The Inevitable Thucydides's Trap?

How Hierarchical Instability and Threat Influences Leaders' Openness to Inputs from Others

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This work is dedicated to 'mamma og pappa' for your lifelong support

and

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Summary

Social hierarchies represent a pervasive structure in social life. Although there are self-reinforcing mechanisms in hierarchies to enhance stability (Magee & Galinsky, 2008), all hierarchies are to a certain extent malleable. Thus, leaders are destined to experience hierarchical instability and threat to their hierarchical position. Even though hierarchical instability and threat may be a common experience for leaders (Leheta, Dimotakis, & Schatten, 2017), prevailing research into how leaders respond to hierarchical instability and threat is rather limited (Sturm & Antonakis, 2015). To decrease this knowledge gap, this dissertation examines when and how hierarchical instability and threat influences leaders' openness to others' inputs.

Article one investigates when and why hierarchical instability decreases leaders' advice-following. Based on a functional perspective on leadership (De Waal, 2007; Van Vugt, Hogan, & Kaiser, 2008) and help-receiving (Ackerman & Kenrick, 2008), the article argues that hierarchical instability (vs. stability) influences how leaders weigh the costs and benefits of following unsolicited advice. More specifically, leaders in unstable hierarchies weigh the social costs of advice-following as being greater than the benefits, ultimately decreasing their degree of advice-following. In support of this notion, experiment 1 showed that leaders in unstable hierarchies decreased advice-following compared to leaders in stable hierarchies. To investigate the mechanism for this relationship, a "moderation-of-process" design was employed, where we investigated the degree to which information pertaining to either costs or benefits of advice-following influenced leaders' degree of advice-following, when in unstable or stable hierarchies. Pertaining to the potential benefits of advice-following, whereas leaders in stable hierarchies increased advice-following from an expert vs. from a non-expert advisor, the advisor's expert level did not influence the degree of advice-following by leaders in unstable hierarchies (experiment 2). On the other hand, pertaining to the social cost of advice-

following, whereas leaders in unstable hierarchies increased advice-following from a non-human vs. from a human advisor, the advisor's humanness did not influence the degree of advice-following by leaders in stable hierarchies (experiment 3). Accordingly, these results suggest that hierarchical instability influences leaders' degree of advice-following, and emphasize the role of social factors, such as hierarchical considerations, in understanding why threatened leaders decrease their advice-following.

Article two examines the potential to generalize the conclusions from article one by using real leader-follower dyads, and also provides a more fine-grained analysis of the underlying psychological process of how leaders respond to hierarchical threats. Based on the premise that if threatened leaders' unwillingness to follow others' inputs is a robust and significant phenomenon, this pattern should be noticed by followers. Thus, followers of threatened leaders should perceive speaking up as futile. The results of a time-lagged (three waves), multisource field study suggest that followers perceive speaking up as futile to leaders who perceive threats to their hierarchical position. We investigated leaders' devaluation of followers (vanDellen, Campbell, Hoyle, & Bradfield, 2011), more specifically leaders' devaluation of followers' competence and/or benevolence, as the mechanism for this relationship. Results revealed that the mechanism accounting for the relationship between leaders' perception of hierarchical threat and followers' futility perceptions was leaders' devaluation of followers' competence, not leaders' devaluation of followers' benevolence. Thus, article two provides a more in-depth understanding of how leaders respond to their own perceptions of hierarchical threat in organizational life. Further, article two also shows how hierarchical threat relates to leaders' interpersonal perception and behavior, ultimately negatively affecting followers.

Article three complements the preceding articles by investigating the relational property of threat and also shifts the focus to leaders' voice solicitation. Extending leader–

member exchange (LMX) theory (Graen & Uhl-Bien, 1995) by applying a functional perceptive on leadership (Boehm et al., 1993a; Keltner, Van Kleef, Chen, & Kraus, 2008; Van Vugt et al., 2008), it examines how relationship quality between leaders and followers relates to leaders' perception of hierarchical threat and leaders' voice solicitation. The results of a time-lagged (two waves), multisource field study suggest that followers' perceptions of the quality of their relationship with their leaders (i.e., the LMX relationship) is positively associated with leaders' voice solicitation, and suggest that this relationship is mediated by leaders' perception of hierarchical threat. More specifically, followers' perception of relationship quality is negatively associated with leaders' perception of hierarchical threat, which in turn is negatively associated with leaders' voice solicitation. Hence, article three again highlights the role of social factors by including relational quality between leaders and followers to understand leaders' perception of hierarchical threat and their openness to others' inputs. Further, results suggest that relationship quality may function as a buffer against perceptions of hierarchical threat.

Combined, the three articles contribute to an increased understanding of when and how hierarchical instability and threat affects leaders' openness to others' inputs. Specifically, this dissertation provides initial insights into the undesirable effects of hierarchical instability and threat on leaders' interpersonal perceptions and behavior. While hierarchical instability has been proposed as a remedy for the corruptive effects of power (Keltner, Gruenfeld, & Anderson, 2003), the findings in this dissertation suggest that on the contrary, followers of leaders who experience hierarchical instability and increased hierarchical threat (compared to hierarchical stability and decreased hierarchical threat) are worse off. In addition, the findings in this dissertation collectively highlight how social factors influence leaders' openness to others' inputs, a perspective not yet fully integrated into advice and voice research. More specifically, results of this dissertation suggest that social factors such as threats to a

hierarchical position (either objective or perceived), and relationship quality as perceived by followers weigh in when leaders decide whether to ask for or follow others' inputs.

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Chapter 1

Introduction

In 431 BC, the Greek historian Thucydides wrote, "It was the rise of Athens and the fear that this instilled in Sparta that made war inevitable." The reaction of a ruling power to the threat of an emerging power is later coined "the Thucydides Trap" by Allison (2017). Although "the Thucydides Trap" is normally used to describe interstate relations,[1] I will argue that the fatalistic discernment of the quote captures important elements pertaining to how leaders respond to hierarchical instability and threat.

In stoical grandeur, the quote tells of the consequences of the inevitable dynamics in social hierarchies where high-rank positions may be lost. Importantly, the quote describes how the experience of hierarchical instability or threats to a hierarchical position prompts high-rank players to fight for and defend their positions. While Thucydides portrayed physically violent confrontation as the inevitable outcome, violence entails a risk for both parties, making non-violent solutions more probable as means for settling hierarchical disputes (Barkow, 1989; Mazur & Booth, 1998; Smith & Harper, 2003). Thus, humans have developed a sophisticated repertoire for solving hierarchical disputes through ritualized, non-violent display behavior that signals high-rank positions (Barkow, 1989). Further, because hierarchical positions are relationally constructed, threats to a hierarchical position essentially entail a relational, dependency component (Emerson, 1962). Therefore, the defense of a high-rank position in peril is often reflected by interpersonal strategies and maneuvers to decrease

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[1] In an alternative translation, "The growth of the power of Athens, and the alarm which this inspired in Lacedaemon, made war inevitable," the characteristics of the threatened object are ambiguous and may denote either an individual, that is, a mythical king, or a city-state.

the threat to a jeopardized position (Case & Maner, 2014; Maner & Mead, 2010; Mead & Maner, 2012).

Research gaps

Scholars have provided an exhaustive body of knowledge on the topics of power (Keltner et al., 2003; Magee & Galinsky, 2008), advice-following (Bonaccio & Dalal, 2006), and voice (Greenberg & Edwards, 2009; Morrison, 2014), yet, our knowledge on 1) how leaders' experience of hierarchical instability and threat may have undesirable effects, and 2) the extent to which potential social costs influence leaders' openness to others' inputs is still limited, as described in more detail below.

Research gap 1: Undesirable effects of hierarchical instability and threat

Leadership positions represent explicit (formal) or implicit (informal) high-rank positions, with disproportionate influence over resource allocation within the group, over conflict handling, and over group decisions (Van Vugt, 2006; van Vugt & Ronay, 2014). Whereas the consensus on how to define leadership is low, most definitions share the assumption that leadership involves exerting influence over others (Yukl, 2013). Leaders can often exert influence by leveraging their power – their asymmetrical control over valuable resources (Fiske & Berdahl, 2007; Magee & Galinsky, 2008), by providing or withholding these resources, and by administering punishment (Keltner et al., 2003; Magee & Galinsky, 2008).

To understand leadership, it is informative to understand the effects of experiencing power, because of the strong association between leadership and power (Magee, Gruenfeld, Keltner, & Galinsky, 2005). Research has the last four decades documented the various ways power transforms the powerful, often with adverse and undesirable consequences for those subject to the powerful (Anderson & Brion, 2014; Keltner et al., 2003; Kipnis, Castell,

Gergen, & Mauch, 1976; Magee & Galinsky, 2008). Although there are important boundary conditions for the general negative effect of power (Côté et al., 2011; Lammers, Galinsky, Gordijn, & Otten, 2008; Sassenberg, Ellemers, & Scheepers, 2012), research suggests that the experience of high levels of power decreases advice-following (See, Morrison, Rothman, & Soll, 2011; Tost, Gino, & Larrick, 2012), leads to cynical interpretation of others' well-intentioned behavior (Inesi, Gruenfeld, & Galinsky, 2012), increases resistance to others' persuasion attempts (Briñol, Petty, Valle, Rucker, & Becerra, 2007), and leads to overconfidence in one's own thinking and behavior (Fast, Sivanathan, Mayer, & Galinsky, 2012) and negative evaluations of others (Georgesen & Harris, 1998).

In their seminal article, Keltner et al. (2003) suggested that the theoretical mechanism behind the effects of experiencing high levels of power was the triggering of the behavioral activation system (BAS) caused by decreased social constraints and resource abundance. Similarly, other theoretical accounts of the effects of power also emphasize decreased social dependency as the mechanism behind the effects of high levels of power (Fiske & Berdahl, 2007), suggesting that elevated power increases psychological distance from others (Magee & Smith, 2013), reduces the "press of the situation," allowing for the resistance to others' influence attempts (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008, p. 1450), and hence liberates the powerful to more freely act according to their own beliefs (Briñol et al., 2007) and dispositions (Guinote, Weick, & Cai, 2012).

While this prolific stream of research has investigated the consequences of experiencing high levels of power, it has not in general taken into account that high-rank positions, such as leadership positions, may be tenuous, malleable, and unstable (Leheta et al., 2017). When hierarchical instability and threat is left out of the equation, research fails to acknowledge that powerful leaders occasionally, and potentially repeatedly, experience threats to their hierarchical position (De Waal, 2007; Sapolsky, 2005). While effects of power

to a certain extent are self-reinforcing (Magee & Galinsky, 2008), powerful leaders are not insulated from the effects of their actions (Anderson & Brion, 2014). Importantly, hierarchical instability and threat imposes social constraints on people in the upper ranks, because their actions may determine the extent to which they will remain in their powerful position. Hence, powerful leaders in unstable hierarchies should have less freedom to act without considering others' reactions. Yet, the prevailing research into how powerful leaders respond to hierarchical instability and threat, is somewhat limited (Sturm & Antonakis, 2015).

Keltner et al. (2003) proposed that hierarchal instability leads to dampened and reversed effects of experiencing high levels of power. In other words, hierarchical instability and threat makes the powerful act as if powerless. Currently, the results of the majority of research studying hierarchical instability are in line with this proposition. While experiencing power increases creativity (Galinsky et al., 2008), hierarchical instability decreases creativity in the powerful (Sligte, de Dreu, & Nijstad, 2011). Likewise, while power is related to increased risk-taking (Anderson & Galinsky, 2006), hierarchical instability reverses this effect by making the powerful more conservative in their decision making (Maner, Gailliot, Butz, & Peruche, 2007). Powerful people also show less unethical behavior when their power is unstable than when it is stable (Kim, Shin, & Lee, 2015). Finally, in the physiological domain, while experiencing power improves cardiovascular functioning (Scheepers, de Wit, Ellemers, & Sassenberg, 2012), hierarchical instability triggers a cardiovascular pattern indicative of threat (Scheepers, Röell, & Ellemers, 2015). One important exception to the previous findings of the reversed effect of hierarchical instability is research by Georgesen and Harris (2006) which suggests that leaders in unstable hierarchies increase their negative evaluations of followers. Nonetheless, given the bulk of knowledge combined from these studies, it may be logical to conclude that hierarchical instability and threat may function as a much-needed instrument to constrain the acts of powerful leaders.

