor, and you often don't know the team. So I've often found it much harder to raise concerns and speak out about even relatively small things, when it's a brand new team that I've never worked with before …. " (S2-FL-007)

> "I think one of our biggest issues is we don't ever usually work in the same teams; we're constantly trading teams in the OR and on the floor. The more you get to know people, the more of a relationship you have with them and the more rapport you have … when you are working with someone for the first time, that person may do things completely different, that person may be used to different systems, and so there can be a lot more communication errors or errors of misunderstanding." (S3-FL-022)

3.4. The dark side of the informal organisation: when it subdues voice

While seeking to create and maintain harmonious relationships was often vital for raising concerns, the informal organisation could also act to suppress voice (both speaking out and speaking up) by requiring forms of obedience to group norms, either because of the importance of avoiding conflict in relationships for day-to-day work, or because of a sense that conforming behaviour would result in personal reward.

> "You kind of want to stay one big happy family at work so you can help each other if you've got, if you need help or a code situation or something, you need everyone to have your back." (S3-FL-029)

> "You get the impression if you're a team player and you work within the structures and you cross your Ts and dot your Is, and don't raise things, then you're more likely to do well within the organisation." (S2-FL-008)

The formal organisation's efforts to encourage voice were thus on the

one hand supported by elements of informal organisation that valued group coherence, and on the other hand undermined by precisely the same elements in situations where the priorities of those groups were not fully aligned with declared organisational policies. Several participants reported that speaking out or speaking up might be seen as "rocking the boat" (S1-FL-013), "creat[ing] trouble within the team" (S2-FL-005), "complaining" (S1-FL-016) or "whinging" (S2-SL-002). It might be seen as an antisocial act rather than a prosocial one, breaking an unspoken bond by "dobbing on their peers" (S2-SL-008), being a "tattletale" (S3-FL-029), or "rat[ting]" (S1-FL-001). Given their dependency on others for work efficiency and performance, participants described using voice sparingly to preserve ongoing positive dynamics and working relationships, only speaking out or up about "very important" (S3-FL-016) matters.

Informal hierarchies also interacted with formal hierarchies to define and organise patterns of relating and behaving around voice. For instance, physicians and surgeons were typically top of the informal hierarchy, reflecting to some extent their formal organisational positioning, but also, crucially, reflecting informally conferred status and privilege, and rankings of entitlement to speak and be heard. This informal ordering and patterning of rights of speaking and listening was highly consequential for voice. Participants described instances where senior doctors did not respond positively to speaking out on the basis that the informal organisation granted them immunity from having to listen to lower-ranked individuals—even though this was not at all formally codified. One participant described physician responses as ranging from dismissive, to placating, to very aggressive (S2-FL-008). Another reported that "doctors ignore nurses because […] they are taught they're *just* nurses" (S2-SL-001).

The potential for subduing of voice was most evident in intra-professional relationships, where the formal hierarchy was clearly established and where the informal hierarchy most closely aligned with it. In these settings, an individual's position in both the formal and the informal social structure contributed to her or his level of influence. For individuals without such status and influence, the perceived risk was that senior staff would not view speaking out or speaking up positively—as prosocial behaviour aimed at improving performance and reducing harm and error—but instead as direct and personal critique that violated the ceremonial (and hierarchical) order (Goffman, 1982).

> "In some of the more hierarchical departments, trainees expressing concerns about attendings can be very negatively received, and can actually result in kind of, not punitive action, but that resident being perceived very negatively." (S3-SL-008)

A further important feature of the relationship between the formal and informal organisation was the way in which the formal organisation enabled opportunities for informal retaliation 'downward', by those in higher-status positions. Participants' experiences of speaking up (and to a lesser extent speaking out) about the behaviours of superordinate colleagues included responses ranging from raising a retaliatory concern about the individual who had spoken up, through interpersonal interactions where the speaker was treated differently or ignored, to instances where the speaker was subject to undesired tasks or involuntary transfer.

> "All of a sudden my name was on the call schedule. […] It is just a small enough group that everybody knows who said something. […] And the idea that they won't retaliate? Well they can: they retaliate in subtle ways that don't rise to the level of illegal." (S1-SL-011)

> "I would say that you're pretty much protected from the institution if you've got the proper documentation. I would say that one could win the specific battle, but you're not going to win the war. Meaning that, 'Oh, OK so you did this, so I'm going to make you do this [unpleasant] task instead because you squealed on me. And if you don't like it, you can leave'. And I've been witness to that at times." (S1-FL-087)

Crucially, however, these forms of retaliation, while not *formally authorised or encouraged*, had a very real *formal impact*. Individuals further down the hierarchy, such as doctors in training, are regularly evaluated by senior colleagues in the same profession on whom they rely for career progression. As such, they were overwhelmingly concerned about not just about informal sanctions, such as being ignored or removed from social networks, but also formal retribution, in the form, for example, of negative evaluations or inability to progress.

