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Title: How Does Perceived Formality Shape Unheard Challenging Voices?

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How Does Perceived Formality Shape Unheard Challenging Voices?

Abstract

It has been argued that upward challenge is important because it allows employees to have a say in organisational decision-making. Yet upward challenge may go unheard in organisations. Formal voice mechanisms are largely considered to be advantageous for encouraging employees to share their views and concerns. However, recent papers calling into question the distinction between formal and informal voice have prompted investigation into the value of formal voice mechanisms in encouraging upward challenge. This qualitative study attempted to understand in what ways formal voice mechanisms had the potential to create unheard voices by first establishing a working definition of formal voice mechanisms. Using a sample of 19 UK police officers, participants used a card sort to categorise formal and informal voice mechanisms. They subsequently identified, through semi-structured interviews, that formal voice mechanisms could be considered risky for upward challenge. The findings can be used by scholars and practitioners as a framework to identify where challenging voices may be going unheard.

Five English keywords: voice, silence, formal, risk, psychological safety

Word Count: 8604

Introduction

Voice can be defined as “any type of mechanism, structure or practice, which provides an employee with an opportunity to express an opinion or participate in decision-making within their organization” (Lavelle, Gunnigle, & McDonnell, 2010 p.396). Despite a recognition that the purpose of voice mechanisms is to encourage voice (Marchington & Suter, 2013), scholars have also acknowledged that voice mechanisms may not always encourage voice, or indeed, may actively discourage voice (Donaghey, Cullinane, Dundon, & Wilkinson, 2011). Under conditions where employees do not feel able to speak up, or find they have limited avenues to express their voice, voice has the potential to go unheard within organisations (Syed, 2014). This empirical paper provides evidence from one UK police force which highlights that the perceived formality of voice mechanisms could be an important influence over unheard voices within organisations.

Voice mechanisms can be considered either formal or informal and both are usually found to some extent in organisations (Pohler & Luchak, 2014). Formal voice mechanisms have the ability to legitimise voice as they are provided by the organisation, signalling to the employee that voice is welcome (Dibben, Klerck, & Wood, 2011; Klaas, Olson-Buchanan, & Ward, 2012). Therefore, it would seem logical that upward challenge would take place using formal voice mechanisms. However, despite the importance of upward challenge for organisations, employees appear reluctant to do it. For example, disagreeing with a manager about company policies or decisions is amongst the top five most difficult topics to voice (Brinsfield, 2013; Milliken, Morrison, & Hewlin, 2003). The reluctance is due to the risk of retaliation from managers and colleagues for speaking up, being labelled a tell-tale, or ruining promotion opportunities (Detert & Edmondson, 2011; Detert & Treviño, 2010). Therefore, despite an awareness that perceived risk can stifle voice, a deeper understanding of what

heightens perceptions of risk is required. One area where this can be gained is by examining the influence of the voice mechanism itself (Morrison, 2014).

When attempting to understand whether the formal or informal nature of voice mechanisms has the potential to shape unheard voices, it is important to consider that there is ambiguity surrounding the distinction between formal and informal voice mechanisms owing to the way in which the voice and silence literature has developed (Mowbray, Wilkinson, & Tse, 2014). For example, the independent theoretical development of the Organisational Behaviour (OB) and Human Resource Management/Employment Relations (HRM/ER) literatures have resulted in each area exclusively focusing on informal and formal voice respectively (Mowbray et al., 2014). The (OB) literature has focused on direct voice between employee and manager and considers voice to be informal and discretionary (Morrison, 2014). On the other hand, the HRM/ER literature has focused on collective voice and considers voice to be formal and structured (Wilkinson & Barry, 2016). Research studies have therefore made assumptions about the formal and informal nature of voice and not felt the need to define it.

The trade union movement, and more recently the role of professional associations within organisations, was borne out of the need to ensure that employees and managers shared their opinions about the necessary conditions in which both could achieve their goals (Ackers, 2015). When opinions are expressed by employees which disagree with those of managers, it is likely that they will be perceived as upward challenge. Upward challenge is a valuable form of voice because it has the ability to provide managers with perspectives different from their own (Kassing, 2006), but where employees do not share upward challenge with managers, the challenging voices go unheard. These may be especially problematic where they represent wrongdoing or unethical behaviour by others. For example, the collapse of Enron in 2001, at the time one of the largest organisations in the world, was due to an inability for employees to challenge decisions and poor accounting practices (Tourish &

Vatcha, 2005). It is therefore important for organisations to provide voice mechanisms which encourage employees to challenge upwards. When attempting to understand the influences that shape upward challenge in the organisation, the formality of the voice mechanism could be important. Therefore, the aim of this research paper is to answer the following research question “how do formal voice mechanisms shape unheard challenging voices?”

This paper will highlight the ambiguity surrounding definitions of formal and informal voice mechanisms and emphasise the importance of defining these terms more clearly to understand how perceived formality shapes unheard voices. Then the importance of formal voice mechanisms will be considered and links to the risky nature of upward challenge will be highlighted. The concept of psychological safety will also be introduced as this is important when attempting to understand how voice can be considered less risky. The methods for data collection will then be outlined and the findings presented. The paper will end with a discussion about the theoretical contributions and practical and academic implications of understanding the role of perceived formality in shaping unheard challenging voices.

Determining the Formality of Voice Mechanisms

When attempting to understand how organisations can prevent voices from going unheard, it is important to understand how employees may view formal and informal voice mechanisms, and how this in turn may shape their propensity to challenge or remain silent. The formality of voice mechanisms can be determined in one of two ways. Firstly, examples of formal voice mechanisms regularly appear in the literature, including suggestion systems, grievance procedures, open door policies, one-to-one meetings and email (Kowtha, Landau, & Beng, 2001; Mowbray et al., 2014; Spencer, 1986). Examples of informal voice mechanisms include technological offerings such as Facebook and Twitter (Zhao & Rosson, 2009), Instant

Messenger (Isaacs, Walendowski, Whittaker, Schiano, & Kamm, 2002), text messaging (Svendsen, Evjemo, & Johnsen, 2006) and video-conferencing (Fish, Kraut, Root, & Rice, 1992).