What seems to be missing is research exploring how hierarchical instability and threat may intensify undesirable effects of power. Power is in general valuable to people (Kifer, Heller, Perunovic, & Galinsky, 2013), which on face value should be reflected in a willingness to defend and reassert a position of power when threatened. While there has been a shift toward considering power as a psychological property or experience of the individual (Tost, 2015), power is inherently relational; "to say that 'X has power' is vacant, unless we specify 'over whom'" (Emerson, 1962, p. 32). Reflecting a zero-sum assumption where power is finite, when leaders risk losing their resource control, they may perceive that others have the potential to gain it (Sirola & Pitesa, 2017). This possibility of losing power to others implies that others' in general, but also followers in particular, may be the target of leaders' social perceptions and behavior enacted to reinstate power (Leheta et al., 2017). An informative line of research suggests that individuals with a high level of dominance motivation may assert their position by means that ultimately harm followers and group performance (Case & Maner, 2014; Maner & Mead, 2010; Mead & Maner, 2012). Yet, how leaders in general react to hierarchical instability and threat, independent of their individual motivation, is less explored. More specifically, how does hierarchical instability and threat influence leaders' social perception and interpersonal behavior toward others?

An increased understanding of how leaders react to hierarchical instability and threat is of both theoretical and practical importance. Theoretically, examining hierarchical instability and threat increases the understanding of how leaders respond to the dynamical property of hierarchies, and, potentially, of the various ways powerful positions are interpersonally defended. The imposed constraints to freedom effected by hierarchical instability and threat may not always function as an antidote to the effects of power. Studying hierarchical instability and threat also illuminates the proposed mechanism behind the psychological effects of power, more specifically, the social freedom to act without

considering others. At the practical level, hierarchical instability and threat may be common experiences of leaders, triggered by changes in alliances, by subordinates jockeying for positions, or by mergers and acquisitions in organizations. Thus, hierarchical instability may be enacted from above or below in the hierarchy with the aim to constrain leaders (Boehm et al., 1993b), and hence increased understanding of the potential consequences of such threats on leaders' perceptions and behavior seems incumbent.

Research gap 2: Exploring the role of potential social costs of leaders' openness to inputs from others

Given that hierarchical instability and threat is proposed to decrease leaders' social freedom (Keltner et al., 2003), and hence, less freedom to discount others' opinions, investigating how hierarchical instability and threat influences leaders' openness to others' inputs seems warranted. There are undoubtedly many ways to operationalize openness to others' inputs. To provide a sufficient scope for this dissertation, I drew from the separate, yet interrelated research streams of voice and advice-following. Commonly, the streams are integrated by building upon and referring to each other's findings, and they share several conceptual commonalities and assumptions. The focus of this dissertation is not an elaborative comparative approach to voice and advice-following. Thus, I will briefly discuss their commonalities and differences. At a higher level, and relevant for this dissertation, seeking and following advice and voice represent the openness and willingness to be influenced by others' ideas, inputs, and judgments.

Granted, the two streams differ in how they define and operationalize their constructs, methodological approaches, and theoretical frameworks. "Advice" may be defined broadly as "any relevant ideas or judgments that are offered to the decision maker" (Gino, Brooks, & Schweitzer, 2012, p. 497). Hence, in the advice stream, the advice provider may be any person irrespective of hierarchical position who attempts to influence the decision process

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(Bonaccio & Dalal, 2006). The decision maker may solicit advice, or receive advice unsolicited. The extent to which advice is followed is commonly measured by the weight given to the advice in the final judgment of the decision maker (Bonaccio & Dalal, 2006).

Although there are various definitions of voice, most definitions highlight the act of speaking up with ideas, suggestions, and opinions to someone who is able to address the problem as a discretionary behavior, originating from a positive and constructive intention to improve work-related outcomes (Burris, 2012; Dyne, Ang, & Botero, 2003; Morrison, 2014). In contrast to advice research where the advisor may be positioned at any hierarchical level, in voice research the person who speaks up is often at a hierarchical level below that of the receiver (i.e., follower speaks up to the leader). The measurement of voice is commonly operationalized by follower or leader perceptions, such as regarding the frequency and efficiency, of speaking up. Further, voice research has also put a greater emphasis than advice research on the content of the input, distinguishing between different types of voice content (Burris, 2012; Liang, Farh, & Farh, 2012). The extent to which followers voice or intentionally withhold their inputs (i.e., follower silence) is partly determined by followers' perceptions of the effectiveness of speaking up in bringing about the desired changes (Morrison, 2014). Thus, one consequence of leaders' decreased openness to others' inputs is followers' perception that speaking up is futile.

Irrespective of their differences, both advice and voice streams have highlighted the normative benefits of including others' opinions to improve the quality of leaders' decisions (Bonaccio & Dalal, 2006; Larrick & Soll, 2006; Morrison, 2014; Soll & Larrick, 2009). In sum, both streams suggest that leaders insufficiently include others' inputs when making decisions, that is, they show resistance to being influenced by inadequately seeking and following others' inputs (Fast, Burris, & Bartel, 2014; Morrison & Milliken, 2000; See et al., 2011; Tost et al., 2012; Yaniv, 2004; Yaniv & Kleinberger, 2000). A consistent pattern

whereby valuable inputs are not implemented is problematic because it generally leads to decreased decision quality (Soll & Larrick, 2009) that may be harmful to organizations (Morrison, 2014).

Extant research suggests that a host of factors contribute to the understanding of when and why leaders fail to solicit and follow others' unsolicited inputs, such as from whom the input originated (Harvey & Fischer, 1997; Whiting, Maynes, Podsakoff, & Podsakoff, 2012), how the input was framed (Burris, 2012), characteristics of the leader (Detert & Burris, 2007; Detert & Treviño, 2010; Fast et al., 2014; See et al., 2011), and the complexity of the task (Gino & Moore, 2007). Yet, what seems to be missing in both streams is research investigating the extent to which leaders' willingness to follow others' inputs is influenced by social factors, more specifically, the possible social costs of seeking and following others' inputs (Ackerman & Kenrick, 2008). Advice-following and voice also converge by the associated negative connotations that are connected to the soliciting and following of others' inputs, ideas, and opinions (Goldsmith & Fitch, 1997; Lee, 1997). Indirectly, a social cost of following others' inputs is that the leader may appear incompetent, dependent, and indecisive (Goldsmith & Fitch, 1997; Nadler & Jeffrey, 1986). Thus, in certain situations leaders may weigh the costs of following others' inputs more than the potential benefits, ultimately decreasing their openness to others' inputs (Ackerman & Kenrick, 2008). As suggested by Ackerman and Kenrick (2008), threats to the obtainment of fundamental goals, such as preservation of a high-rank position or alliance formation (e.g., relational quality with important others), trigger considerations of the associated costs and benefits of following inputs, where the costs of being more or less open to others' inputs may increase.

To sum up, neither stream has sufficiently incorporated how social cost factors may decrease openness to solicit or follow unsolicited inputs, be they advice or voice. Investigating when and why leaders are more, or less, sensitive to the potential social costs of

following others' solicited or unsolicited inputs provides a more complete understanding of leaders' openness to others' inputs.

Objective of the present research

The overall objective of this dissertation is to address the proposed limitations in previous work and to extend the knowledge of potentially undesirable effects of hierarchical instability and threat on leaders' behavior and the knowledge of the role of social cost in determining leaders' openness to others' inputs. To do so, I combined the two research gaps into an overall research question: When and why does hierarchical (in)stability and threat decrease leaders' openness to others' inputs? The three articles sought to provide a mosaic answer to this question by using different types of research methodologies and theoretical refinements to provide unique contributions to different research streams.

The first article used experimental design to examine the general proposition that leaders in an unstable hierarchy would be less inclined to follow unsolicited advice than leaders in a stable hierarchy would be. Further, the objective of article one was to investigate the proposed theoretical process behind leaders' decreased willingness to follow advice in unstable compared to stable hierarchies by the use of a "moderation-of-process" experimental design (Spencer, Zanna, & Fong, 2005). More specifically, article one tested the proposition that leaders in stable versus unstable hierarchies differ in their weighting of the task benefits versus the social cost of following advice, whereas leaders in unstable hierarchies give more weight to the social costs, which in turn decreases their advice-following.

The objective of article two is to extend article one by examining the generalizability of the experimental conclusions from article one by using real leader-follower dyads, and also to provide a more fine-grained analysis of the underlying psychological process by which

leaders manage hierarchical threat. First, because ethical considerations prevented the experimental manipulation of objective hierarchical threat using real leaders, leaders' perception of hierarchical threat was examined. Second, to mimic the role of advisors in the organizational context, the focus from advisors in general (as employed in article one) was changed to followers in particular. This change of input source also reflects the daily life in organizations where followers represent a common source of inputs and opinions on leaders' decision making. I therefore wanted to see whether the experimental finding, that leaders in an unstable hierarchy show reduced openness to others' inputs, corresponds to the perceptions of real-life followers of hierarchically threatened leaders. Third, a down-stream consequence of leaders' decreased openness to followers' inputs and opinions is that the followers perceive speaking up to be futile (Morrison, 2014). Hence, if hierarchically threatened leaders decreased use of others' inputs is a robust phenomenon with practical relevance, followers should perceive speaking up to such leaders as futile. Therefore, to investigate the generalizability of the conclusion drawn from the first study, the dependent variable of interest is changed from the leader's degree of unsolicited advice-following to the follower's perception of the futility of speaking up. Finally, an objective of the second article was also to provide a more fine-grained analysis of the mechanisms by which leaders respond to and manage hierarchical threats. More specifically, I investigated the mediating effects of leaders' devaluation of followers' competence and/or benevolence in the relationship between hierarchical threats and futility perceptions.

Article three investigated the extent to which leaders' perception of hierarchical threat mediated the proposed association between relationship quality between leader and follower and leaders' voice solicitation by using real leader-follower dyads. With this line of inquiry, I complement the previous articles in two ways. First, I again examined the role of social factors for leaders' openness to others' inputs, but this time I included the role of relationship

quality between leader and follower together with leaders' perception of hierarchical threat. While functional perspectives acknowledge that followers may represent a threat, they also emphasize that followers are indispensable for securing a leadership position (Boehm et al., 1993b; De Waal, 2007; Keltner et al., 2008). Thus, high-quality relationships with followers who are committed to the leader (Walumbwa, Cropanzano, & Goldman, 2011) should arguably reflect leaders' accomplishment in "forming and maintaining reciprocal and cooperative alliances" (Ackerman & Kenrick, 2008, p. 123), that ultimately reduces hierarchical threat (Ferris et al., 2005). I therefore sought to investigate if relationship quality, as perceived by the follower, was negatively related to the leader's perception of hierarchical threat.

Second, I examined the leader's willingness to solicit inputs (i.e., voice), a departure from the preceding articles that had investigated unsolicited inputs. This approach was taken to clarify if there is a distinction between solicited and unsolicited inputs. On the one hand, the implicit connotations of incompetence, dependence, and deference are the same irrespective of whether the input was solicited or unsolicited. Thus, a similar pattern should be expected, irrespective of whether the input was solicited or unsolicited (Gino et al., 2012). On the other hand, soliciting inputs differs from receiving unsolicited inputs on the proactive versus reactive dimension of how to relate to a problem. When people actively seek inputs, they are in a position to frame and define the problem and to decide whom to solicit from. This behavior entails a form of active approach behavior and vigor associated with high-rank individuals (Anderson & Berdahl, 2002; Keltner et al., 2003). Passively permitting others to define important outcomes of one's life is often an undesirable consequence of having a low-rank position (Kraus, Piff, & Keltner, 2009). Yet, while actively approaching a problem may be more desirable than actively avoiding it, at least in others' perspective of preferred leadership behavior, approaching a problem still involves the explicit confirmation that there

is a problem which the leader is incapable of solving by his or her own means. Conversely, by not asking for help, the leader repudiates the existence of a problem, or signals the possibility of handling the problem by his or her own means. The objective of article three was therefore to investigate if leaders who perceived hierarchical threat also were reluctant to solicit inputs.

Intended combined contribution

The three articles included in this dissertation each aim to make distinct contributions to different research topics, as discussed thoroughly in each article. Further, when taken together, they also aim to provide an overarching contribution to the field by addressing limitations in the literature, as uncovered and discussed previously. Overall, this dissertation aims to provide increased understanding of when and how hierarchical instability and threat will affect leaders' openness to others' inputs.