> "The other group that I think is vulnerable are the folks who would consider themselves lower in the hierarchy. Now, we all know we shouldn't have that kind of hierarchy. We should function as a team. But if you ask them they would say, 'Well, I don't want to speak up because the physicians, they retaliate'. So the folks who may not have the same training level – technicians on the floor, young nurses who don't have a lot of experience." (S1-SL-014)

> "The immediate reaction from those departments or divisions [to incident reports from junior colleagues] was, 'How dare this trainee? This isn't their place; why are they doing this?' It was [seen as] inappropriate for a resident to file an incident report saying anything about an attending, and saw that as kind of misbehaviour by the resident." (S3-SL-008)

The boundary between the realms of the formal and informal organisation in such situations became blurred. People were aware that these activities were interconnected with each other: formal evaluations are not done in a vacuum (regardless of any formal assurances to the contrary). Safeguards offered by formal processes for speaking up—such as anonymity and protection from retribution—often counted for little given the existence of an informal organisation that could readily subvert such measures.

> "Medicine and science are very hierarchical, so if you are making a complaint about someone who has some power over your promotion within our system, it's this power imbalance that I think makes it very difficult for people to feel comfortable and free enough to speak up. […] If you can't speak up to someone who is really an accountable leader and who will take action and protect you and make a difference, then you can't speak up." (S1-SL-018)

The accountability arrangements of the formal organisation hung heavy in such scenarios. Poor behaviour among physicians, participants acknowledged, was prone to being tolerated, and managers did not always possess the skills or training to have the difficult conversations necessary to hold physicians accountable. The informal organisation was thus seen both to create and to reinforce inconsistent application of policies across occupational groups and at different hierarchical levels. Formal policies and protocols and organisational exhortations to exercise voice could thus be robbed of their effectiveness by the informal hierarchy.

4. Discussion

Decades of sociological examination show informal organisations to be complex systems with their own order and logic, likely to interact with the formal in ways that are not easily predicted. The policies and protocols set out by the formal organisation were important. But the informal organisation too was highly consequential, facilitating or subduing voice in relation to quality and safety concerns.

One way that this was evident was in the way that the formal and informal hierarchies co-existed, supplemented, and mutually reinforced each other (Nembhard and Edmondson, 2006). Both formal and informal hierarchies can operate to undermine the ability and desire of individuals in lower-status groups to speak. Other aspects of the

informal organisation had their roots in the social relationships forged by co-workers independent of their formal relationships. Whatever the origins of these features of the informal organisation, their influence on voice behaviour was profound. But it was not uniform, unidirectional, or necessarily predictable: these features could both support and undermine speaking up and speaking out. Nonetheless, some features of environments that were 'voice supportive' could be distinguished.

In promoting a voice-supportive environment, the informal organisation both *supplemented* and *compensated for* the formal organisation (Gulati and Puranam, 2009). It helped staff to navigate silences and inconsistencies, and negotiate the trade-offs between potential benefits, potential downsides, and personal risks. In some instances, the informal organisation increased the effectiveness of the formal, by supplementing it with a similar set of behaviours. For example, personal relationships could help staff to voice concerns in a more nuanced way that was more likely to be well received. In other instances, the informal organisation compensated for deficiencies in the formal organisation by motivating behaviours that were not adequately promoted by the formal organisation. On occasion, the informal organisation could even encourage voice behaviours that the formal organisation appeared to *dis*courage. Issues such as distrust in formal reporting systems, ambiguity in formal guidance about what to report and overly complex procedures for voicing concerns could be mediated by an informal organisation that offered counsel, guidance and reassurance. Individuals leveraged various informal networks to increase the likelihood of positive response to voice, including personal networks to validate concerns and garner support for both raising issues and promoting their resolution. At the same time, the informal organisation had its dark side. It could also act to deter voice (Detert and Edmondson, 2011; Morrison, 2011), for example by supporting norms that tended towards group coherence and the avoidance of challenge, by providing messages that contradicted formal efforts to mitigate the silencing effect of hierarchies and associated authority gradients, and by reinforcing individuals' doubts about the appropriateness of speaking up or out. The key point is that the informal organisation did not operate uniformly or in a vacuum: its influence on voice behaviour depended on how it related to the formal organisation.

These insights may provide a more practical starting point for somewhat abstract prescriptions for improving voice that position organisational culture as "culprit" (Mannion and Davies, 2018, p. 1). If organisational culture is the "values, beliefs and assumptions" and "shared way of thinking" on which members rely to make sense of their organisations (Mannion et al., 2009, p. 152), then the informal organisation is perhaps best understood as the behaviour that arises from this thinking. Acknowledging and intervening in the informal organisation is key to supporting voice; so too is understanding the informal organisation in the context of its relationship to the formal organisation. Analyses and prescriptions that seek to address culture and behaviour in isolation from formal policy are unlikely to succeed.