Secondly, formal voice mechanisms can be identified through their characteristics. These include “codified, pre-arranged, and regular/concrete structures” (Marchington & Suter, 2013 p.286), the presence of a record (Lievrouw & Finn, 1996), and being collective in nature (Dundon, Wilkinson, Marchington, & Ackers, 2004). On the other hand, informal voice mechanisms have been described as placed “outside a structured process” (Klaas et al., 2012 p.324) or through the “ad-hoc or non-programmed interactions between management and their staff” (Marchington & Suter, 2013 p.286). As a result of the lack of formal structure, informal voice mechanisms are usually direct in nature (Dundon & Gollan, 2007), of a highly interpersonal nature, unplanned and interactive (Kraut, Fish, Root, & Chalfonte, 1990). Furthermore, the interpersonal nature of informal voice mechanisms means that there is less likely to be a written record of the voice exchange.

The voice and silence literature frequently refers to formal and informal voice as if there is a clear distinction between the two. For example, a recent paper by Mowbray and colleagues (2014) presented a table of examples of formal and informal voice mechanisms. However, despite claims that there is a consensus on understandings of formal and informal voice mechanisms, Harlos (2001) argued that individuals are unlikely to have consistent views of formal and informal voice mechanisms. Amongst a panel of experts who were asked to rate nine voice mechanisms as low, medium or high formality, using the following definition “the degree of standardization of voice systems and their protocols, including the degree to which systems are formally specified”, there was only a 70% agreement, suggesting that it is possible for individuals to perceive formality in different ways (Harlos, 2001 p.329).

Attempts to define formal and informal voice appear to be based on the difference between collective trade unionised voice and direct employee-manager voice. Therefore, informal voice can be defined as “direct communication between employees and FLMs [front line managers]” (Townsend & Loudoun, 2015 p.475). In other words, highlighting the absence of voice through collective and structured mechanisms. Therefore, it could be said that scholarly definitions of formal and informal voice have developed along a dichotomy: voice which is unionised and that which isn't. However, in organisations without a strong trade union presence, meanings of formal and informal voice are likely to take on a different significance as all voice mechanisms are not being compared with the formal nature of trade union collective voice. Given an understanding that individuals can have differing views of formal and informal voice mechanisms, which may be shaped by the extent to which voice is unionised where they work, it is important to consider the role of formal voice mechanisms in shaping upward challenge.

The Role of Formal Voice Mechanisms

The HRM/ER literature, given its focus on collective formal voice mechanisms, has largely assumed that formal voice is advantageous, not only for organisations in capturing the differing interests of employees, but also for employees by providing a legitimate route through which employees can share their interests (Dibben et al., 2011). The standardised nature of formal voice mechanisms provides employees with an expectation of what voicing will entail, thereby allowing an accurate risk assessment of the voice process. It also provides them with reassurance that their contributions are likely to be evaluated (Klaas et al., 2012). Formal voice mechanisms capture a record and therefore make the voice exchange highly visible (Klaas et al., 2012; Lovejoy & Grudin, 2003), providing the individual with evidence to demonstrate that they have attempted to have their interests represented (Kowtha et al., 2001). Given that formal voice mechanisms usually have a prescribed target for the voice,

the record also makes it more difficult for managers to sweep voice under the carpet (Harlos, 2001; Klaas et al., 2012). In other words, the presence of formal voice mechanisms empowers employees because there are reassurances that their voice will be acted upon (Dibben et al., 2011).

Although formal voice mechanisms do appear to encourage voice, formal voice mechanisms are not always preferred by employees. For example, Marchington and Suter (2013) identified that a group of hotel workers preferred informal voice mechanisms where they had a good relationship with their manager. This finding supports the wider voice literature which has demonstrated that voice is more likely to take place where an employee and their manager have a good relationship because the manager can be trusted to represent the interests of the individual fairly (Botero & Van Dyne, 2009; Holland, Cooper, Pyman, & Teicher, 2012). It is therefore possible that formal voice mechanisms may not be used for upward challenge where a poor relationship exists between the employee and manager. In such situations it is possible that upward challenge through formal voice mechanisms might be considered risky.

Formal Voice Can Be Risky

Studies have shown between 68% and 85% of employees felt unable to raise an issue to a manager, indicating a large potential for unheard challenging voices (Brinsfield, 2013; Milliken et al., 2003). The risks, which include fear of damaging relationships and career opportunities or being labelled a tell-tale, are thought to stem from implicit beliefs that are perpetuated amongst employees about the right and wrong ways in which they should share their concerns with managers (Detert & Edmondson, 2011). For example, it is not advisable to challenge a manager in public because it may be embarrassing for them, an action which may then result in negative career consequences for the employee. As managers have the

ability to make decisions which concern the future development of the employee (Morrison & Rothman, 2009) individuals with a desire to progress within the organisation are particularly aware of the risks inherent in speaking up (Athanasziades, 1973), especially about information which may be perceived by the manager to challenge the status quo (Van Dyne et al., 2003).

Risk can also be considered to exist where there are reduced feelings of psychological safety. Psychological safety can be defined as “the extent to which an individual perceives it to be safe to express himself or herself at work” (Liang, Farh, & Farh, 2012 p.80). Psychological safety forms part of a wider judgement called the efficacy-safety calculus, a deliberate and rational process of weighing up the costs and benefits of voice, which all individuals undertake when deciding whether to voice and which mechanism to use (Morrison, 2014). Using a sample of 341 subordinates and 114 of their matched supervisors at a Chinese retail organisation, Liang and colleagues (2012) demonstrated that psychological safety was likely to be a more important factor when voicing their “concerns about existing or impending practices, incidents or behaviors that may harm their organization” (p.72) than when suggesting ways to “improve existing work practices and procedures to benefit organizations” (p.71). Therefore, upward challenge may be more likely to go unheard where risk is perceived.

Studies have found psychological safety to be a mediator of voice behaviour when studied in conjunction with variables such as ethical leadership (Walumbwa & Schaubroeck, 2009), managerial openness (Detert & Burris, 2007) and maintaining confidentiality (Harlos, 2001). Each of these studies highlights the importance of managerial support for enhancing psychological safety (Tucker, Nembhard, & Edmondson, 2007). Given the link between managers and psychological safety, it has also been recognised that psychological safety is likely to be a shared collective phenomenon, underpinned by “the collective belief within a

work unit that members can question existing practices and admit mistakes without suffering ridicule or punishment” (Edmondson 1999 as cited in Tucker et al., 2007 p.896). Therefore, it is possible that perceptions of risk associated with formal voice mechanisms are particular to, and shared within, the organisation. The next section will therefore describe the organisation in which the present study took place.