Foremost, this dissertation aims to contribute to the literature on leadership and power by investigating an under-researched area of hierarchical instability and threat. Because hierarchical instability may be prevalent in organizational life, understanding how leaders respond to threats to their positions is warranted (Sturm & Antonakis, 2015). At the metalevel, the three articles help to clarify the role of social hierarchical dynamics in understanding leaders' social perceptions and behavior. By doing so, this dissertation questions the implicit assumption that leaders are unthreatened, secure, and stable that is often prevailing in existing research on power and leadership (Leheta et al., 2017). Collectively, the articles in this dissertation aim to complement existing research that has included hierarchical instability and threat by exploring how malleable hierarchies may produce in leaders negative and undesirable effects that ultimately affect others. Investigating a malleable hierarchy,

either as an objective context (article one) or as subjectively perceived by the leader (articles two and three), broadens the scope of the generalizability of the conclusions.

Second, this dissertation aims to contribute to the literature of advice-following and voice. Scholars have suggested that leaders' openness to others' inputs is pivotal for decision quality (Bonaccio & Dalal, 2006), and if followers refrain from speaking up with suggested work-related improvements, organizations are likely to suffer (Morrison, 2014). The articles in this dissertation aim to extend prior research that has examined factors that influence leaders' openness to others' inputs by investigating how *social* considerations, such as hierarchical concerns and relational quality, may play an important role to understand leaders' willingness or reluctance to ask for and follow others' inputs. Combined, by considering social factors in understanding leaders' openness to others' inputs, the articles may supplement an already complex picture. Further, the articles also indicate that leaders' decreased openness to others' inputs may be one of the many social maneuvers leaders employ to attempt to maintain their powerful positions.

Chapter 2

Theoretical background

Leadership and hierarchical instability and threat

Social hierarchies where individuals are implicitly or explicitly ranked with respect to a valued social dimension are a pervasive structure of human life (Halevy, Chou, Galinsky, & Murnighan, 2012; Magee & Galinsky, 2008). Hierarchies emerge early in ontogeny (Hawley, 1999), are quickly formed in new groups (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013), and the relative-rank positions are accurately assessed by their members (Anderson, Ames, & Gosling, 2008; Anderson, Srivastava, Beer, Spataro, & Chatman, 2006). Although hierarchies have self-perpetuating mechanisms to preserve the vertical structure to secure stability (Jost & Banaji, 1994; Magee & Galinsky, 2008), a prerequisite to function effectively (Bendersky & Hays, 2012; Swaab, Schaerer, Anicich, Ronay, & Galinsky, 2014), hierarchical structures are to a certain extent malleable and dynamic (Bendersky & Hays, 2012; Hays & Bendersky, 2015). Similarly, seminal work by primatologists De Waal (2007) and Sapolsky (2005) suggests that the socially stratified relationships within the hierarchy are not static and infinite, because leaders repeatedly experience hierarchical instability and threat to their positions. Likewise, in organizational life, hierarchical instability is inevitable because actors strive for resource control (Pfeffer, 1981).

High-rank positions, such as leadership positions, often engender "social power," defined as "the asymmetrical control over valuable resources in social relations" (Magee & Galinsky, 2008, p. 361). Therefore, hierarchical instability and threat foreshadows downward mobility for leaders, where future control over resources is uncertain, and potentially lost. In general, power is valuable and is associated with benefits for the powerful (Kifer et al., 2013).

Power provides social control over others, but potentially more important, it also allows freedom from others' control (Lammers, Stoker, Rink, & Galinsky, 2016). As such, a context of hierarchical instability and threat is a salient signal to leaders that their future power and independence are in peril, and may be transferred to or governed by others. Research about primates (De Waal, 2007; Sapolsky, 2005) and humans (Scheepers & Ellemers, 2005; Scheepers et al., 2015) alike suggests that hierarchical instability is a clearly stressful state for leaders.

Functional theories of power and leadership highlight how leaders may engage in strategic actions to maintain their advantageous positions when threatened (De Waal, 2007; Van Vugt, 2006; Van Vugt et al., 2008). Importantly, a functional perspective, as opposed to the framework of power provided by Keltner et al. (2003), posits that hierarchical instability and threat may in some instances amplify the behavioral effects of power, not diminish them, if these behaviors may preserve leaders' power. The acknowledgment that hierarchical instability and threat may motivate power guarding in leaders is also recognized by other theoretical accounts (Anderson & Brion, 2014; Williams, 2014). To prevent loss of resources, previous research suggests that dominance-motivated leaders respond with strategic behaviors aimed at retaining their positions, behaviors that ultimately harm the group and its members (Case & Maner, 2014; Maner & Mead, 2010; Mead & Maner, 2012).

Hierarchical instability represents a temporary coordination problem for the group (Van Vugt, 2006). Who shall determine the direction of the group's decisions? Whose decisions are weighted the most under decision conflict? Solving these conflicts through aggressive encounters between rivals for hierarchical positions entails a lethal risk for both parties (Barinaga, 1996; De Waal, 2007). Therefore, competitions for leadership positions and hierarchical disputes are seldom solved by physical confrontation, but instead by "ritualized fights" (Barkow, 1989, p. 181) that involve behavior displays and signals representative of

high rank (De Waal, 2007; Mazur & Booth, 1998). Signals are physical or behavioral attributes that have evolved to influence others' behavior, and that are effective because of the evolved favorable response in the receiver (Smith & Harper, 2003). Behavior displays that are aligned with a high-rank position often evoke deference and submissiveness in others (Tiedens & Fragale, 2003), and hence settle hierarchical disputes.

Of particular importance for leaders is the signal of competence, such as showing outstanding task knowledge or skills (Chapais, 2015; Henrich & Gil-White, 2001; Van Vugt, 2006). The actual competence of leaders may be hard to discern. To evaluate competence in leaders, people rely on behavior displays and signals perceived to reflect competence in others. Previous research suggests that physical characteristics, such as facial expressions (Antonakis & Dalgas, 2009; Todorov, Mandisodza, Goren, & Hall, 2005), voice pitch (Klofstad, Anderson, & Peters, 2012), or behavior signatures (Anderson, Brion, Moore, & Kennedy, 2012), are used as cues to reflect leaders' level of competence. People quickly defer to people they perceive to behave competently and afford them high-rank positions (Anderson & Kilduff, 2009; Tiedens, 2001). On the other hand, perceptions of incompetence will yield the opposite and constitute a direct threat to rank and position (Anderson & Kilduff, 2009).

Social cost of openness to others' inputs

Leaders often receive inputs when making decisions, or have the potential to solicit such inputs. Help offers, such as advice or inputs, are associated with both costs and benefits (Goldsmith & Fitch, 1997; Nadler & Jeffrey, 1986). One of the benefits related to following others' inputs is superior task performance such as improved decision quality. In general, using multiple inputs from diverse sources will ultimately limit decision errors, (Einhorn, Hogarth, & Klempner, 1977; Wallsten, Budescu, Erev, & Diederich, 1997), even when the input is of low quality (Larrick & Soll, 2006; Soll & Larrick, 2009). Thus, incorporating

others' inputs is advocated in both advice-following research (Bonaccio & Dalal, 2006; Larrick & Soll, 2006; Soll & Larrick, 2009) and voice research (Fast et al., 2014; Morrison, 2014). Moreover, leaders also have a need to maintain beneficial interpersonal relationships (Baumeister & Leary, 1995). Following others' inputs serves to sustain relationships and build long-term alliances by not violating norms of reciprocity where resources, such as information, are shared and used (Ackerman & Kenrick, 2008).

On the other hand, following others' helpful inputs is also associated with potential social cost (Goldsmith & Fitch, 1997; Nadler & Jeffrey, 1986). Importantly, soliciting or following others' inputs may be at odds with the preferred attributes of leaders. Invariably, when leaders receive advice or when followers speak up, it implies a non-optimal state of affairs, at least in the eyes of others. Unsolicited advice or voice may reflect an indirect critique of the leader (Fast et al., 2014). More specifically, unsolicited inputs entail an implicit connotation of incompetence in the receiver (Goldsmith & Fitch, 1997). By following others' inputs, leaders implicitly acknowledge their own competency level as inferior to that of the provider of the input. What is often conveyed as the defining act of leadership (Yukl, 2013) and the downstream consequence of power (Fiske & Berdahl, 2007) is the influencing of others. In following others' opinions, the direction of influence is turned, with the leader yielding and deferring to others. In sum, the act of following others might be a cue of a leader who is servile, incompetent, indecisive, and wavering in decisions.

Further, help relationships (such as being the provider of helpful inputs versus the receiver of such inputs) reflect, just as stratified relationship of high rank and low rank do, dependency relationships where one party is more dependent upon the other (Fiske & Berdahl, 2007; Lee, 1997; Sniezek & Van Swol, 2001). Departing from a zero-sum assumption, leaders may perceive that following others' inputs changes the power-dependency structure in the relationship (Tost et al., 2012). This line of argument is supported

in research by Schaerer, Tost, Huang, Gino, and Larrick (2018), suggesting that providing advice enhances one's own feelings of power, if the advice is followed. Further, research suggests that followers who speak up improve their own hierarchical rank at work (McClean, Martin, Emich, & Woodruff, 2017). When leaders solicit voice, followers perceive themselves to have more influence (Tangirala & Ramanujam, 2012). These findings contrast with the general conception of speaking up or offering inputs as being solely intended to improve decision quality or work-related concerns. The offering of (helpful) inputs may instead reflect the motivation for the personal attainment of power or rank. Thus, by soliciting or implementing others' inputs, leaders strengthen potential rivals who may constitute a danger to their hierarchical position. In sum, for leaders there are substantial costs and benefits involved with asking for and following others' inputs, costs and benefits that leaders must consider when deciding how open they will be to others' inputs.

Functional perspective on leaders' openness to input

To understand how leaders weigh these trade-offs concerning the costs and benefits associated with asking for and following others' inputs, I drew from functional theories of leadership and power asserting that leaders will be motivated to exhort efforts to maintain position (Barkow, 1989; De Waal, 2007; Van Vugt, 2006) and used a functional perspective on help refusals (Ackerman & Kenrick, 2008).

According to Ackerman and Kenrick (2008), threats to the goal attainment in one of the specific domains of social life, such as threats to the goal of maintaining a high social rank or of maintaining a coalition, will influence how the trade-offs between potential costs and benefits of following others' inputs are solved. A tenuous hierarchical position represents a domain-specific threat to the leader's ability to maintain a coveted position. In such situations, the cost of conveying an image at odds with preferred attributes of a leader is increased. The

implicit connotations of incompetence, deference, and dependency, involved by following others' unsolicited or solicited opinions, are a blow to "the resource-holding potential" (Parker, 1974; Parker & Rubenstein, 1981) of a leader, a potential which represents the leader's capability to defeat possible rivals. Leaders whose position is under siege may undermine their own position and reduce their chance of preserving their position by behavior that implicitly is at odds with behavior characteristic of a leadership position. When the goal is to preserve their own power and hierarchical position by not following others' inputs, leaders may signal their own competence, superiority, and assertiveness, important behavioral characteristics of leaders (Anderson & Kilduff, 2009; Chapais, 2015; Henrich & Gil-White, 2001; Van Vugt, 2006). Fundamentally, when leaders follow others' inputs, such advice-following momentarily reverses the established direction of influence. Thus, hierarchical instability and threat should reduce leaders' willingness to solicit and follow others' ideas and opinions. Conversely, a leader in an irrevocable hierarchy, with no pending threats, may not suffer from a temporary deviation from the preferred attributes of a leader. Thus, leaders in a stable hierarchy can prioritize the task and normative benefits that following others' ideas and opinions entails.

Although these behavioral tendencies of leaders' decreased willingness to listen to others apply to advisors in general, a functional framework also highlights how followers may represent a distinct source of threat to leaders in unstable hierarchies. To achieve group goals, leaders are often expected to support and develop the capabilities of their followers (Leheta et al., 2017). When there are threats to the hierarchical order, capable followers are a greater source of menace to leaders than incapable followers are (Mead & Maner, 2012). This might entail that supposedly positive characteristics of followers that are relevant for obtaining organizational goals (such as having high levels of competence, being proactive, or engaging in constructive behavior) are viewed negatively by the leader because these characteristics

also reflect the resource-holding potential of a possible rival (Parker & Rubenstein, 1981), and have implications for the leader's ability to retain the position. Acknowledging positive attributes in followers, such as their high level of competence, may strengthen them to ascend the hierarchy. To decrease the potential danger of followers, it is probable that leaders experiencing hierarchical threat engage in self-protection strategies (vanDellen et al., 2011) such as the devaluation of followers, and decrease their openness to followers' inputs.

