# Speak Up! Examining Voice as a Construct in Information Systems Literature

Yasamin Hadavi
*Baylor University*, yasamin_hadavi1@baylor.edu

Stacie Petter
*Baylor University*, stacie_petter@baylor.edu

# Speak Up! Examining Voice as a Construct in Information Systems Literature

*Emergent Research Forum (ERF)*

**Yasamin Hadavi**
Baylor University
Yasamin_hadavi1@baylor.edu

**Stacie C. Petter**
Wake Forest University
petters@wfu.edu

## Abstract

Voice research has traditionally used a deliberative perspective, in which individuals carefully calculate individual and situational facts to determine whether or not to speak up. Voice offers information systems (IS) scholars avenues for new theorizing about reducing cyberbullying, advocating for equal rights, and engaging in social movements through social media by examining how individuals can express their concerns to induce change. To date, IS scholars rarely study the construct of voice directly, but rather discuss the importance of reporting wrongdoing or advocating for others. Besides, many studies examining voice are situated in organizational contexts with little research examining voice in technology-mediated settings. This paper synthesizes the current research on voice, making connections within the management and IS literature to develop a framework for studying voice in online settings.

## Keywords

Voice, whistle-blowing, organizational voice, online reporting, social change.

## Introduction

Extensively studied in management within organizational contexts, scholars typically define the construct of voice (sometimes referred to as organizational voice, employee voice, and whistleblowing) as "discretionary communication of ideas, suggestions, concerns, or opinions about work-related issues, with the intent to improve organizational or unit functioning" (Morrison, 2011 p. 375). Some studies define voice as an upward expression of work ideas, opinions, or concerns by employees to their upper managers (Tangirala et al., 2012). Other definitions highlight the multidimensionality of voice (Van Dyne et al. 2003) and define different forms of voice used to influence others to induce improvements or change the status quo (Sherf et al., 2019). In organizational settings, voice has been associated with improvements in task performance (Li et al., 2017), developing multiple decision alternatives (Farh et al., 2020), and enabling team effectiveness (Li et al., 2021). Given that voice offers many benefits to organizations, a substantive body of research in this area identifies the antecedents (Li et al., 2017) and consequences (Burris, 2012; McClean et al., 2018) of voice. Yet, there is no comprehensive understanding of the nomological network that offers a comprehensive picture of voice.

Existing literature examining voice in the information systems (IS) discipline tends to investigate why individuals choose to speak up in the context of software project teams, often in the context of whistleblowing. Whistleblowing is "the disclosure by organization members…of illegal, immoral, or illegitimate practices under the control of their employees, to persons or organizations that may be able to affect action" (Near et al., 1995 p. 680). In IS, whistleblowing examines when people will report wrongdoing during a software project, such as releasing software with known defects or not disclosing to a client that a project will be over budget or time (Park et al., 2008; Petter et al., 2016). Voice has also been studied in IS to examine one's willingness to report computer abuse (Lowry et al., 2013) or how a team members' actions may be harming the group (Petter 2018).

More recently, some IS scholars have studied online reporting of wrongdoing in the context of social media (Wong et al., 2021). Users' expressing their voice in online platforms can report cyberbullying behaviors (Wong-Lo et al., 2014), advocate for equal rights (Hadavi et al., 2021), and engage in social movements through social media (Tye et al., 2018). Individuals expressing their voice about wrongdoing

is important in multiple contexts, including health information privacy violations (Keil et al., 2018), artificial intelligence (Marda 2019), and social media (Agarwal et al., 2012). Some information technologies, such as artificial intelligence, may amplify some voices at the expense of others (Marda 2019). For instance, social media can intensify certain voices as individuals express themselves using multiple media such as text, videos, and images (Vera et al., 2022). Some IS research has studied voice in online settings to examine when and how individuals express ideas to induce change. However, these IS studies rarely study the construct of voice directly, but discuss the importance of reporting wrongdoing or advocating for others, consistent with themes from the voice literature in management.