The UK Police Service

It has been acknowledged that the characteristics of an organisation are likely to shape voice behaviour (Marchington & Suter, 2013; Townsend & Loudoun, 2015; Tucker et al., 2007).

The present study was carried out in one force of the UK Police Service (UKPS). In its bureaucratic form, the UKPS can be considered a command and control organisation due to its tall hierarchy and highly formalised environment (Adler & Borys, 1996), making it a suitable organisation for attempting to understand formal voice mechanisms in shaping upward challenge. The command and control nature of the organisation commonly refers to situations such as public order situations or 999 incidents, where there is co-ordinated strategic, tactical and operational response to a situation. Outside of command and control situations, officers have the opportunity to express their views, concerns and suggestions under conditions referred to as steady state, or business as usual (National Policing Improvement Agency, 2009). Dissenting views would not be acceptable in a command and control situation and hence, the present study focused exclusively on upward challenge during steady state situations. The content of the challenge that might be expected in a steady state situation is likely to be common to most organisations and includes decisions which affect work-related incidents or an individual’s personal situation at work.

Police officers within the UKPS are represented by a number of professional associations.

Although these do provide formal voice mechanisms in the form of collective voice, their

role is not to represent employee opinions to managers, but rather police officers' opinions to the government, thereby providing a different role to that of a trade union (Police Federation, 2017). It is possible that the different understanding of formal collective voice may therefore have impacted upon perceptions of formality.

In summary, the literature review has demonstrated that perceptions of formality may contribute to unheard challenging voices. The literature review section identified that to understand how formal voice mechanisms shape upward challenge, it is important to establish a working definition of formality. Therefore, the next section will describe the methodology used to define formal and informal voice mechanisms. By asking the participants which mechanisms they believe to be formal and how this shapes their propensity for upward challenge, it is possible to answer the research question "how do formal voice mechanisms create the potential for unheard challenging voices?"

Methodology

This study was carried out within the UK Police Service (UKPS) between September and December 2014. The present study comprised 19 participants from four ranks in one UK Police Force; three Constables, three Sergeants, eight Inspectors and five Chief Inspectors, levels one to four of a nine-level hierarchy. Inspector and Chief Inspector ranks are equivalent to middle manager in a non-rank structured organisation. The participants were recruited through a project sponsor, who invited individuals from a number of areas of the force to take part. The study was carried out by the researcher at a location arranged by the participating organisation, but away from the participants' daily place of work.

Each participant was asked to take part in a card sort activity and a semi-structured interview. The card sort activity was used to develop a definition of formal and informal voice mechanisms within the UKPS. Card sort was used for this study because it has been shown

to be useful for eliciting constructs which can explain people's behaviour (Matteson, Merth & Finegood, 2014). The process for the card sort was explained in a short oral briefing. Each participant was given a number of cards, each labelled with a different voice mechanism, which participants were instructed to categorise as formal or informal. Whilst doing so, they were asked to explain their thought processes, a process known as concurrent think-aloud technique (Todhunter, 2015). Once transcribed, the thought processes become known as Thinking Aloud Protocols (Ericsson & Simon, 1999). Concurrent think-aloud technique provides an understanding of why the participants categorised the mechanisms in the ways they did, capturing the reasons for their decisions. Participants were told that they could add mechanisms or categories where appropriate. This has been described as a free card sort and is useful for inductive analysis by allowing the participants to provide alternative views of how the data might be represented (Watts & Stenner, 2012). As a result of this process, a number of organisation-specific mechanisms were suggested by the participants. Also, many participants created a category called *both* which indicated that mechanisms could be both formal and informal. Also, some chose to put cards into a category called *not relevant* if they did not use the mechanism. Table 1 supports the classification of the general mechanisms used in this study. Table 2 contains the organisation-specific mechanisms for which there was no prior classification in the literature.

Insert Table 1 about here

Insert Table 2 about here

The semi-structured interviews focused on asking participants about their experiences of disagreeing with a superior officer. The use of a responsive, semi-structured interview was designed to capture general patterns of voice behaviour whilst still allowing scope to explore interesting topics raised by the participant (Flick, 2014). Specifically, the participants were

asked to reflect on situations where they had disagreed with a decision made by a superior officer and what they had done about this.

The card sort activity and semi-structured interviews were conducted in the same appointment and were both recorded using an audio device. The length of each appointment lasted between 44 minutes and one hour 47 minutes, with an average appointment time of one hour 17 minutes. The card sort categorisations of the voice mechanisms were typed up using Microsoft Excel whilst the Thinking Aloud Protocols (TAPs) (Ericsson & Simon, 1999) and semi-structured interviews were transcribed into Microsoft Word documents and analysed using Nvivo 10. A thematic analysis of the TAPs identified themes which illustrated the way in which the participants viewed formal and informal voice mechanisms (Miles & Huberman, 1984). The themes represented over-arching categories highlighting the characteristics of formal and informal mechanisms within the UKPS (Saldana, 2009). A thematic analysis of the semi-structured interview questions relevant to this study produced a theme which highlighted that formality was risky.

Findings

The findings section is presented in three parts. Firstly, the results of the card sort demonstrate how participants categorised formal and informal voice mechanisms. Secondly, the results of a thematic analysis of the TAPs highlight a number of themes explaining the reasons for formal and informal categorisations. Finally, an analysis of the TAPS and interviews provide insight into how perceived formality has the potential to create unheard voices.

Categorisation of Voice Mechanisms

The objective of the card sort activity was to identify how participants viewed formal and informal voice mechanisms with a view to understanding how this shaped their propensity to

voice. In the first instance, a comparison of the card sort categorisations across all participants was carried out to establish if there was a consistent view of formal and informal voice mechanisms. Table 3 shows the results of the card sort analysis. The left hand column indicates voice mechanisms which were categorised as formal by more than one participant. The top row denotes the four ranks included in the study. Each grey square denotes that all participants of that rank identified that voice mechanism as formal. The findings showed that only three voice mechanisms were identified as formal by all of the participants from all four ranks: grievance procedure, talk-through radio and video conference (DMM). The most senior group of participants agreed upon formal voice mechanisms more often than those at lower levels but there was no agreement of voice mechanisms categorised as informal.