Yet, while acknowledging that followers may represent a threat to leaders, they are nevertheless also an indispensable resource for the leaders' ability to maintain a position. The evolution of complex cooperative skills in the history of the human species introduced the need for managers to manage alliances and interpersonal bonds with followers (Boehm et al., 1993a; Keltner et al., 2008). Thus, the fundament of leaders' hierarchical position did not stem from solely coercive threats and intimidation. High-quality alliances are often built by a history of social exchanges that are developed into more trusting and lasting relationships (Graen & Uhl-Bien, 1995; Walumbwa et al., 2011). These resources may be tangible (e.g., food, mates) or intangible, such as valuable inputs of information. When followers perceive a high-quality and long-lasting relationship with their leader based on trust, their propensity to revolt against the leader is likely to be diminished. Instead, given the mutual benefits that arise in high-quality relationships between leader and followers (Graen & Uhl-Bien, 1995), they may reflect strong, cooperative alliances. Conversely, a leader's failure to develop high-quality relationships with followers may increase the insecurity of a hierarchical position, because one possible source of threat is not neutralized (De Waal, 2007).

Accordingly, Ackerman and Kenrick (2008) proposed that the existence of alliances, such as high-quality interpersonal bonds, influences how the trade-offs between costs and benefits of openness to others' inputs are solved. More specifically, the existence of a high-quality relationship may diminish the potential social threat of soliciting and following

followers' inputs. Instead, the leader faces the social cost of alienating existing alliances by not seeking and following their inputs. Thus, a leader who has low levels of openness to followers' inputs risks violating norms of reciprocity (Blau, 1964) by preventing participative decision-making (Yukl, 2013). Consequently, when leaders have good relationships with their followers, the social cost of failing to ask for and implement their inputs is the potential undermining of a cooperative, functional alliance (Ackerman & Kenrick, 2008).

To sum up, a functional perspective suggests that threats to various fundamental goals of social life, such as the maintenance of a hierarchical position or of alliances with others, influence how leaders solve the trade-offs involved in soliciting and following others' inputs, that ultimately will influence leaders' openness to others' inputs. More specifically, when there are threats to their hierarchical position, leaders weigh the potential social cost (of appearing incompetent, indecisive and dependent) more than the potential benefits of following others' inputs (Ackerman & Kenrick, 2008). Thus, I propose that hierarchical instability and threat decreases leaders' openness to others' inputs. However, when leaders have strong relationships with their followers, the potential social cost (of alienating functional alliances) makes leaders more open to their followers' inputs.

Chapter 3

When the Throne is Shaken: When and why hierarchical (in)stability affects advice-following

By

Ingvild M. Seljeseth, Mehrad Moeini-Jazani, Bob Fennis, and Luk Warlop

Abstract

Building on a functional help-refusals perspective, we propose that hierarchical instability reduces leaders' advice-following. We argue that hierarchical instability shifts leaders' focus from benefits of advice-following toward its potential social costs, which subsequently reduces advice-following. Accordingly, we show that, relative to leaders in stable hierarchies, leaders in unstable hierarchies are less likely to follow advice (Experiment 1) and are insensitive to diagnostic cues about advice benefits, such as the advisor's level of expertise (Experiment 2). Furthermore, consistent with our reasoning, we show that when the social costs of advice-following are attenuated because the advice comes from a non-human advisor versus a human advisor, leaders in unstable hierarchies show increased advice-following (Experiment 3).

Keywords: leadership, hierarchical instability, advice-following, competence, benevolence

Introduction

One of the first official photos the White House released of the newly elected President of the United States, Donald Trump, shows him surrounded by a group of advisors in the Oval Office (see White, 2017, August). The group includes National Security Advisor Michael Flynn, White House Press Secretary Sean Spicer, Chief of Staff Reince Priebus, White House chief strategist Steve Bannon, and Vice President Mike Pence. Interestingly, less than seven months after Trump's inauguration, only Vice President Pence remained. As many leading media underscore, one of the hallmarks of his presidency so far has been that Trump feels constantly threatened by real or imaginary political adversaries and thus engages in systematically searching for recognition, acknowledgement, and reassurance of his power and position. Consequently, Trump apparently relies less on advice when deciding policy issues, claiming, for example when it comes to foreign policy, "I'm speaking with myself, number one, because I have a very good brain and I've said a lot of things" (Chasmar, 2017, March).

To make high-quality decisions, it is imperative for leaders to be open to others' inputs (Owens & Hekman, 2012; Owens, Johnson, & Mitchell, 2013; Srivastava, Bartol, & Locke, 2006; Yukl, 2012). Previously, research has investigated characteristics of the leader (Gino & Schweitzer, 2008; Tost, Gino, & Larrick, 2012), the advisor (Sniezek, Schrah, & Dalal, 2004), and the decision task (Gino & Moore, 2007) as the factors that influence unsolicited advice-following. Yet, leaders' decisions whether to follow advice are also influenced by their discrete context (Oc, 2018). Hierarchical instability, where leaders might lose their high-rank positions, is a particularly salient context for leaders (De Waal, 2007; Sapolsky, 2005), and one that increases leaders' propensity to signal characteristics representative of their high-rank position as a way to defend their position (De Waal, 2007; Smith & Harper, 2003). To be perceived as competent is pivotal to attain and maintain leadership positions (Anderson & Kilduff, 2009; Van Vugt, 2006). Thus, a context of hierarchical instability may affect how

sensitive leaders are to the potential social costs of advice-following. While advice-following often improves decision quality, it is also accompanied by potential social costs such as indicating incompetence, inferiority, and yielding to the advisor (Goldsmith & Fitch, 1997; Nadler & Halabi, 2006; Nadler & Jeffrey, 1986), although the concern regarding these costs is not always warranted (Brooks, Gino, & Schweitzer, 2015).

In the present research, we aim to contribute to the advice-following literature and leadership literature by investigating when and why a context of hierarchical instability influences leaders' degree of advice-following. Specifically, we build on the evolutionary theory of help-refusals (Ackerman & Kenrick, 2008) to propose a novel hypothesis that hierarchical instability increases leaders' unwillingness to follow advice. We argue that for leaders in unstable hierarchies, the potential social costs of following advice, such as appearing incompetent or conceding inferiority, take precedence over considerations of potential benefits of following advice. Thus, we propose that leaders in unstable hierarchies follow advice to a lesser extent than leaders in stable hierarchies do. Despite Trump's idiosyncrasies, by using the evolutionary lens we will argue that actively ignoring inputs and advice may be the rule, rather than the exception, when it comes to leaders who perceive that their throne is shaken.

Theory and Hypotheses

A functional perspective on advice-following

Leaders often make decisions that have significant consequences for those in the lower tiers of the hierarchy (Day & Antonakis, 2012). When leaders make decisions, they frequently receive unsolicited advice meant to influence their decisions. When deciding whether to follow advice, the leader must weigh the potential benefits relative to the potential costs of following the advice. The normative perspective of advice-following, supported by a

wealth of research, ranging from voice research (Morrison, 2014) and advice-following

research (Bonaccio & Dalal, 2006; Larrick & Soll, 2006; Soll & Larrick, 2009) to statistical

theories (Einhorn, Hogarth, & Klempner, 1977; Wallsten, Budescu, Erev, & Diederich, 1997),

advocates advice-following because of its potential benefits. Specifically, if leaders use

multiple inputs and include a broader range of information from diverse sources when making

decisions, they will be less likely to make errors. Hence, according to the normative

perspective, to increase decision quality, leaders should follow advice. While this account

highlights the benefits of advice-following, it fails to consider potential (social) costs

associated with following advice (cf. Tost et al., 2012).

　　　　The functional evolutionary perspective on help-refusals (Ackerman & Kenrick,

2008), on the other hand, posits that following advice may have social costs. More

specifically, costs of following advice are related to the information that the act of following

advice conveys about the advice-follower. Importantly, by following advice, people implicitly

concede they have less competence in the task at hand than the advisor does, and thus are

dependent on and inferior to the advisor (Goldsmith & Fitch, 1997; Nadler & Jeffrey, 1986).

Following advice can therefore be potentially damaging to the competent image leaders

would like to convey. Interestingly, the semiotics of advice-following indicates that by

following advice, one subtly conveys being subordinate to the advisor. In evolutionary

theories of leadership, subordinates are often described as "followers"—denoting who leads

and who follows (King, Johnson, & Van Vugt, 2009). Disregarding advice, a behavior that

seems to ignore the traditional rational and normative perspectives on decision making, could

just as well represent the adaptive avoidance of an otherwise costly error (Haselton & Nettle,

2006) of behaving at odds with preferred leader attributes.

　　　　To provide a more balanced account of leaders' advice-following, we ask the

following question: Under what conditions do leaders weigh the potential costs of advice-

following more heavily than the potential benefits? From a functional evolutionary perspective, the differential weighing of the costs versus the benefits of following advice depends, at least in part, on the existence of threats to one's status and power (Ackerman & Kenrick, 2008). While it is usually "good to be the king" (Akinola & Mendes, 2013), a context of hierarchical instability triggers stress responses among those with higher ranks (Sapolsky, 2005; Scheepers, Röell, & Ellemers, 2015). Hierarchical instability constitutes a salient threat to a leader's social standing and future resource control (De Waal, 2007). Threat to one's status renders one vigilant and raises one's suspicion regarding others' malevolent intentions (Kramer & Gavrieli, 2005), and triggers behaviors aimed at safeguarding and maintaining one's position (Dorrough, Glöckner, & Lee, 2016; Maner, Gailliot, Butz, & Peruche, 2007; Pettit, Yong, & Spataro, 2010). Leaders in a threatened position therefore have a higher propensity to signal preferred attributes of leaders, as a way of holding on to their positions (De Waal, 2007). The signal of competence is important because followers show a strong preference for leaders they perceive as competent (Chapais, 2015; Henrich & Gil-White, 2001; Van Vugt, 2006). Conversely, a temporary deviation from the preferred attributes of a leader represents a minimal risk when the hierarchical position is secure, stable, and irrevocable.

In line with Ackerman and Kenrick (2008), we posit that hierarchical instability (vs. stability) spurs leaders to give more precedence to the social costs of appearing incompetent than to the normative benefits of advice-following, eventually resulting in a reduced tendency to follow advice. Thus, our first hypothesis addresses the general effect of decreased advice-following by leaders in unstable hierarchies compared to those in stable hierarchies:

Hypothesis 1: Individuals having an unstable leadership position will follow advice to a lesser extent than will individuals having a stable leadership position.

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As discussed above, deciding whether to follow advice invariably involves resolving a trade-off between the potential benefits (such as increased decision quality) and the potential costs (such as appearing incompetent) associated with advice-following. We suggest, and propose as our theoretical mechanism, that leaders in unstable compared to those in stable hierarchies weigh the costs and benefits of advice-following differently, ultimately influencing their willingness to follow advice. If the benefits of advice-following are not prioritized, then cues that pertain to the benefits of following advice should be ignored, and not influence the degree of advice-following. An important cue reflecting the potential benefits of advice-following is the advisor's level of expertise. In general, the advice from expert advisors is followed to a greater extent than the advice from non-expert advisors is (Harvey & Fischer, 1997). We therefore propose that leaders in unstable hierarchies who are more concerned with the social costs of following advice should disregard diagnostic cues related to the benefits of advice-following, such as the advisor's level of expertise. Thus, we posit that the advisor's level of expertise should not influence the degree of advice-following by leaders in unstable hierarchies. However, when leaders' hierarchical positions are unthreatened, secure, and stable, the potential social costs of following advice can to a greater extent be ignored. Therefore, leaders in stable hierarchies give more weight to the benefits of advice-following when receiving unsolicited advice than do leaders in unstable hierarchies. Consequently, leaders in stable hierarchies will be sensitive to diagnostic cues related to the benefits of advice-following, such as the advisor's level of expertise. We therefore propose that leaders in stable hierarchies will be more likely to follow expert advice than non-expert advice.

Hypothesis 2: There is an interaction effect of hierarchical instability and advisor expertise. More specifically, whereas the advisor's expertise level will not influence the degree of advice-following for individuals with an unstable leadership position, individuals with a stable leadership position will follow the advice from an expert advisor to a greater extent than they will the advice from a non-expert advisor.

The converse of our reasoning suggests that leaders in unstable hierarchies disregard advice because the potential social costs are weighed more strongly than the potential benefits of following advice. If social costs are prioritized, then cues pertaining to the existence of social costs should affect the degree of advice following. When leaders make decisions, they are increasingly provided with inputs from non-human agents, such as data algorithms. The humanness of the advisor is a salient cue reflecting the existence of potential social costs involved with following advice. Following advice from a non-human advisor does not entail social costs vis-à-vis the advisor, because non-human agents do not represent potential rivals in a social hierarchy. We therefore propose that leaders in unstable hierarchies will be sensitive to the advisor's humanness by increasing their advice-following from a non-human advisor compared to a human advisor. However, leaders in stable hierarchies, who are not concerned with the social costs of advice-following, should not be influenced by the advisor's humanness in their degree of advice-following.