Practical implications follow from this point. Most fundamentally, our findings suggest that poor specification of formal policies and inconsistency in their application—for example, ambiguous procedures or apparently arbitrary, capricious or Janus-faced processing of concerns—may explain reticence to raise concerns. Improving clarity, fairness, and quality and transparency of policy, process and procedure may well be a prerequisite. But clarity and consistency of procedure can only go so far, and indeed the addition of further layers of formal policy may provide a veneer of order without enhancing understanding (Martin et al., 2018). Equally important will be understanding the informal organisation—how staff make sense of the messages and cues they receive about when speaking up and out is appropriate. This in turn may suggest interventions that can help to address dissonances, tensions and anxieties that arise at the overlapping boundaries of the informal and informal organisation. These interventions may, for example, include skills training around communication and elicitation for those in middle-management roles, and communication strategies for informally raising concerns with colleagues, including tools such as accessible frameworks and role-playing for giving and receiving feedback in a work setting.

Leadership inclusiveness may be critical: it has been shown to positively influence speaking and may be particularly helpful in hierarchical environments such as inpatient care settings (Nembhard and Edmondson, 2006), and the need for organisations to encourage listening as well as voice has been noted (Jones and Kelly, 2014a). Defined as "words and deeds exhibited by leaders that invite and appreciate others' contributions" (Nembhard and Edmondson, 2006, p. 941), leadership inclusiveness has been shown to minimise the effect of status on psychological safety within teams and give legitimacy to voice. In this way, it can support the positive influences of the informal organisation on voice behaviour, while seeking to address some of its downsides, particularly its potentially silencing effect on those lower in hierarchies. Given that a sense of risk or threat is a primary influence on employees' willingness to speak (Detert and Edmondson, 2011; Edmondson, 2003; Milliken et al., 2003), such approaches may help to offset some negative effects of informal hierarchy on voice—though they may also need to address the reasons for reluctance to encourage voice on the part of leaders, which may relate to their own sense of threat or vulnerability.

Finally, prior work has explored the social identity approach—which includes various theories of inter-group and intra-group behaviour (Tajfel and Turner, 2004; Turner et al., 1987)—as a key strategy in inter-professional collaboration and conflict in healthcare (Hewett et al., 2009; Hewstone et al., 1994). Social identity theory refers to viewing oneself as a member of a group and examines impacts of such self-categorisation on perceptions, attitudes, and behaviours. It can help make sense of relations within and between groups in environments where group identification, such as professional affiliation, is highly salient. Such a framework may be valuable in further understanding aspects of informal organisation and identifying mechanisms of change to improve employee voice across professional groups, and across hierarchical divides. For example, appealing to superordinate group identifications that transcend professional affiliations or affiliations associated with hierarchical status (Kreindler et al., 2012) may be an important means of promoting both voice and listening. Forging and foregrounding collective identities of this kind (for example, team-, unit-, and even organisation-centred identities) may not only help to displace lower-order identifications that are often associated with inter-group antagonism: it may also be an important means to achieving leadership inclusiveness of the kind outlined above. This means active work on the part of organisational leaders towards making such superordinate identifications meaningful, to "advance shared group interests, to craft a sense of shared identity, and to help embed this so that it becomes part of the material fabric of group members' lives" (Haslam, 2014, p. 5). Equally, by better understanding individuals' *self*-categorisations, leaders within organisations may better be able to recognise the key forms of affiliation that may affect individuals' beliefs and behaviours around voice and its consequences, and thus work to influence them—for example, by identifying the key trusted individuals and 'opinion leaders' within those groups who might reinforce the positive influences of the informal organisation on voice while mitigating some of its negative impacts.

Our study is not without limitations, and two in particular deserve note. First, our sample of sites was restricted to three academic medical centres in two countries, so the findings may not be generalisable to healthcare organisations in general. Second, our within-site sampling strategy was non-strategic, in the sense that we interviewed anyone who responded to the initial recruitment email and who was available to be interviewed. Thus, while reflecting a wide range of perspectives, the sample may be subject to selection bias.

5. Conclusions

We posit that a deeper understanding of the influence of informal

organisation on speaking up and speaking out, and its relationship to the formal organisation, may be key to practical realisation of prominent recent recommendations regarding improving organisational culture in relation to voice. Ever-greater numbers of formal policies, procedures and roles are unlikely in themselves to unlock the usefulness of employee voice. The findings of this study suggest that recognising the impact of the interactions for the formal and informal organisation is key to improving policies, practices and processes for hearing and learning from concerns.

Credit author statement

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