Insert Table 3 about here

Table 4 shows all of the participants' responses for the card sort activity. The variation in views of formal and informal voice mechanisms emphasises the potential for ambiguity over whether voice mechanisms are viewed as formal and informal. The column referred to as *not answered* highlights that not all participants categorised all of the voice mechanisms as a result of the free card sort principles used in the card sort activity.

Insert Table 4 about here

Understanding the Factors Influencing Perceived Formality

In order to understand the reasons why participants differentiated between formal and informal voice mechanisms, the TAPs were analysed to identify common themes. The process of thematic analysis showed that the formality of voice mechanisms was determined by three characteristics, *record*, *audience* and *content*. In other words, formality could be identified where the voice mechanisms captured a record (record), where the voice

mechanism involved an audience that was outside of the immediate work team (audience) or where the nature of voice was work-related as opposed to social (content). As was highlighted in Table 4, the category of *both* indicated that many of the voice mechanisms were capable of being perceived as formal and informal, according to the different combination of record, content and audience at different times. Each of the themes has been described in more detail below.

Record. Within the police force, many of the voice mechanisms made a recording so that evidence was available if investigations were subsequently required. This was particularly important where courts of law may ask questions about the process by which an incident was managed. As one Chief Inspector explained: “there’s a basic rule, certainly in critical incident management, if it’s not written down or they haven’t got a record for it, it didn’t happen....that’s what the CPS [Crown Prosecution Service] bouncers tell us” (Chief Inspector 5).

Audience. When considering the audience of the voice mechanism, if the audience were not part of the immediate work team, then the voice mechanism was categorised as formal. For example, 17 out of the 19 participants categorised scheduled group meetings as formal because these were usually meetings where attendees were from outside of their immediate team and unlikely to be known to them. The importance of audience therefore appeared to be about knowing the attendees in a personal capacity and being able to speak openly to them in order to voice opinions and disagreements, reflecting the importance for participants of trusting those to whom they were voicing:

You’re not going to turn up at a meeting where you don’t know all of the people, you may know some, but you’re not going to have that relationship with these people where you can talk and make it informal (Sergeant 1).

Content. Another theme that arose strongly from the TAP analysis was content. The main importance of content highlighted by participants was that work-related content and social content were considered to be different, with work-related content considered to be formal, and social content considered to be informal. As one Constable explained: “Yes, everything in work is formal, when you’re talking about a job. Everything’s formal because it’s somebody else’s problem that you’re helping deal with...,Whereas it could just be, like I said, chat about the Christmas do that makes it informal” (Constable 1). The implication of a work versus social-related divide is that most voice that take place within work is likely to be considered formal.

In summary, a thematic analysis of the TAPS showed that where the voice mechanism provided a recording of the voice exchange (record), where an audience had the potential to be made aware of the voice exchange (audience), and where the nature of the voice was work-related (content), participants were more likely to perceive voice mechanisms as formal. The next section will summarise the findings of the semi-structured interviews which explored how perceptions of formality shaped upward challenge.

The Link Between Perceived Formality and Unheard Voices

There is a strong culture in the UKPS of moving upward through the ranks, and participants described that there was pressure from the organisation for anyone reaching the rank of Sergeant to continue aiming for promotion. Amongst the participants, seven officers were aiming for promotion, seven officers were not aiming for promotion and there were five where their aspirations were unclear. However, the fact that 16 out of the 19 participants were at least at the rank of Sergeant indicated that promotion and career progression had been important to them at some stage.

During the interviews, the participants were asked to talk about situations when they had disagreed with a managerial or organisational decision to provide insight into the reasons for challenging or choosing to remain unheard. During the interview, one Inspector explained the potential negative impact that challenge could have on career progression.

... the problem we've got is our organisation as I said to you is very hierarchical. And you disagree with the wrong people and you can probably say goodbye to wherever you're going anywhere again. To be quite honest. And to say that doesn't happen, it does happen (Inspector 2).

Another Inspector, who decided to remain at Inspector level, emphasised the difference that she felt when challenging a superior once she had stepped off the "promotion treadmill".

I can be, I am a lot freer to be honest...I'm not bothered about internal politics, whereas I would have to be bothered about internal politics on that promotion path... I wouldn't have felt perhaps as free enough to say that if I was seeking promotion.... Because you might be criticising ideas from those that are in, have that position of power to promote you (Inspector 8).

Throughout the interviews, it became clear that risk to career progression was important to the participants. Therefore, an exploration of how record, audience and content shaped propensity to voice highlighted an additional theme, *guarded*. The theme guarded represented a cautiousness towards challenging upwards using voice mechanisms perceived as formal. One Chief Inspector explained that having a record of the voice exchange with his superior made him guarded simply because it could not be disputed once it was committed to email.

People will be guarded because There's no debate that you wrote down XYZ.

Whereas in a phone call conversation, I mean, you remember the general principles of the conversation, but unless it's a specific phrase that stands out, the exact details would perhaps be... (Chief Inspector 2).

The risk associated with voicing in writing was highlighted by another Chief Inspector who explained that records could be viewed by others and used to hold officers to account for what they'd said.

Email is formal, because it's an audit record, I'll be doing it in a work email one way or the other. The tone can still be informal occasionally, but it's there, I fully expect that someone can reproduce it and I can be accountable to anything put in there (Chief Inspector 5).

As a result of the risk associated with formal voice mechanisms, many participants indicated that they would be more likely to challenge where a record or audience were absent.

I challenged upwards with my previous superior on regular occasions, and it was more just a behind closed doors conversation because I always work on the remit that you can disagree with everybody, you can certainly disagree with your line superior behind closed doors, but you have to give a public view to the staff that you're joined and that you're believing in the same things even if you actually don't (Chief Inspector 3).