Hypothesis 3: There is an interaction effect of hierarchical instability and the humanness characteristic of the advisor. More specifically, whereas individuals with an unstable leadership position will follow the advice from a non-human advisor to a greater extent than they will the advice from a human expert advisor, the humanness of the advisor will not influence the degree of advice-following for individuals with a stable leadership position.

Overview of current studies

We tested our proposition in three experiments. The effectiveness of our experimental manipulations was tested in external manipulation checks, the results of which are reported in the supplementary material. The first experiment tested our proposition that leaders in an unstable hierarchy would be less inclined to follow unsolicited advice than leaders in a stable hierarchy would be. In Experiments 2 and 3 we examined our proposed theoretical process by experimentally manipulating it, that is, we used a moderation-of-process design as advocated by Spencer, Zanna, and Fong (2005). In Experiment 2, we investigated the different sensitivity of leaders in stable and unstable hierarchies to information pertaining to the benefits of following advice by examining how a benefit cue, more specifically, the advisor's expertise level, affects their degree of advice-following. In Experiment 3, we examine the different sensitivities of leaders in stable and unstable hierarchies to information pertaining to the social costs of following advice by examining how a social cost cue, more specifically, the advisor's humanness, affects their degree of advice-following.

Experiment 1: Hierarchical (in)stability and advice-following

The purpose of the first experiment was to test our prediction that leaders in an unstable hierarchy would be less inclined to follow unsolicited advice than leaders in a stable hierarchy would be.

Methodology

Participants and design

In our first experiment, we took an exploratory approach to determine the sample size using G*Power software (v.3.1) (Faul, Erdfelder, Buchner, & Lang, 2009). Specifically,

for an omnibus test with three experimental groups, a power of .8, a significance level of .05, and an estimated medium effect size ($f = .25$) indicated a total sample size of 159 participants. We therefore aimed to recruit at least 53 participants per condition, with more participants being included if they had already signed up for the allotted laboratory time, after the sample-size requirements had been met.

A total of 187 undergraduate and graduate students (128 females, $M_{age} = 23.25$, $SD = 3.85$) participated in the experiment for a standard show-up fee. Participants were randomly assigned to one of three experimental conditions: leaders in a stable hierarchy, leaders in an unstable hierarchy, and control group. Participants were excluded if they voiced suspicion during the debriefing (n = 3) or were unable to follow experimental instructions (n = 5), leaving 179 participants in the final sample.

Procedure

Participants signed up one week before the lab experiment for an ostensible study on group dynamics. When they registered, they received an online questionnaire containing questions measuring demographics and personality items that they had to complete at least two work days before they came to the lab.

Participants arrived for their respective experiment in groups of a maximum of four people. Upon arrival, the experimenter told participants that the experiment consisted of several tasks. Participants learned they would individually first complete a computerized task consisting of several estimation trials, and then be escorted from their individual cubicles to a different room where each would be paired with another individual to complete a group task. After the initial oral explanations by the experimenter, participants started working in their private cubicles, and all further instructions were provided online.

Estimation task (Part 1)

In the first part of the experiment, participants completed several judgment tasks in individual computer cubicles (see Gino & Schweitzer, 2008; Tost et al., 2012 for a similar setup). All participants saw pictures of a transparent glass filled with 90 (first estimation task), 131 (second estimation task), and 177 (third estimation task) peas. They estimated the number of peas in each glass. Participants were informed they could earn an additional monetary award of approximately 62 USD if they provided an accurate estimate in all three rounds.

Leadership manipulation

Next, participants were randomly assigned to one of three experimental conditions: a leader in a stable hierarchy, a leader in an unstable hierarchy, or a control condition. The experimenter was blind to the specific experimental conditions of each participant. In the two leadership conditions, to increase the perceived legitimacy of the leader role in the ostensible upcoming dyadic task, participants were informed their role in the group task had been determined according to their score on the pre-lab survey, described as a leadership potential test; however, the leader role was in fact randomly assigned. Participants in the two leadership conditions were told that they would be in charge of one subordinate in the upcoming group task. Their alleged subordinate was also described as having a high score, yet not as high as that of the participant assigned to the leader role. Participants were told that as a leader they would structure the dyadic task, evaluate their subordinate, and decide how to divide the monetary rewards associated with the group task (Galinsky, Gruenfeld, & Magee, 2003). In the control condition, participants were not given information about their leadership potential, but were solely informed they would have equal control over the process and outcome of the task throughout the dyadic task, and that the reward would be evenly distributed between group members.

Hierarchical (in)stability manipulation

To manipulate hierarchical instability, we followed previous manipulations (Case & Maner, 2014; Maner et al., 2007; Mead & Maner, 2012). In the unstable hierarchy condition, participants were told that the hierarchy might change depending on their performance in the upcoming estimation task. Specifically, participants were told that their assigned leader role might be lost, and that they would be reassigned to the subordinate position in the forthcoming group task if they performed worse than their subordinate did in the estimation tasks. The subordinate would then be assigned to the leader position. In the stable hierarchical condition, participants were told that they would keep their position throughout the experiment, irrespective of their performance in the upcoming estimation tasks. In the control condition, participants were told that they would keep their roles throughout the group task.

After hierarchical instability was manipulated, participants were asked to complete part two of the estimation task before the ostensible dyadic task was to begin.

Estimation task (Part 2)

Participants were shown the same three pictures as in the first estimation task and were again asked to estimate the number of peas in the glass. However, this time participants were provided with an estimate that another person had purportedly made from looking at the same three pictures. Participants were informed that the estimates were made by a participant from a previous experiment who had been randomly assigned to the advisor role. In fact, the advice reflected the actual number of peas in the glass and all participants were given the same advice. Participants were also shown their own first estimates.

Dependent measure

Advice-following. Following past research in advice-following (Gino, 2008; Gino, Brooks, & Schweitzer, 2012; Yaniv, 2004), we measured participants' extent of advice-following using the "weight of advice" (WOA) index. This measure reflects the extent to which participants revise their estimates in the direction of the advisor's estimate when taking into account their initial estimate and the difference between the advice and the initial estimate. When the WOA ratio is equal to 0, the advisor's estimate (i.e., advice) has no influence on the final estimate, and when the WOA ratio is equal to 1, the final estimate is identical to the advisor's estimate (Bonaccio & Dalal, 2006). Hence, higher scores on this measure indicate greater advice-following. When – as in this experiment – there is no a priori reason to assume that the advisor has more or less expertise, the normatively correct course of action is to give one's own and the other person's estimates equal weight (WOA = 0.5) (Soll & Larrick, 2009). For each participant, we computed WOA[2] in each estimation trial using the following formula:

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[2] In all experiments, in line with previous research (Gino, Shang, & Croson, 2009; Tost et al., 2012), we excluded a target WOA score from computation of the mean WOA score when the participant guessed the correct number in the first estimation, and WOA scores above 1 were treated as WOA = 1, whereas WOA scores below 1 were treated as WOA = -1. In study 1, 10 participants guessed the correct number for one or two of the targets. There were five participants with WOA above 1 for the first target, four participants with WOA above 1 for the second target, and 10 participants with WOA above 1 for the third target. In study 2, no participants guessed the correct number on their initial estimates, there was one participant with WOA above 1 for the first target, and there were four participants with WOA above 1 for the second target and four participants with WOA above 1 for the third target. In study 3, 10 participants guessed the correct number for the last target. There were six participants with WOA above 1 for the first target, three for the second target, one for the third target, and three for the fourth target. One participant had a WOA below 1 for the second target.

$$\text{WOA} = \frac{\left| final\ estimate - inital\ estimate \right|}{\left| advice - inital\ estimate \right|}$$

The average WOA score for each participant constituted our dependent variable. Finally, participants completed leader manipulation checks by indicating the extent to which they perceived (a) themselves or (b) their team member to be in charge and in control of the outcomes in the upcoming teamwork task. The results enabled us to evaluate if our manipulation of hierarchical instability isolated our intended independent variable, rather than leaders' perception of power. Participants also completed the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988) to assess potential affect-based explanations.[3]

Results and discussion

Advice-following. The average values of WOA for each experimental condition are displayed in Figure 1. A one-way ANOVA revealed a marginally significant effect of hierarchical instability on advice-following ($F(2,176) = 2.47$, $p = .09$, $\eta_p^2 = .03$). Results of planned contrasts revealed that, consistent with our Hypothesis 1, leaders in an unstable leadership position decreased their advice-following ($M = .24$, $SD = .21$) significantly compared to leaders in a stable leadership position ($M = .34$, $SD = .26$; $F(1, 176) = 4.93$, $p = .03$, 95% CI $_{\text{Mean-Differences}}$ [-.19, .01]). Although we did not have any a priori hypothesis about the control group, we ran contrast analyses to understand the direction of the previous effect. The WOA for participants in the control group ($M = .28$, $SD = .25$) was not significantly different from that of participants with either a stable leadership position ($F(1,$

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[3] The results of these analyses are reported in the supplementary material.

176) = 1.54, p = .22, 95% CI $_{\text{Mean-Differences}}$ [-.14, .03]) or an unstable leadership position (F(1,

176) = 1.05, p = .31, 95% CI $_{\text{Mean-Differences}}$ [-.04, .13]).

Figure 1

Experiment 1, mean WOA values by experimental conditions. Error bars represent standard errors
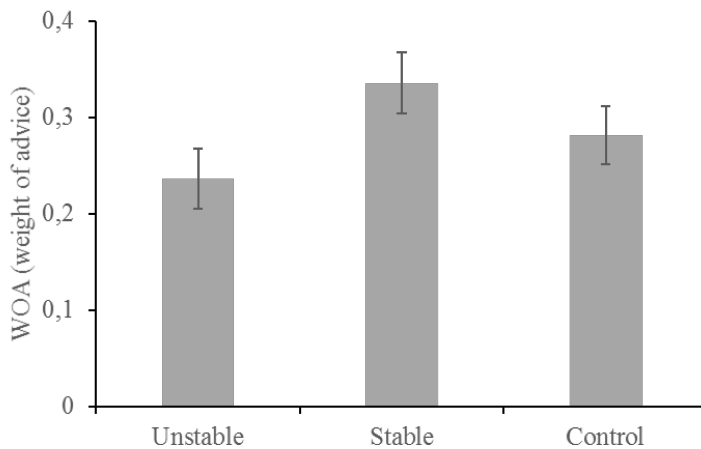
Overall, these findings suggest that leaders in an unstable hierarchy decreased advice-following more than leaders in a stable hierarchy did. Although we are arguing that this effect emerges because of concerns regarding the social costs of advice-following among the unstable leaders, an alternative possibility is that experiencing hierarchical instability may increases leaders' sensitivity to the quality of the advice. In the first experiment, information pertaining to the quality of the advice was not made available to participants. Critically, this alternative account suggests that in the presence of diagnostic cues regarding the quality of advice (e.g., the advisor's level of expertise), leaders in unstable hierarchies should show increased advice-following in order to reduce the risk of making bad decisions. However, according to our own theoretical account, because following advice from experts still entails

social costs to leaders, leaders in unstable hierarchies should not follow advice, even if advisors are experts. We test these two competing accounts in the next experiment by explicitly manipulating the advisor's level of expertise.

Experiment 2: Hierarchical (in)stability and the benefits of advice-following

One important diagnostic criterion reflecting the quality of advice is the advisor's level of expertise (Meshi, Biele, Korn, & Heekeren, 2012; Schrah, Dalal, & Sniezek, 2006; Sniezek et al., 2004). We expected leaders in an unstable hierarchy to be indifferent to expertise cues when deciding the extent to which they would follow advice, given that they prioritized the potential social costs of following advice. Conversely, we expected leaders in a stable hierarchy, who prioritized the benefits of advice-following, to follow the advice coming from an expert advisor more than they would the same advice coming from a non-expert advisor.

Method

Participants and Design

The sample size was determined by the availability of students in our lab for the allotted time of the experiment. Participants were randomly assigned to one of four experimental conditions from a 2 (hierarchical position: stable vs. unstable) × 2 (advisor's expertise: expert vs. non-expert) between-subjects design. A total of 133 undergraduate and graduate students participated in this experiment for a standard show-up fee or course credits. The most accurate participant earned an additional monetary reward of approximately 50 USD. Participants were excluded if they voiced serious suspicion during the debriefing (n = 3) or were unable to follow experimental instructions (n = 3), leaving 127 participants in the sample (72 females, M_{age} = 21.09, SD = 2.93).