To date, most management and IS literature examining voice assumes that the communication among parties occurs in a face-to-face or offline context. Few studies have specifically considered the antecedents or consequences of voice in technology-mediated communication settings (e.g., Wong et al 2021; Petter 2018). Theories such as media richness theory (Daft et al., 1986) and media synchronicity theory (Dennis et al.,2008) tell us that there are differences when communication occurs face-to-face versus technology-mediated interactions. There is a lack of systematic understanding of the underlying factors that facilitate or inhibit voice behavior through the use of information and communication technologies. Therefore, we should be careful about assuming that the same antecedents and consequences of voice are true in offline and online environments. To that end, this paper synthesizes the current research on voice within management and IS literature to develop a framework to study voice in online settings.

## Literature Review

We follow the guidelines by Templier and Paré (2019) to integrate rigor and relevance for our literature review. Since the phenomenon of voice is understudied in IS, we include voice literature from the management literature to shed light on potential applications and extensions of voice within the IS discipline. Therefore, our review considers articles within IS and management journals.

To identify the relevant voice literature within business disciplines, first, the authors performed full-text searches for keywords related to voice in journals within the AIS Senior Scholars journal list, the *Academy of Management Journal*, and the *Academy of Management Review*. We searched for articles using the following keywords: "voice" or "organizational voice" or "whistleblowing." We retained research articles found during this search for further consideration (i.e., 696 articles). Because we expected more recent articles to be more likely to consider voice in technology-mediated contexts, we limited the time frame of relevant articles to 2018-2021, reducing the number of relevant articles to 117. Next, we examined if and how voice was studied in each article by searching for the keywords within the full-text of the article and reading the abstract. Many papers were excluded because (a) the article did not consider voice (or a similar concept) as a construct or (b) our search terms were only in the reference list within the article. After this round, 22 articles remained. Then, we read the full-text of each article to identify the immediate antecedents and consequences of voice. In three articles, the authors did not specify immediate antecedents or consequences of voice in hypotheses or conceptual models. Moreover, seven additional articles were removed after realizing the voice was not the central theme in those papers (e.g., Abbasi et al., 2019; Li et al., 2018). In all, 12 articles analyzed for the purposes of this literature review.

We coded the articles within our literature review to specify the immediate antecedents and consequences of voice identified in propositions (in conceptual papers) and supported hypotheses (in empirical papers). For each article, we examined if the authors considered voice as a behavior or an intention based on the research design and measures. Other information we captured included the context of the study, the theories used, the sample, the method used for conducting the research, and the tools for analyzing the results. After completing the coding, we looked for general themes by comparing the antecedents and consequences of voice, the study context, and the research methods.

## Results

### *Antecedents of Voice*

Our review of the voice literature indicates multiple factors contribute to an individual's decision to voice their concerns. Some factors are based on one's personal attributes, attitudes, or beliefs, which we refer to as voicer's characteristics. These factors include *perceived self-efficacy* (Wong et al., 2021), *perceived*

*behavioral integrity* (Lam et al., 2018), *proactive personality* (Lam et al., 2018; Li et al., 2021; Schilpzand et al., 2018), and *perceived responsibility* (Wong et al., 2021). Environmental factors also affect one's decision to voice their concerns. The environmental factors are determined by the interaction of the voicer with other individuals (i.e., bystanders, amplifiers, managers, and leaders) (e.g., Keil et al., 2018; Lam et al., 2019; and Schilpzand et al., 2018) and the perceptions of voicer related to the consequences and context (e.g., wrongdoing and tool for voice) (Wong et al., 2021). *Information redundancy* (Hussain et al., 2019), *diffusion of responsibility* (Wong et al., 2021), *peer leader-member exchange* (Hussain et al., 2019), and *infusion identity* (Leigh et al., 2019) belong to the interactions with others category. We consider *perceived impact* (Sherf et al., 2021), *perceived emergency* (Wong et al., 2021), and *anticipated regret of remaining silent* (Keil et al., 2018) to be elements in assessments of outcomes, the situation, and the medium category.