In summary, the findings showed that the perceived formality of voice mechanisms was identified by three characteristics, record, content and audience. The recording of work-related voice exchanges and their potential to be shared with others was considered to be risky using formal voice mechanisms. The risk was underpinned by concerns about the

upward challenge negatively affecting their career opportunities. Where risk was perceived, participants indicated feeling disinclined to voice, suggesting that perceptions of formality could lead to unheard challenging voices. Table 5 provides an indication of how the different characteristics of each voice mechanism might identify level of risk perceived. Where three characteristics were present, risk was considered to be high. This was in contrast to voice mechanisms where none of the characteristics were present, which was considered to be low.

Insert Table 5 about here

Understanding How Perceived Formality Shapes Unheard Challenging Voices

The purpose of this article was to examine the contributing role of formal voice mechanisms to unheard challenging voices within organisations. It was argued that challenging voices may go unheard because formal voice mechanisms may be perceived as risky because of the potential to damage career opportunities (Milliken et al., 2003). However, the different perceptions of formal and informal voice mechanisms prevented a deeper understanding of how formal voice mechanisms might contribute to unheard voices. Nineteen uniformed police officers took part in a card sort activity and semi-structured interview to establish how they perceived the formality of voice mechanisms and how this shaped their propensity for upward challenge.

The findings showed that the formality of voice mechanisms was perceived differently across the sample, indicating that establishing definitions of formality was important before determining how formality can create unheard voices. Using the card sort categorisations for each individual, the analysis identified that formal voice mechanisms were perceived as risky for upward challenge predominantly for officers aspiring to promotion. The presence of the theme *guarded* demonstrated that participants made a conscious decision about whether to challenge upwards using formal voice mechanisms. The strong promotion culture described

by the participants suggested that challenging voices would go unheard where the risk was perceived to outweigh the benefit to their career.

There were three main reasons why risk was identified amongst the participants. Firstly, upward challenge was viewed as a challenge to authority. The main reasons for withholding voice from managers appeared to be linked to power differences between the two hierarchical levels, meaning that a manager had the ability to make decisions which concerned the future development of the employee (Morrison & Rothman, 2009).

Secondly, the recording made by the formal voice mechanism meant that the upward challenge could not be disputed. The recordable nature of formal mechanisms is often advantageous for organisations because it provides evidence of how decisions have been made. Despite the advantages of a record, it can be perceived as disadvantageous by employees where the recorded nature renders the voice highly visible. Thus formality increases the potential for ostracism by managers (Bjørkelo, Einarsen, Nielsen, & Matthiesen, 2011) who might consider formal voice attempts as insubordination where they are surprised or embarrassed by the information they are being given (Klaas et al., 2012). Although formal voice mechanisms may not discourage employees from voicing ideas and suggestions, they may restrict upward challenge.

Finally, an unknown audience further heightened the chances of news of their upward challenge being shared with those who may have power over their promotion. Where individuals are known, it is possible to predict how they will react, making the upward challenge feel safer (Schwappach & Gehring, 2014). On the other hand, where individuals are not trusted, challenging voices are potentially unheard.

Theoretical Contributions

The present study has produced a number of theoretical contributions to the literature on voice with regards to reasons why challenging voices may go unheard in organisations. First, the present study has contributed towards the theme of the special issue by considering the way in which perceptions of voice mechanisms may lead to upward challenge which is not shared with a manager. The voice and silence literature has largely assumed that formal voice mechanisms are a way of legitimising voice (Dibben et al., 2011). However, in the present study, formal voice mechanisms were found to be risky for upward challenge because of the potential to damage career opportunities. As a result, participants described being guarded when considering upward challenge, signifying a conscious choice about whether to voice, what to voice, to whom they should voice and when to voice. The present study provides an important empirical contribution to the voice and silence literature by highlighting the increased risk associated with formal voice mechanisms, and therefore, formal voice mechanisms have the potential to shape upward challenge.

Second, the present study is the first study to attempt to define formal voice mechanisms from an employee perspective, an important step forward in the voice and silence literature. The identification of three characteristics which defined formal voice mechanisms in the UKPS, record, audience and content, provided deeper insight into the issues that employees considered to be important when challenging upwards. As indicated by Marchington and Suter (2013) and Townsend and Loudoun (2015), the organisational characteristics that shape voice behaviour are likely to be more visible through case study research. Given the limited agreement on what constitutes formal voice mechanisms, the methods used in this study can act as a framework for scholars to establish working definitions of formality in order to build on existing knowledge about the role of formal voice mechanisms.

Finally, the formality of voice mechanisms was perceived differently across participants, and across different hierarchical levels. For example, more senior participants were likely to view more formality than more junior participants. Yet, managers are more likely to challenge upwards than non-managers (Kassing & Avtgis, 1999). Therefore, it is important to investigate the link between perceptions of formal voice mechanisms, hierarchical status and unheard challenging voices. Given that the main driver for a lack of upward challenge appeared to be concerns over promotion opportunities, this must also be taken into account.

Implications for Practitioners

This study has demonstrated the potential for voices to go unheard where formal voice mechanisms are perceived to be risky. As a result, it is important for managers to understand whether employees perceive formal voice mechanisms to be risky and identify the factors that may be causing these perceptions. The present research can be used as a frame through which managers can start to begin identifying where formality might exist amongst the voice mechanisms that exist in their organisations. In establishing views of formal voice mechanisms, managers would gain an insight into the potential situations where voice might not take place thereby allowing them to prevent unheard voices. Alternatively, where informal voice mechanisms exist, it is possible that challenging voices do not go unheard, but employees find another way in which to share their concerns. Therefore, the framework might identify voice mechanisms where upward challenge is more likely.

Limitations

The data was collected in a single organisation so future research is necessary to examine the generalisability of the findings. Definitions of formal and informal are likely, to a degree, to be organisation-specific and so data from one organisation may have provided more consistent themes as they emerged from participants whose interpretations were shaped by a

common organisational culture (Yin, 2009). On the other hand, the UKPS comprises 46 forces which are all governed by the same legislative requirements so it is considered possible that effects may be replicated elsewhere, signifying potential for generalisability of the research findings to other police forces.

A further limitation may be the absence of data to highlight more specifically the type of work-related voice about which the police officers in this sample referred. The medical literature has identified a difference in perceived risk surrounding the voicing of patient safety issues as opposed to steady state operational issues (Morrow, Gustavson, & Jones, 2016). Therefore, it is possible that certain types of content may create unheard voices more readily than others.