Procedure

Participants arrived in the lab individually or in groups for several unrelated studies, in which the current experiment was embedded. The procedure was identical to that of Experiment 1 with two exceptions. First, we manipulated the advisor's expertise characteristics (expert vs. non-expert) by closely following manipulations described by Tost et al. (2012). Participants were given information about the advisor's performance in a preceding session of the same experiment. In the expert-advisor condition, participants were told that the estimates were from an advisor who was among the best performers in a previous session (specifically, in the top 5% in terms of accuracy). In the non-expert advisor condition, we told participants that the estimates were those of an advisor who was among the average performers in a previous session (specifically, in the 50th percentile). In fact, all participants received the same advice, which was the correct answer to the estimation task. Second, due to practical constraints in the lab, participants answered personality items immediately after completing the first estimation task.

Results and discussion

Advice-following. A 2 (hierarchical position: stable vs. unstable) × 2 (advisor's expertise: expert vs. non-expert) between-subjects ANOVA revealed a significant effect of the advisor's expertise, $F(1,123) = 4.67$, $p = .03$, $\eta_p^2 = .04$. Analysis also revealed a marginally significant interaction effect between hierarchical position and the advisor's expertise, $F(1,123) = 3.104$, $p = .08$, $\eta_p^2 = .03$. Consistent with our Hypothesis 2, contrast analyses revealed that (see Figure 2) participants in an unstable leadership position disregard the advice to an equal extent, irrespective of whether it came from an expert ($M = .30$, $SD = .23$) or a non-expert advisor ($M = .28$, $SD = .25$; $F < 1$, $p = .78$). Further, participants in a stable leadership position increased their advice-following more when the advice came from an

expert advisor (M = .42, SD = .27) than when it came from a non-expert advisor (M = .25, SD = .25, $F(1,123)$ = 7.64, p = .007, 95% CI $_{\text{Mean-Differences}}$ [.05, .3]).

Figure 2

Experiment 2, mean WOA values by experimental conditions. Error bars represent standard errors
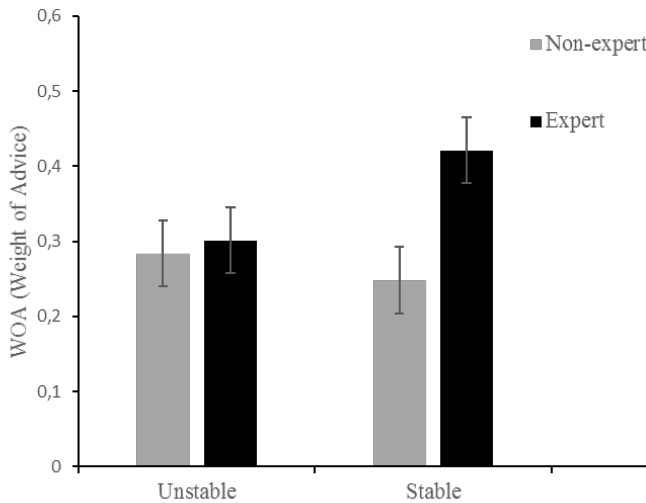
These results are consistent with our reasoning that, unlike leaders in a stable hierarchy, leaders in an unstable hierarchy are less sensitive toward the normative benefits of following advice, and hence disregard diagnostic cues that signify the quality of advice (i.e., the advisor's expertise level). On the other hand, leaders in a stable hierarchy follow the advice from an expert advisor to a higher degree than they follow the advice from a non-expert advisor. While the second experiment gives support for our theoretical notion that leaders in an unstable hierarchy are not sensitive toward information that pertains to benefits of following advice, we have not yet directly tested the theoretical prediction that social costs associated with following advice underlie decreased advice-following by leaders in unstable hierarchies.

Experiment 3: Hierarchical (in)stability and the social costs of advice-following

The purpose of the third experiment was to test the proposed mechanism underlying our effect by experimentally manipulating the proposed process (Spencer et al., 2005). So far, we reasoned that following advice poses a threat to the preferred image of a leader who is competent, autonomous, and decisive vis-à-vis the advisor. However, this implication should hold only when the advisor is a human being who might be motivated to increase his or her own hierarchical position (Lammers, Stoker, Rink, & Galinsky, 2016), and hence constitutes a social threat. On the other hand, at least for now, computers do not strive for social positions in human hierarchies. Thus, when the advisor is a computer, following the advice does not represent a social cost. We therefore expected leaders in an unstable hierarchy to increase their advice-following from a non-human expert advisor compared to a human expert advisor, whereas leaders in a stable hierarchy would be indifferent to cues about the (in)humanness of the advisor when deciding the extent to which they would follow advice.

The testing of this hypothesis allows us to rule out the alternative explanation that threat-induced rigidity in judgment is the cause of decreased advice-following in leaders with unstable positions. Because the applied advice-following paradigm requires that advice recipients be able, when receiving new advice, to flexibly alter their initial response (i.e., respond differently), higher rigidity in leaders with unstable positions might serve as an alternative explanation for our earlier results. If leaders in unstable hierarchies demonstrate rigidity in thinking, then it should not matter whether the advice giver is a human or a computer for their degree of advice-following. However, if leaders in unstable hierarchies decrease advice-following because of the social costs and threat it creates for their desired image of competence, then they should be more inclined to follow advice from a non-human advisor, rather than from a human advisor.

Method

Participants and Design

An a priori power analysis using G*Power software (v.3.1) (Faul et al., 2009) justified the sample size. For four groups, a power of .8, a significance level of .05, and an estimated small-to-medium interaction effect size (f = .20), the total sample size was determined to be 199 participants. We therefore aimed to recruit at least 50 participants per condition, with more participants being included if they had already signed up for the allotted laboratory time, after the sample-size requirements had been met. Participants were randomly assigned to one of four experimental conditions from a 2 (hierarchical position: unstable vs. stable) × 2 (advisor's expert characteristics: non-human vs. human) between-subjects design.

A total of 206 undergraduate and graduate students (140 females, M_{age} = 24.86, SD = 4.65) participated in the experiment for a show-up fee. Participants were told they could earn an additional monetary award of approximately 62 USD if they provided an accurate estimate in all three rounds. Participants were excluded if they voiced suspicion during the debriefing (n = 7), or when a technical error precluded the second part of the estimation task (n = 1), leaving 198 participants in the sample.

Procedure

The procedure was identical to that of Experiment 2, with two exceptions. First, we manipulated the advisor's expertise characteristics (non-human vs. human). In the human condition, we employed the exact same manipulation as in Experiment 2, whereas in the non-human condition, the only difference was that the advisor was described as a computer algorithm. In fact, all participants received the same advice, which was the correct answer to the decision task. Second, we also changed the material for estimation to increase the ecological validity of the experiment. In the third experiment, participants were asked to

predict future stock prices of four companies. The graphs depicted the stock listings during a four-week interval from anonymized Norwegian firms downloaded from the Norwegian Stock Exchange. Participants looked at graphs displaying the development of the stock price over a four-week period and were asked to predict the stock price for the following (fifth) week. Because we used historical stock listings from actual companies, we were able to provide the correct answer as the advice.

Results and discussion

Advice-following. A 2 (hierarchical position: unstable vs. stable) × 2 (advisor humanness: human vs. non-human) between-subjects ANOVA revealed a significant effect of advisor humanness ($F(1,194) = 14.72$, $p < .001$, $\eta_p^2 = .07$). Importantly, analysis also revealed a significant interaction effect between hierarchical position and the humanness of the advisor ($F(1,194) = 6.12$, $p = .01$, $\eta_p^2 = .03$ (see Figure 3).

Figure 3

Experiment 3, mean WOA values by experimental conditions. Error bars represent standard errors
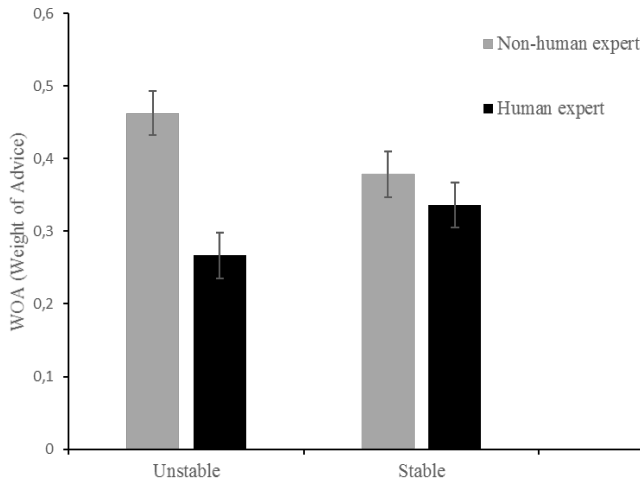
Consistent with our reasoning, planned contrast analyses revealed that participants in an unstable leadership position increased their advice-following more when the advice came from a non-human advisor ($M = .46$, $SD = .24$) than when it came from a human advisor ($M = .27$, $SD = .18$; $F(1, 194) = 19.91$, $p < .001$, 95% CI $_{Mean-Differences}$ [.11, .28]). Further, participants in a stable leadership position followed the advice to an equal extent, irrespective of the (in)humanness of the advisor ($F < 1$); advice-following from a non-human advisor ($M = .38$, $SD = .22$) did not significantly differ from advice-following from a human advisor ($M = .34$, $SD = .22$, $p = .34$) for leaders in a stable hierarchy. Thus, Hypothesis 3 was supported. The findings from Experiment 3 highlight the importance of social costs when leaders in unstable hierarchies decide to follow advice. Further, the results also support our notion that leaders in stable hierarchies do not consider social costs of advice-following when deciding whether to follow advice.

General Discussion

Building on the evolutionary theory of help-refusals, we argued that hierarchical instability (vs. stability) spurs leaders to give more precedence to the social costs than to the normative benefits of advice-following, eventually resulting in a reduced tendency to follow others' advice. The result of our first experiment was in line with our first hypothesis, that leaders in an unstable hierarchy follow advice to a lesser extent than leaders in a stable hierarchy do. Second, we hypothesized that whereas leaders in an unstable hierarchy would be indifferent to expertise cues and follow the advice to an equal extent irrespective of the expertise level of the advisor, leaders in a stable hierarchy would increase their advice-following more when the advice came from an expert than when it came from a non-expert, which was supported in the second experiment. Third, we hypothesized that whereas leaders in an unstable hierarchy would increase their advice-following more when the advice came from a non-human advisor than when it came from a human advisor, leaders in a stable hierarchy would follow the advice to an equal extent irrespective of the humanness of the advisor, which was supported in the third experiment.

Theoretical contributions

Our research makes two distinct contributions. First, our findings complement prior research on power and advice-following (See, Morrison, Rothman, & Soll, 2011; Tost et al., 2012) by incorporating the role of a contextual factor, hierarchical instability, in explaining when and why powerful leaders will follow advice. Hierarchical instability has been suggested to decrease the effect of experiencing power, because leaders in unstable hierarchies are more bound by social constraints than leaders in stable hierarchies are (Keltner, Gruenfeld, & Anderson, 2003). While hierarchical instability has previously been shown to decrease the effect of experiencing power (see Maner et al., 2007; Sligte, de Dreu,

& Nijstad, 2011), we have shown that hierarchical instability in some instances can also intensify the effect of power (i.e., decrease advice-following). In line with previous research (Case & Maner, 2014; Maner & Mead, 2010; Mead & Maner, 2012), we suggest that when the throne is shaken, the responses of leaders will be shaped by the extent to which they perceive their actions to be in line with, and potentially help them to maintain, their privileged position. Our results therefore highlight how the decision by leaders whether to follow advice may reflect their strategic concerns regarding the preservation of a high-rank position.

Further, we contribute to the understanding of advice-following by highlighting the social element in explaining willingness to follow advice. Although our focus on the social aspects does not represent a paradigm shift in the research on advice-following (see the role of social competition in advice-following in Tost et al., 2012), it has not yet received much attention. This is interesting, because the decision whether to follow advice is seldom made in a social vacuum. Following advice is a behavior characteristic of the powerless (Tost et al., 2012), and may be perceived to be at odds with a leader role. Our findings suggest that the social context of leaders influences their sensitivity to the negative social connotations of advice-following, and that sensitivity in turn impacts their willingness to follow advice. Thus, advice-following reflects a social dynamic between the recipient and the advisor.