### Consequences of Voice

The consequences of voice focus on outcomes that affect the voicer once they express their concerns. Some studies suggest that voice helps in improving the team performance and organizational effectiveness (e.g., Farh et al., 2020), while other studies consider impacts to the individual (Lam et al., 2018). The result of our review of literature shows that the consequence of voice manifests itself in two ways, perceived outcomes of voice such as *credibility and relationship damage* (Lam et al., 2018), and actual outcomes such as *peer-rated status* and *leader emergence* (McLean et al., 2018).

## Discussion

Of the twelve articles we reviewed, ten were from the management discipline and two articles were from the IS discipline. To date, the voice literature has not been widely embraced within IS; however, there is a rich conceptualization and literature related to this phenomenon, which has relevance to IS researchers. As IS scholars examine how social media and online tools can support social movements (Agarwal et al., 2012) or can stop negative online behaviors (Wong et al. 2021), prior research on voice can illuminate new antecedents and consequences of these prosocial behaviors. Furthermore, as organizations struggle to retain employees during "the great resignation"(Krugman, 2021), managers can consider how technology may enable employees to voice concerns to create a positive work climate and improve employee morale.

Prior research indicates that social media supports activism by enabling the powerless to voice widely shared grievances and organize unequally distributed resources (Leong et al., 2019). Considering the role of voice to achieve societal goals is different from considering voice in organizations, in which employees are more likely to share similar objectives, goals, and norms based on the needs of the organization. When considering voice within online environments, such as social media, it is unknown if one's voice is lost or becomes distorted given the nature and scale of online communication. For example, in social media contexts, voice may need to reach a minimum volume (i.e., quantity of voicers, influence of voicer, message of voicers) to influence or encourage societal change. Voice on social media is more likely to be dispersed, and new factors are likely to predict one's willingness to voice concerns and the consequences of concerns. For instance, the voicer's credibility or the social media platform's credibility could affect the outcomes of voice behavior. Relatedly, it is often difficult to determine whether a piece of information or opinion on social media is authentic given the prevalence of bots as manipulative actors that are likely to affect the voice climate and norms of users on social media (Ross et al., 2019).

### Limitations and Future Research

This paper shares our initial review of recent IS and management literature related to voice. We are extending this review to include additional journals, years, and terminology. For instance, while reviewing articles, we found some studies referred to voice and used terms, such as "reporting." We will present more holistic results at the Americas Conference on Information Systems in Minneapolis, Minnesota.

We also note this study focuses on the antecedents and consequences of voice. The organizational voice literature is replete with constructs that predict not only the likelihood of someone expressing their voice and the consequences of it, but also antecedents and consequences associated with the likelihood of individuals to choose to remain silent about a concern, issue, or wrongdoing. This phenomenon is often referred to as organizational silence (Morrison et al., 2000) or the mum effect (Park et al., 2008). Further

research can develop an extended understanding of the voice behavior by looking at the silence literature since there are instances of voice in silence literature.

## Conclusion

Our work examines antecedents and consequences of voice to identify opportunities to study this phenomenon in a technology-mediated context. The preliminary conceptual model identifies a series of voicer characteristics and environmental factors that affect one's likelihood to express their voice in organizational or social contexts. Our work also identifies positive and negative actual or perceived outcomes that arise when voicing concerns. We intend to identify a research agenda related to voice in the context of technology-mediated communication. The findings will inform both IS scholars and management scholars about how to extend our existing understanding of voice in organizational and social situations in which the expression of concerns involves using technology-oriented solutions. The research agenda will further inform the IS discipline opportunities to theorize voice by considering the role of technology-mediated communication by individuals in organizations and society.