Implications for Future Research

There are a number of avenues for development of the research into perceived formality and its effects on unheard voices. The UK police force involved in this research had been under high levels of scrutiny from the Independent Police Complaints Commission (IPCC) for some time, suggesting that perceptions of risk might have been higher than in other forces. It is therefore possible that perceived formality might be higher or lower in other forces than observed here.

Future research should also compare data from different organisations to understand the extent to which the definitions of formality are consistent across industry type and sector. For example, healthcare organisations, hospitals or religious institutions, where individual departments are largely governed by the same processes and procedures.

Conclusion

The present study has identified that formal voice mechanisms have the potential to create unheard voices by increasing perceptions of risk. As a result, understanding how employees perceive formality could be an important way to help managers prevent challenging voices from going unheard.

References

- Ackers, P. (2015). Trade Unions as Professional Associations. In S. Johnstone & P. Ackers (Eds.), *Finding a Voice: New Perspectives on Employment Relations* (pp. 95–126). Oxford: Oxford University Press.
- Adler, P. S., & Borys, B. (1996). Two Types of Bureaucracy : Enabling and Coercive and. *Administrative Science Quarterly*.
- Athanassiades, J. (1973). The Distortion of Upward Communication in Hierarchical Organizations. *Academy of Management Journal*, 16(2), 207–226.
- Bjørkelo, B., Einarsen, S., Nielsen, M. B., & Matthiesen, S. B. (2011). Silence is Golden? Characteristics and Experiences of Self-reported Whistleblowers. *European Journal of Work and Organizational Psychology*, 20(2), 206–238.
<http://doi.org/10.1080/13594320903338884>
- Botero, I. C., & Van Dyne, L. (2009). Employee Voice Behavior. Interactive effects of LMX and Power Distance in the United States and Colombia. *Management Communication Quarterly*, 23(1), 84–104. <http://doi.org/10.1177/0893318909335415>
- Bratton, J., Sawchuk, P., Forshaw, C., Callinan, M., & Corbett, M. (2010). *Work and Organizational Behaviour* (2nd ed.). Basingstoke: Palgrave Macmillan.
- Brinsfield, C. T. (2013). Employee Silence Motives : Investigation of Dimensionality and Development of Measures. *Journal of Organization Behavior*, 34, 671–697.
<http://doi.org/10.1002/job>
- Detert, J. R., & Burris, E. R. (2007). Leadership Behaviour and Employee Voice: Is The Door Really Open? *Academy of Management Journal*, 50(4), 869–884.
- Detert, J. R., & Edmondson, A. C. (2011). Implicit Voice Theories: Taken-for-Granted Rules of Self-Censorship at Work. *Academy of Management Journal*, 54(3), 461–488.
<http://doi.org/10.5465/AMJ.2011.61967925>
- Detert, J. R., & Treviño, L. K. (2010). Speaking Up to Higher-Ups: How Supervisors and Skip-Level Leaders Influence Employee Voice. *Organization Science*, 21(1), 249–270.
<http://doi.org/10.1287/orsc.1080.0405>
- Dibben, P., Klerck, G., & Wood, G. (2011). *Employment Relations. A Critical and International Approach*. London: CIPD.
- Donaghey, J., Cullinane, N., Dundon, T., & Wilkinson, A. (2011). Reconceptualising Employee Silence Problems and Prognosis. *Work, Employment & Society*, 25(1), 51–67.
- Dundon, T., & Gollan, P. J. (2007). Re-conceptualizing Voice in the Non-Union Workplace. *The International Journal of Human Resource Management*, 18(7), 1182–1198.
<http://doi.org/10.1080/09585190701391925>
- Dundon, T., Wilkinson, A., Marchington, M., & Ackers, P. (2004). The Meanings and Purpose of Employee Voice. *The International Journal of Human Resource Management*, 15(6), 1149–1170. <http://doi.org/10.1080/095851904100016773359>
- Ericsson, K. A., & Simon, Herbert, A. (1999). *Protocol Analysis* (Revised Ed). Massachusetts: Massachusetts Institute of Technology.
- Fish, R. S., Kraut, R. E., Root, R. W., & Rice, R. E. (1992). Evaluating Video as a Technology for Informal Communication. In *CHI '92 Proceedings of the SIGCHI*

- Conference on Human Factors in Computing Systems* (pp. 37–48). Retrieved from <http://dl.acm.org/citation.cfm?id=142755>
- Fish, R. S., Kraut, R. E., Root, R. W., & Rice, R. E. (1993). Video as a Technology For Informal Communication. In *Communications of the ACM* (Vol. 36, pp. 48–61). Retrieved from <http://dl.acm.org/citation.cfm?id=142755>
- Flick, U. (2014). *An Introduction to Qualitative Research* (5th ed.). London: Sage.
- Harlos, K. P. (2001). When Organizational Voice Systems Fail: More on the Deaf-Ear Syndrome and Frustration Effects. *The Journal of Applied Behavioral Science*, 37(3), 324–342. <http://doi.org/10.1177/0021886301373005>
- Holland, P., Cooper, B. K., Pyman, A., & Teicher, J. (2012). Trust in Management: The Role of Employee Voice Arrangements and Perceived Managerial Opposition to Unions. *Human Resource Management Journal*, 22(4), 377–391. <http://doi.org/10.1111/1748-8583.12002>
- Isaacs, E., Walendowski, A., Whittaker, S., Schiano, D. J., & Kamm, C. (2002). The Character, Functions, and Styles of Instant Messaging in the Workplace. In *Proceedings of the 2002 ACM Conference on Computer Supported Cooperative Work* (pp. 11–20).
- Kassing, J. W. (2006). Employees' Expressions of Upward Dissent as a Function of Current and Past Work Experiences. *Communication Reports*, 19(2), 79–88. <http://doi.org/10.1080/08934210600917115>
- Kassing, J. W., & Avtgis, T. A. (1999). Examining the Relationship between Organizational Dissent and Aggressive Communication. *Management Communication Quarterly*, 13(1), 100–115. <http://doi.org/10.1177/0893318999131004>
- Katz, D., & Kahn, R. L. (1978). *The Social Psychology of Organizations* (2nd ed.). New York: Wiley.
- Klaas, B. S., Olson-Buchanan, J. B., & Ward, A. K. (2012). The Determinants of Alternative Forms of Workplace Voice: An Integrative Perspective. *Journal of Management*, 38(1), 314–345. <http://doi.org/10.1177/0149206311423823>
- Korsgaard, M. A., Roberson, L., & Rymph, R. D. (1998). What Motivates Fairness? The Role of Subordinate Assertive Behavior on Managers' Interactional Fairness. *Journal of Applied Psychology*, 83(5), 731–744.
- Kowtha, N., Landau, J., & Beng, C. (2001). The Culture of Voice: Exploring the Relationship Between Employee Voice and Organizational Culture. *Academy of Management Conference Proceedings*, 1–33. Retrieved from [http://research.nus.biz/Documents/Research Paper Series/rps0105.PDF](http://research.nus.biz/Documents/Research%20Paper%20Series/rps0105.PDF)
- Kraut, R. E., Fish, R. S., Root, R. W., & Chalfonte, B. L. (1990). Informal Communication in Organizations: Form, Function, and Technology. In *Human Reactions to Technology: The Claremont Symposium on Applied Social Psychology* (pp. 145–199). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.59.9721&rep=rep1&type=pdf>
- Lavelle, J., Gunnigle, P., & McDonnell, A. (2010). Patterning Employee Voice in Multinational Companies. *Human Relations*, 63(3), 395–418. <http://doi.org/10.1177/0018726709348935>
- Liang, J., Farh, C. I. C., & Farh, J. L. (2012). Psychological Antecedents of Promotive and