Practical implications

Paradoxically, while leaders in unstable hierarchies presumably will profit most from listening to others, because maintaining their positions often hinges on making high-quality decisions, our results suggest that they will also refrain from doing so. Organizational events (such as restructuring, mergers, and acquisitions) that shake up the organizational hierarchy are relatively frequent, making hierarchical instability a common aspect of leaders' lives. Although the effects we found were relatively modest in size, even if threatened leaders have

a modest bias for ignoring advice, the long-term consequences of such behavior will potentially be reduced decision quality.

A blunt implication of our results is that organizations that strive to increase leaders' willingness to follow others' advices should create irrevocable hierarchical positions to diminish threats to leaders' hierarchical rank. We do not support such a quick-fix solution given our results, because social hierarchies are inherently dynamic and evolve because of such dynamism. Organizations could implement practices whereby their leaders would experience hierarchical threat less frequently and perhaps such practices would increase leaders' willingness to listen to others' advice. In situations where the hierarchy is unstable, people aiming to influence a leader whose position is uncertain may benefit by framing the advice as computer-generated which is likely to lower the social costs of following the advice.

Limitations and future research

Although experiments allow for rigorous testing of causal relationships, the extent to which the results from our experiments generalize to real-life situations when leaders receive advice is unknown. For instance, in our studies the advisor was not known to the participants; thus, this artificial setting may change the documented relationships. Commonly, leaders have a relationship with the advisor, and this established relationship may change the social dynamics of receiving unsolicited advice when threatened. Additionally, although we determined sample size a priori by using power analysis and existing resources in the lab, the conclusiveness of the studies would have been improved had we had more participants. Thus, future studies should involve real leaders and should examine with sufficient statistical power the proposed relationship.

While the purpose of our studies was to examine the general tendency of decreased advice-following by leaders who experience hierarchical threat, boundary conditions may

change this effect. For instance, are there conditions that make leaders in unstable hierarchies more willing to follow advice from humans? First, an advisor might have a higher rank than the leader does (e.g., the advisor might be the leader's top manager). Such a condition might diminish or even reverse our documented effect. An unstable hierarchy may make a leader wary of defying the advice from a person who ultimately decides if the leader is to retain the leadership position. On the other hand, a stable hierarchy may make a leader less concerned with temporarily failing to comply with behavior appropriate to the leader's rank. Thus, leaders in an unstable hierarchy may show greater willingness to follow the advice from an advisor who outranks them than leaders in a stable hierarchy would.

We build our argument on the assumption that following unsolicited advice is a potential blow to preferred attributes of leaders. However, it is uncertain if people evaluate leaders who follow unsolicited advice as being less competent than leaders who reject unsolicited advice. Research in the related field of advice-seeking may suggest that leaders' incompetency concern is exaggerated because people who seek advice, compared to those that do not seek advice, are perceived as more competent by the ones they solicit advice from (Brooks et al., 2015). A leader who actively seeks advice is more action-oriented toward problem-solving than is a leader who passively receives unsolicited advice. Thus, whether the followed advice was unsolicited or solicited may affect others' evaluations of the advice-follower's competence. Therefore, to give insights into the social consequences of following unsolicited advice, future research might investigate to what extent following unsolicited advice affects others' perceptions of the leader's competence, or if their perceptions of the leader's competence are unaltered, and reflect concerns of the leader only.

Conclusion

Throughout evolution, kings and leaders arise, to ultimately fall and be replaced. As such, hierarchical instability represents a common feature of group living. While the

idiosyncrasies of our opening example may tempt us to think that the reluctance to follow others' sound advice represents the oddities of the few, we suggest instead that this reluctance may be a common response in leaders' management of hierarchical threat.

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Supplementary material

Pilot test of the effectiveness of the hierarchical instability manipulation

We conducted an external manipulation check by using participants ($n = 191$) who were similar in background, but who did not take part in the original experiments, to test the effectiveness of our hierarchical instability manipulation. Specifically, in a between-subjects design the participants were asked to read the instructions of one of the manipulations of hierarchical position (either a description of being a leader in an unstable hierarchy, a leader in a stable hierarchy, or being a member in a dyadic task with equal control over outcomes), and were asked to respond about the extent to which they perceived hierarchical instability in the described scenario. The three items were "I can lose my role position if I don't perform well in the estimation task," "The role assignments may change prior to the teamwork task," and "Keeping my role position depends upon my performance in the estimation task," with Cronbach's α = .87. A one-way ANOVA revealed a significant effect of our manipulation of hierarchical position on perceived hierarchical instability ($F(2, 188) = 79.02$, $p < .001$, η_p^2 = .46). As expected, participants reading the manipulation of a leader in an unstable hierarchy perceived a higher degree of hierarchical instability ($M = 5.78$, $SD = 1.24$) than did both the participant reading the hierarchical stability manipulation ($M = 2.46$, $SD = 1.63$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [2.79, 3.85]) and the participant reading the equal control ($M = 3.63$, SD = 1.61, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [1.62, 2.67]). Further, the difference in perceived hierarchical instability between participants reading the stable hierarchy and participants reading the equal control was also significant ($p < .001$). Overall, these differences this suggest that the manipulation of hierarchical instability worked as intended.

Experiment 1

Leader manipulation check. Following the procedure applied by Guinote (2007) using two 7-point Likert scales (1 = Not at all, 9 = Very much), participants indicated to what extent they perceived a) *themselves*, and b) *their partner* to be in control of outcomes in the upcoming group task. Results of a 3 (hierarchical position: stable leader vs. unstable leader vs. equal control; between-subjects) x 2 (target: themselves vs. ostensible dyad member; within-subjects) mixed-design ANOVA revealed the expected significant interaction effect between factors ($F(2,176) = 30.41$, $p < .001$, $\eta_p^2 = .26$). Leaders in the stable hierarchy perceived themselves to be more in control of outcomes ($M = 5.54$, $SD = 1.12$) than they perceived their partner to be ($M = 3$, $SD = 1.58$; ($F(1, 176) = 98.16$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [2.04, 3.05], $\eta_p^2 = .36$). In the same vein, leaders in an unstable hierarchy also perceived themselves to be more in control of outcomes in the dyadic task ($M = 5.49$, $SD = 1.24$) than they perceived their partner to be ($M = 3.12$, $SD = 1.63$, ($F(1, 176) = 88.41$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [1.88, 2.87], $\eta_p^2 = .33$). Finally, participants in the equal control condition perceived themselves ($M = 3.87$, $SD = 1.1$) and their team member ($M = 3.78$, $SD = 0.96$; $F(1, 176) = 0.15$, $p = .70$) to be equally in control of outcomes. These results demonstrate that our hierarchical position manipulation did not interfere with the perceptions of control in the ostensible dyadic task.

Affect. To investigate a potential affect-based explanation for our findings, a one-way ANOVA was performed to investigate the effect of hierarchical positions on affect, measured by participants' self-reported measures of positive and negative affective state using PANAS (Watson et al., 1988). Results revealed that hierarchical positions failed to significantly predict positive affect ($F(2,176) = 2.77$, $p = .07$, $\eta^2 = .03$). Further, results revealed that

hierarchical positions failed to significantly predict negative affect ($F(2,176) = 2.9$, $p = .06$, $\eta^2 = .03$).

Experiment 2

External check of manipulation of the advisor's expertise. To avoid potential demand effect, we used an external sample to investigate the validity of our manipulation of the advisor's expertise. The same participants used in the external check of manipulation of hierarchical instability ($n = 191$) were also asked to indicate their perceptions of the advisor's competence. Specifically, in a between-subjects design, participants were given the instructions related to either the non-expert advisor or the expert advisor and were asked to rate their perception of the competence level of the advisor. The three items were "My advisor has a high degree of expertise," "My advisor is competent in the estimation task," and "My advisor previously had a high performance in the estimation task," with a Cronbach's α = .88. A one-way ANOVA revealed a significant effect of our manipulation of the advisor's competence on the perceived competence of the advisor ($F(1, 189) = 142.27$, $p < .001$, $\eta_p^2 = .43$). As expected, participants reading the non-expert instruction perceived the advisor to be less competent ($M = 3.96$, $SD = 1.05$) than did participants reading the expert advisor instruction ($M = 5.75$, $SD = 1.02$, 95% CI $_{\text{Mean-Differences}}$ [-2.09, -1.5]), suggesting that the manipulation of expertise worked as intended.

Leader manipulation check. We used the same manipulation check of control of outcomes in the ostensible dyadic task as in study 1. A 2 (hierarchical leadership position: stable vs. unstable; between-subjects) x 2 (advisor: expert vs. non-expert; between-subjects) x 2 (target: themselves vs. group member; within-subjects) mixed-design ANOVA revealed a non-significant interaction effect of hierarchical position and target ($F(1,123) = 2.943$, $p = .09$, $\eta_p^2 = .02$), suggesting that participants with a stable leadership position did not differ

from participants with an unstable leadership position in their perception of control over outcomes in the dyadic task. Participants with a stable leadership position perceived themselves to be more in control of outcomes in the dyadic task ($M = 4.75$, $SD = 1.24$) than they perceived their partner to be ($M = 3.65$, $SD = 1.44$); ($F(1, 123) = 19.3$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [0.6, 1.59]). In the same vein, participants with an unstable leadership position also perceived themselves to be more in control of outcomes ($M = 5.16$, $SD = 1.29$) than their partner was ($M = 3.45$, $SD = 1.56$); ($F(1, 123) = 47.12$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [1.21, 2.19]). Participants with a stable leadership position and an unstable leadership position also did not differ regarding the extent to which they perceived themselves to be in control of resources ($F(1, 123) = 3.39$, $p < .068$, 95% CI $_{\text{Mean-Differences}}$ [-.03, .85]), nor regarding the extent to which they perceived their ostensible dyad member to be in control of resources ($F < 1$).

Affect. To investigate the potential role of affect in our findings, a 2 (hierarchical position: stable vs. unstable) x 2 (advisor: expert vs. non-expert) between-subjects ANOVA was performed on participants' self-reported measures of positive and negative affect using PANAS (Watson et al., 1988). The interaction of hierarchical positions and advisors was not significant predictors of positive affect ($F < 1$, $p = .45$) or of negative affect ($F < 1$, $p = .99$).

Experiment 3

Leader manipulation check. Although all our experimental conditions involved leadership positions, we included the same manipulation check as in previous studies to check that our manipulation of hierarchical instability did not interfere with their perceptions of being more in control of resources than their ostensible partner was. A 2 (hierarchical position: unstable vs. stable) x 2 (target: themselves vs. ostensible dyad member) mixed-design ANOVA, with hierarchical position as the between-subjects variable and target as the within-subjects factor, revealed a non-significant interaction effect of hierarchical position

and target, suggesting that participants with an unstable leadership position and participants with a stable leadership position did not differ in their perception of their control over outcomes in the dyadic task ($F < 1$). Participants with an unstable leadership position perceived themselves to be more in control of outcomes in the dyadic task ($M = 5.58$, $SD = 1.19$) than they perceived their partner to be ($M = 3.05$, $SD = 1.59$); ($F(1, 194) = 120.98$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [2.08, 2.98]). In the same vein, participants with a stable leadership position also perceived themselves to be more in control of outcomes ($M = 5.35$, $SD = 1.36$) than their partner was ($M = 2.95$, $SD = 1.58$); ($F(1, 194) = 109.05$, $p < .001$, 95% CI $_{\text{Mean-Differences}}$ [1.95, 2.86]). Participants with an unstable leadership position and participants with a stable leadership position also did not differ regarding the extent to which they perceived themselves to be in control of resources ($F(1, 194) = 1.53$, $p < .22$, 95% CI $_{\text{Mean-Differences}}$ [-.13, .58]) nor regarding the extent to which they perceived their ostensible dyad member to be in control of resources ($F < 1$, $p = .67$), suggesting that our hierarchical instability manipulation did not interfere with leadership perceptions.

Affect. To investigate the potential role of affect in our findings, a 2 (power position: threatened powerful vs. non-threatened powerful) x 2 (expert advisor characteristics: non-human vs. human) between-subjects ANOVA was performed on participants' self-reported measures of positive and negative affect (Watson et al., 1988). The interactions of hierarchical positions and advisor characteristics were not significant predictors of positive affect ($F < 1$, $p = .84$) or of negative affect ($F < 1$, $p = .33$).