## REFERENCES

Abbasi, A., Li, J., Adjeroh, D., Abate, M., & Zheng, W. (2019). Don't mention it? Analyzing user-generated content signals for early adverse event warnings. *Information Systems Research, (30*:3), pp. 1007-1028.

Agarwal, N., Lim, M., & Wigand, R. (2012). Raising and rising voices in social media. *Business & Information Systems Engineering, (4*:3), pp. 113-126.

Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of management journal, (55*:4), pp. 851-875.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management science, (32*:5), pp. 554-571.

Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. *MIS quarterly*, pp. 575-600.

Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. 2001. Disrupted routines: Team learning and new technology implementation in hospitals. *Administrative Science Quarterly*, (46:4) pp. 685–716.

Farh, C. I., Oh, J. K., Hollenbeck, J. R., Yu, A., Lee, S. M., & King, D. D. (2020). Token female voice enactment in traditionally male-dominated teams: Facilitating conditions and consequences for performance. *Academy of Management Journal, 63*(3), 832-856.

Hadavi, Y., & Petter, S. (2021). Determinants of Voice on Social Media among Individuals from Marginalized Groups.

Hussain, I., Shu, R., Tangirala, S., & Ekkirala, S. (2019). The voice bystander effect: How information redundancy inhibits employee voice. *Academy of Management Journal*, (62:3), pp. 828-849.

Keil, M., Park, E. H., & Ramesh, B. (2018). Violations of health information privacy: The role of attributions and anticipated regret in shaping whistleblowing intentions. *Information Systems Journal, (28*:5), pp. 818-848.

Kim, Y. J., & Toh, S. M. (2019). Stuck in the past? The influence of a leader's past cultural experience on group culture and positive and negative group deviance. *Academy of Management Journal, (62*:3), pp. 944-969.

Krugman, P. (2021, November 5). Opinion | Wonking Out: Is the Great Resignation a Great Rethink? *The New York Times*. https://www.nytimes.com/2021/11/05/opinion/great-resignation-quit-job.html

Lam, W., Lee, C., Taylor, M. S., & Zhao, H. H. (2018). Does proactive personality matter in leadership transitions? Effects of proactive personality on new leader identification and responses to new leaders and their change agendas. *Academy of Management Journal, (61*:1), pp. 245-263.

Lam, C. F., Rees, L., Levesque, L. L., & Ornstein, S. (2018). Shooting from the hip: a habit perspective of voice. *Academy of Management Review, (43*:3), pp. 470-486.

Leigh, A., & Melwani, S. (2019). #BlackEmployeesMatter: mega-threats, identity fusion, and enacting positive deviance in organizations. *Academy of Management Review, (44*:3), pp. 564-591.

Leong, C., Pan, S. L., Bahri, S., & Fauzi, A. (2019). Social media empowerment in social movements: power activation and power accrual in digital activism. *European Journal of Information Systems, (28*:2), pp. 173-204.

Li, A. N., Liao, H., Tangirala, S., & Firth, B. M. (2017). The content of the message matters: The differential effects of promotive and prohibitive team voice on team productivity and safety performance gains. *Journal of Applied Psychology*, (*102*:8), 1259-1270.

Li, A. N., & Tangirala, S. (2021). How voice emerges and develops in newly formed supervisor–employee dyads. *Academy of Management Journal*, (*64*:2), pp. 614-642.

Li, T., van Dalen, J., & van Rees, P. J. (2018). More than just noise? Examining the information content of stock microblogs on financial markets. *Journal of Information Technology*, (*33*:1), pp. 50-69.

Lowry, P. B., Moody, G. D., Galletta, D. F., & Vance, A. (2013). The drivers in the use of online whistleblowing reporting systems. *Journal of Management Information Systems*, (*30*:1), pp. 153-190.