- Prohibitive Voice: A Two-Wave Examination. *Academy of Management Journal*, 55(1), 71–92. <http://doi.org/10.5465/amj.2010.0176>
- Lievrouw, L. A., & Finn, T. A. (1996). New Information Technologies and Informality: Comparing Organizational Information Flows Using the CSM. *International Journal of Technology Management*, 11(1/2), 28–42.
- Lovejoy, T., & Grudin, J. (2003). Messaging and Formality: Will IM Follow in the Footsteps of Email? In *INTERACT*. Retrieved from http://courses.ischool.utexas.edu/Turnbull_Don/2008/fall/INF_385Q/readings/grudin.pdf
- Marchington, M., & Suter, J. (2013). Where Informality Really Matters : Patterns of Employee Involvement and Participation (EIP) in a Non-Union Firm. *Industrial Relations*, 52(January), 284–313.
- Matteson, C. L., Merth, T. D. N., & Finegood, D. T. (2014). Health Communication Cards as a Tool for Behaviour Change. *ISRN Obesity*, 1–10. <http://doi.org/10.1155/2014/579083>
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis*. London: SAGE Publications Ltd.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. . (2003). An Exploratory Study of Employee Silence : Issues that Employees Don't Communicate Upward and Why. *Journal of Management Studies*, 40(6), 1453–1476.
- Morrison, E. W. (2014). Employee Voice and Silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 173–197. <http://doi.org/10.1146/annurev-orgpsych-031413-091328>
- Morrison, E. W., & Rothman, N. B. (2009). Silence and the Dynamics of Power. In J. Greenberg & M. S. Edwards (Eds.), *Voice and Silence in Organizations* (pp. 111–134). Bingley: Emerald Group Publishing Ltd.
- Morrow, K. J., Gustavson, A. M., & Jones, J. (2016). Speaking Up Behaviours (Safety Voices) of Healthcare Workers: A Metasynthesis of Qualitative Research Studies. *International Journal of Nursing Studies*, 64, 42–51. <http://doi.org/10.1016/j.ijnurstu.2016.09.014>
- Mowbray, P. K., Wilkinson, A., & Tse, H. H. M. (2014). An Integrative Review of Employee Voice: Identifying a Common Conceptualization and Research Agenda. *International Journal of Management Reviews*, 17(3), 382–400. <http://doi.org/10.1111/ijmr.12045>
- National Policing Improvement Agency. (2009). Guidance on Command and Control. Retrieved May 25, 2017, from https://www.ipcc.gov.uk/sites/default/files/Documents/acpo_guidance_on_command_and_control_-_2009-2.pdf
- Pohler, D. M., & Luchak, A. A. (2014). The Missing Employee in Employee Voice Research. In A. Wilkinson, J. Donaghey, T. Dundon, & R. B. Freeman (Eds.), *Handbook of Research on Employee Voice* (pp. 188–207). Cheltenham, UK: Edward Elgar Publishing Limited.
- Police Federation. (2017). Aims & Objectives. Retrieved October 17, 2017, from http://www.polfed.org/aboutus/aims_objectives.aspx
- Saldana, J. (2009). *The Coding Manual for Qualitative Researchers*. London: SAGE

Publications Ltd.

- Schwappach, D. L., & Gehring, K. (2014). Trade-Offs Between Voice and Silence: A Qualitative Exploration of Oncology Staff's Decisions to Speak Up About Safety Concerns. *BMC Health Services Research*, 14(1), 303. <http://doi.org/10.1186/1472-6963-14-303>
- Spencer, D. G. (1986). Employee Voice and Employee Retention. *Academy of Management Journal*, 29(3), 488–502. <http://doi.org/10.2307/256220>
- Svensden, G., Evjemo, B., & Johnsen, J. A. K. (2006). Use of SMS in Office Environments. In *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*. Retrieved from http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1579404
- Syed, J. (2014). Diversity Management and Missing Voices. In A. Wilkinson, J. Donaghey, T. Dundon, & R. B. Freeman (Eds.), *Handbook of Research on Employee Voice* (pp. 421–439). Cheltenham, UK: Edward Elgar Publishing Limited.
- Todhunter, F. (2015). Using Concurrent Think-Aloud and Protocol Analysis to Explore Student Nurses' Social Learning Information Communication Technology Knowledge and Skill Development. *Nurse Education Today*, 35(6), 815–822. <http://doi.org/10.1016/j.nedt.2015.01.010>
- Tourish, D., & Vatcha, N. (2005). Charismatic Leadership and Corporate Cultism at Enron: The Elimination of Dissent, the Promotion of Conformity and Organizational Collapse. *Leadership*, 1(4), 455–480. <http://doi.org/10.1177/1742715005057671>
- Townsend, K., & Loudoun, R. (2015). The Front-Line Manager's Role in Informal Voice Pathways. *Employee Relations*, 37(4), 475–486. <http://doi.org/10.1108/MBE-09-2016-0047>
- Tucker, A. L., Nembhard, I. M., & Edmondson, A. C. (2007). Implementing New Practices: An Empirical Study of Organizational Learning in Hospital Intensive Care Units. *Management Science*, 53(6), 894–907. <http://doi.org/10.1287/mnsc.1060.0692>
- Van Dyne, L., Ang, S., & Botero, I. (2003). Conceptualizing Employee Silence and Employee Voice as Multidimensional Constructs. *Journal of Management Studies*, 40(6), 1359–1392. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-6486.00384/full>
- Walumbwa, F. O., & Schaubroeck, J. (2009). Leader Personality Traits and Employee Voice Behavior: Mediating Roles of Ethical Leadership and Work Group Psychological Safety. *Journal of Applied Psychology*, 94(5), 1275–1286. <http://doi.org/10.1037/a0015848>
- Watts, S., & Stenner, P. (2012). *Doing Q Methodological Research: Theory, Method and Interpretation*. London: SAGE Publications Ltd. <http://doi.org/http://dx.doi.org/10.4135/9781446251911>
- Wilkinson, A., & Barry, M. (2016). Voices From Across the Divide : An Industrial Relations Perspective on Employee Voice. *German Journal of Human Resource Management*, 30(3–4), 338–344. <http://doi.org/10.1177/2397002216649899>
- Yin, R. K. (2009). *Case Study Research Design and Methods* (4th ed.). London: SAGE Ltd.
- Zhao, D., & Rosson, M. (2009). How and Why People Twitter: The Role that Micro-blogging Plays in Informal Communication at Work. In *Proceedings of the ACM 2009*

International Conference on Supporting Group Work (pp. 243–252). Retrieved from <http://dl.acm.org/citation.cfm?id=1531710>

Table 1. General voice mechanisms and their categorisation according to literature

Voice mechanism	Literature Classification	Authors
Appraisal Review	Formal	Korsgaard, Roberson and Rymph (1998)
Bumping into superior	Informal	Kraut, Fish, Root and Chalfonte (1990)
Email	Formal and Informal	Lovejoy and Grudin (2003)
Facebook	Informal	Zhao and Rosson (2009)
Going unannounced to superior's office	Informal	Kraut, Fish, Root and Chalfonte (1990)
Grievance Procedure	Formal	Katz and Kahn (1978)
Meetings	Formal	Bratton, Sawchuk, Forshaw, Callinan and Corbett, (2010)
Suggestion box	Formal	Katz and Kahn (1978)
Telephone	Informal	Lievrouw and Finn (1996)
Text Message	Informal	Svendsen, Evjemo and Johnsen, (2006)
Twitter	Informal	Zhao and Rosson (2009)
Video Conferencing	Informal	Fish, Kraut, Root and Rice (1993)

Table 2. Organisation-specific voice mechanisms

Voice mechanism	Description
Daybook	A private book used by Inspectors and above to record decisions.
Morning Briefing	A daily local meeting attended by all Constables and Sergeants on the same team.
Telephone Conference (DMM)	Daily Management Meeting (DMM) was a daily local meeting attended by Inspectors and Chief Inspectors. It was not always possible to attend in person and video conferencing was not available at all sites.
Video Conference (DMM)	Daily Management Meeting (DMM) was a daily local meeting attended by Inspectors and Chief Inspectors. It was not always possible to attend in person.
Monthly Management Meeting	A monthly local meeting attended by all Inspectors and Chief Inspectors in the same area.
Point to point radio	A private two-way channel
Talk-through radio	A public two-way channel
Video Conference (Lync)	A private two-way video conferencing facility to which everyone had access on their PC.

Table 3. Voice mechanisms agreed as formal by all participants by rank

Channel	PC	S	I	CI
Grievance Procedure				
Talk-through radio				
Video conference (DMM)				
Appraisal review				
Twitter Post				
Scheduled meetings group				
Daybook				
Monthly Management Meeting				
Email				
Morning Briefing				

Table 4. A summary of all participant card sort responses

Channel	Formal	Informal	Both	Not Relevant	Not answered
Appraisal review	17	1	1	0	0
I [subordinate] bumping into superior	1	10	4	0	4
Superior bumping into me [subordinate]	0	11	4	0	4
Subordinate coming unannounced to my [superior's] office	1	8	6	0	4
Daybook	10	1	1	0	7
Email	14	0	5	0	0
Facebook group message	2	9	0	8	0
Facebook wall posts	1	8	1	9	0
Facebook personal message	0	8	1	10	0
I [subordinate] going unannounced to a superior's office	3	8	4	0	4
Grievance procedure	19	0	0	0	0
Mobile text work	7	6	3	1	2
Mobile work phone call	8	5	4	0	2
Monthly management meeting	5	0	0	0	14
Morning briefing	12	2	5	0	0
Personal mobile call	0	6	5	6	2
Personal mobile text	0	6	5	6	2
Point to point radio	6	5	8	0	0
Scheduled 1-2-1s	15	1	3	0	0
Scheduled meetings group	17	0	2	0	0
Suggestion box	10	5	3	1	0
Talk-through radio	18	0	0	0	1
Telephone call	0	1	1	0	17
Telephone call landline	7	5	5	0	2
Telephone conference (DMM)	1	0	0	0	18
Text Message	1	1	1	0	17
Twitter post	10	2	1	6	0
Video Conference	6	0	0	0	13
Video Conference (DMM)	10	0	0	2	7
Video Conference (Lync)	6	3	1	3	6

Table 5. Characteristics and how they might map onto risk

Record	Content	Audience	Level of perceived risk when challenging
Y	W	UK	High
Y	W	K	Med
Y	NW	UK	Med
N	W	UK	Med
N	NW	UK	Med
Y	NW	K	Low
N	W	K	Low
N	NW	K	Low

Legend: Record: Y = yes, N = no; Content: W = work-related, NW = not work-related; Audience: UK = unknown, K = known.