Marda, V. (2019). Cardoso, A., Boudreau, M.-C., & Carvalho, J. 2013. Think individually, act collectively: Studying the dynamics of a technologically enabled civic movement. *In International Conference on Information Systems. Milan. Introduction*, 2019 Global Information Society Watch: Artificial Intelligence: Human Rights, Social Justice and Development, Association for Progressive Communication (APC), Article 19. APC Publishing.

McClean, E. J., Martin, S. R., Emich, K. J., & Woodruff, C. T. (2018). The social consequences of voice: An examination of voice type and gender on status and subsequent leader emergence. *Academy of Management Journal*, (*61*:5), pp. 1869-1891

Morrison, E.W. (2011). Employee voice behavior: Integration and directions for future research. *Academy of Management Annals*, (5), pp. 373–412.

Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management review*, (*25*:4), pp. 706-725.

Near, J. P., & Miceli, M. P. (1995). Effective-whistle blowing. *Academy of management review*, (*20*:3), pp. 679-708.

Park, C., Im, G., & Keil, M. (2008). Overcoming the mum effect in IT project reporting: Impacts of fault responsibility and time urgency. *Journal of the Association for Information Systems*, (*9*:7), p. 1.

Petter, S. (2018, June). If You Can't Say Something Nice: Factors Contributing to Team Member Silence in Distributed Software Project Teams. In *Proceedings of the 2018 ACM SIGMIS Conference on Computers and People Research* (pp. 43-49).

Petter, S., Randolph, A. B., DeJong, J., & Robinson, A. T. (2016). The trouble with troubled projects: Keeping mum during times of crisis. *AIS Transactions on Replication Research*, (*2*:1), p. 6.

Ross, B., Pilz, L., Cabrera, B., Brachten, F., Neubaum, G., & Stieglitz, S. (2019). Are social bots a real threat? An agent-based model of the spiral of silence to analyse the impact of manipulative actors in social networks. *European Journal of Information Systems*, (*28*:4), pp. 394-412.

Schilpzand, P., Houston, L., & Cho, J. (2018). Not too tired to be proactive: Daily empowering leadership spurs next-morning employee proactivity as moderated by nightly sleep quality. *Academy of Management Journal*, (*61*:6), pp. 2367-2387.

Sherf, E. N., Parke, M. R., & Isaakyan, S. (2021). Distinguishing voice and silence at work: Unique relationships with perceived impact, psychological safety, and burnout. *Academy of Management Journal*, (*64*:1), pp. 114-148.

Tangirala, S., & Ramanujam, R. (2012). Ask and you shall hear (but not always): Examining the relationship between manager consultation and employee voice. Personnel Psychology, (65:2), pp. 251-282.

Templier, M., & Paré, G. (2015). A framework for guiding and evaluating literature reviews. *Communications of the Association for Information Systems*, (*37*:1), 6.

Tye, M., Leong, C., Tan, F., Tan, B., and Khoo, Y. H. (2018). Social Media for Empowerment in Social Movements: The Case of Malaysia's Grassroots Activism, *Communications of the Association for Information Systems* (42:1), pp. 408-430.

Van Dyne, L., Ang, S., and Botero, I. C. (2003). Conceptualizing Employee Silence and Employee Voice as Multidimensional Constructs, *Journal of Management Studies* (40:6), pp. 1359-1392.

Vera, A., & Krishnakumar, P. (22, February 26). Trayvon Martin'n death and the decade of technological evolution that inspired a movement. *CNN*. https://www..cnn.com/interactive/2022/02/us/travyon-martin-10-yea-death-anniversary/

Wong-Lo, M., & Bullock, L. M. (2014). Digital metamorphosis: Examination of the bystander culture in cyberbullying. *Aggression and violent behavior*, (*19*:4), pp. 418-422.

Wong, R. Y. M., Cheung, C. M., Xiao, B., & Thatcher, J. B. (2021). Standing up or standing by: Understanding bystanders' proactive reporting responses to social media harassment. *Information Systems Research*, (*32*:2), pp. 561-581.