Chapter 4

The futility of speaking up to a threatened leader: The mediating role of leaders' devaluation of followers' competence

By

Ingvild M. Seljeseth and Miha Škerlavaj

This research addresses how characteristics of the leader relate to followers' perceptions that speaking up is futile. In one multisource, cross-lagged field study, we investigate the extent to which, and how, a leader's perception of hierarchical threat is related to followers' perceptions of the futility of speaking up. First, in line with our prediction, we found that a leader's perception of hierarchical threat is positively related to the futility of speaking up as perceived by followers. Second, we investigate the mechanisms for this relationship by using a dual-path model. In line with our prediction, we found that leaders' devaluation of followers' competence mediated the relationship between leaders' perception of hierarchical threat and followers' perception of the futility of speaking up. Contrary to our prediction, our results did not support a mediation role of leaders' devaluation of followers' benevolence. Overall, this research shows the negative consequences for followers when leaders perceive their position to be threatened.

Introduction

Leadership positions are not static, secure, and stable (Leheta, Dimotakis, & Schatten, 2017). On the contrary, although there is a possibility of upward mobility, leaders also occasionally risk losing power and status associated with their hierarchical position (Fiske, 2010). While threats to the hierarchical order are an inevitable aspect of socially stratified relationships, prevailing research on how leaders react to and manage hierarchical threat in everyday organizational life is sparse (Sturm & Antonakis, 2015). Given that leaders' perception of hierarchical threat is proposed to change the fundamentals of leadership, such as how leaders perceive and respond to their followers (Leheta et al., 2017), we address this issue by investigating, through the proposed mechanism of the leader's devaluation of followers, the effect of the leader's perception of hierarchical threat on followers' perception of the futility of speaking up.

Organizations struggle with employee silence – the intentional withholding of ideas, information, and opinions about work- and organizational-related improvements by persons who might take action to address those issues (Milliken, Morrison, & Hewlin, 2003; Morrison, 2014; Withey & Cooper, 1989). An important antecedent of silence is the perception that speaking up is futile (i.e., ineffective in bringing about the desired result) (Detert, Burris, & Harrison, 2010; Milliken et al., 2003). To understand which factors influence futility perceptions, extant research has mainly focused on followers' characteristics, such as followers' perceptions of their leader (Saunders, Sheppard, Knight, & Roth, 1992) or of authorities in the organization (Detert & Treviño, 2010), followers' perceptions of the relationship with their leader (Liu, Zhu, & Yang, 2010), and followers' traits (Crant, Kim, & Wang, 2011; LePine & Van Dyne, 1998). Investigating how characteristics of the leader can influence followers' perceptions of the futility of speaking up is of both theoretical and practical interest, and may advance the discussion about ways to

reduce employee silence by shifting the focus to the leader, who is often the main recipient of followers' inputs.

By exploring the relationship between the leader's perception of hierarchical threat and followers' futility perceptions using a dual-path model where the leader's devaluations of followers' competence and benevolence are proposed as the potential mechanisms, we aim to contribute to the literature on leadership and silence. First, we aim to contribute to the leadership literature by addressing the faulty assumption, as recently pointed out by Leheta et al. (2017), that leaders feel secure and unthreatened in their hierarchical positions. Taking this into account, we aim to provide a more nuanced, complete, and realistic account of leadership by examining specific mechanisms, and possible negative consequences for followers that may ensue when their leaders perceive hierarchical threats.

Second, we intend to contribute to the silence literature by examining how characteristics of the leader relate to followers' perceptions of the futility of speaking up. By doing so, we extend a literature on silence that has predominantly investigated characteristics of the follower as being responsible for futility perceptions. Leaders' characteristics influence how leaders respond to followers who speak up (Fast, Burris, & Bartel, 2014); hence, it is plausible that followers notice that some leaders are less receptive to their inputs, and hence perceive speaking up to those leaders as futile. Moreover, whereas leaders' devaluation of followers' competence has previously been shown as an important mechanism explaining leaders' aversion to followers' inputs (Fast et al., 2014), leaders may be unwilling to implement followers' inputs, not because they find them incompetent, but because they perceive their followers to be working against their (i.e., the leaders') interest. To address this issue, we simultaneously tested two potential mechanisms: leaders' devaluation of followers' competence and leaders' devaluation of followers' benevolence, to discern their relative contribution to futility perceptions.

In sum, in the present research we employed a multisource, cross-lagged design to investigate how the leader's perception of hierarchical threat relates to followers' perceptions that speaking up is futile. Further, we seek to disentangle the process by examining the extent to which leaders' devaluations of followers' competence and/or benevolence may account for the proposed relationship.

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Theory and Hypotheses

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The futility of speaking up to hierarchically threatened leaders

To generate predictions about leaders' characteristics that may be related to followers' perceptions that speaking up is futile, we drew from functional theories of leadership and hierarchies (De Waal, 2007; Sapolsky, 2005; Van Vugt, Hogan, & Kaiser, 2008). Leadership evolved in response to increased demands for social coordination that accompanied a complex group life, where leaders are expected to help their group accomplish common goals (Van Vugt et al., 2008). To do so, leadership positions are often endowed with social power, the asymmetrical control over valuable resources (Magee & Galinsky, 2008), and accompanied by status, the perceived respect and admiration in the eyes of others (Anderson & Kilduff, 2009a). Consequently, to maintain a leadership position is associated with benefits for the leader (Anderson, Kraus, Galinsky, & Keltner, 2012; Kifer, Heller, Perunovic, & Galinsky, 2013). People acquiring the top position are motivated to preserve the vertical structure because they benefit the most from the hierarchy (Fehr, Herz, & Wilkening, 2013).

A functional perspective highlights an inherent conflict in the respective motivations of leaders and followers, where leaders may be interested in protecting their beneficial position, even when doing so is at odds with the interest of the group, or may harm followers (Van Vugt et al., 2008). Importantly, a functional perspective posits that threats may trigger leaders' inclination to protect their hierarchical position. Leaders occasionally perceive threats

to their hierarchical position (Leheta et al., 2017), which in general is highly distressing for leaders (Sapolsky, 2005; Scheepers, Röell, & Ellemers, 2015). Threats to a hierarchical position may involve both uncertain prospects of future resource control and the possibility of being degraded by others. Moreover, the actual loss of power and status is harshly judged by society (Pettit, Sivanathan, Gladstone, & Marr, 2013). Functional perspectives suggest that in response to threats, leaders may engage in efforts to enforce and preserve their hierarchical position (Case & Maner, 2014; Maner & Mead, 2010; Mead & Maner, 2012). These efforts may be directed at followers, even if followers engage in what would normally count as positive and constructive behavior, since followers may be regarded by the leader as rivals for the leader's coveted position (Leheta et al., 2017). Hence, when threatened, leaders may be more sensitive toward complying with followers' inputs that on the surface may be construed as a positive act, yet at a deeper level may carry negative connotations for the leader.

Traditionally, the theoretical perspective of speaking up highlights the positive valence of this behavior, positing that followers are motivated to benefit and improve the organization (Grant & Mayer, 2009; Rusbult, Farrell, Rogers, & Mainous, 1988) by providing constructive (Van Dyne, Ang, & Botero, 2003) and improvement-oriented inputs (Detert & Burris, 2007; Morrison, 2014). This positive connotation is further underscored by conceptualizing speaking up within the framework of organizational citizenship behavior (Burris, Detert, & Chiaburu, 2008) or extra role behavior (Van Dyne & LePine, 1998), where followers go above and beyond what is formally required.

We argue, however, for an alternative perspective on speaking up by suggesting that threatened leaders are likely to perceive and react in a different way to followers who speak up. This argument is consistent with research indicating that leaders have overly negative reactions to followers who speak up (Burris, 2012; Van Dyne & LePine, 1998). Leaders sometimes sanction followers who speak up (Seibert, Kraimer, & Crant, 2001), and fail to

sufficiently implement their voiced concerns (Fast et al., 2014). Thus, threatened leaders may be more prone to a negative interpretation of speaking up, causing an aversion for followers' voice (Fast et al., 2014), which ultimately leads followers to perceive that speaking up is futile.

There are several aspects that may be intimidating for leaders when followers speak up. Leaders hold formal positions in a hierarchy and are those mainly responsible for the state of affairs. Speaking up inherently conveys an indirect critique of the leader. Inevitably, by speaking up, the follower indicates the leader's incompetence by indirectly suggesting that the leader either failed to analyze the present situation correctly or failed to independently discern ways to improve it (Goldsmith & Fitch, 1997). Incompetence is of special concern to leaders, because task competence often constitutes the fundament on which leadership positions are built (Van Vugt, 2006), and influences the extent to which high-rank positions are acquired and maintained (Anderson & Kilduff, 2009b; Chapais, 2015). Moreover, when leaders are perceived as incompetent, their followers behave more dominantly toward them and show more resistance to their influence attempts (Darioly & Schmid Mast, 2011).

When followers voice, albeit constructively, they proactively challenge the status quo (Liu et al., 2010), which potentially is perceived as a challenge to the hierarchical order. At its best, the indirect critique addresses a non-optimally managed situation, at its worst, a dangerously ill-managed situation (reflecting the distinction between promotive vs. prohibitive, respectively, as addressed by Liang, Farh, and Farh (2012). By complying with inputs voiced by followers, leaders may perceive a risk of undermining their own position. In effect, providing inputs to others represents a way to increase one's own levels of power and a way to exert influence (Schaerer, Tost, Huang, Gino, & Larrick, 2018). Most definitions propose that leadership involves a process of influence toward the achievement of goals (Day & Antonakis, 2012; Stogdill, 1950; Yukl, 2013). Therefore, when followers speak up to their

leaders, they attempt to reverse the normal direction of influence, that is, *from* leader *to*

follower. Indeed, followers' implicit voice theories suggest that followers are well aware of

the hierarchical upheaval that speaking up entails (Detert & Edmondson, 2011).

To sum up, speaking up reflects a social hierarchical dynamic between leaders and

their followers that may undermine and challenge the leader's position, reverse the direction

of influence, in essence, denoting who is the leader and who is the follower. We propose that

when leaders perceive hierarchical threats they interpret the act of speaking up in a more

negative light, ultimately decreasing the frequency whereby desired changes due to input

provided by the follower are implemented. Followers will likely perceive that speaking up is

futile if their voice is consistently not heard (Morrison, 2014). Importantly, ignorance is a

powerful strategy to distinguish and suppress others' behavior, because it creates a perception

of hopelessness whereby change to the current situation seems impossible (Maier &

Seligman, 1976). The voice of the follower is muffled. Eventually, increasing the perception

that speaking up is futile may represent an important way of silencing indirect critique, and

hence allegedly diminish the threat it represents. As such, this leads us to our first hypothesis,

Hypothesis 1: The leader's perception of hierarchical threat will be positively related to the

follower's perception that speaking up is futile.

Dual-path model: The leader's devaluation of the follower

Hierarchical positions, such as leader and follower positions, are social, interpersonal

constructs (i.e., one cannot exist without the other) that are socially negotiated and settled.

Therefore, hierarchical threats are foremost an interpersonal threat to the leader's public

image (for the importance of distinguishing between ego threat and public image threat, see

Leary, Terry, Allen, and Tate (2009)). Hierarchical threat indicates that the leader's public

image is in peril, because actually losing the position is associated with adverse social consequences for the leader, such as loss of power and status (Pettit et al., 2013).

One compensatory mechanism people employ to reduce the threat to one's public image is to devalue relevant others (vanDellen, Campbell, Hoyle, & Bradfield, 2011). While hierarchical threats sometimes are triggered from above, such as when there are pending decisions that alter the formal structure or power distribution in the organization, leaders may also perceive threats to arise from below in the hierarchy (Leheta et al., 2017). Research suggests that malleable hierarchies, when leaders risk losing their position, may shift leaders' perception of followers from being mere subordinates to rivals for their position (Case & Maner, 2014). Hence, to neutralize the threat from below, followers are viable targets of leaders' efforts to retain their positions. Indeed, research suggests that leaders respond to hierarchical threats by increasing their negative expectancies of followers' abilities (Georgesen & Harris, 2006).

A devaluation of followers may function as an intrapersonal strategy to reduce the leader's own feelings of threat, but may also be an efficient interpersonal strategy because it undermines the follower. According to two different functional perspectives, hierarchical threat may lead to the futility of speaking up by at least two distinct types of devaluations, through the devaluation of the follower's competence, and/or through the devaluation of the follower's benevolence.

Path one: The leader's devaluation of the follower's competence

Competence is an important currency in deciding the outcome of hierarchical differentiations between people (Anderson & Kilduff, 2009b). A common assumption is that leaders prefer to have competent followers. However, when there are threats to the hierarchical order, a competent follower may be perceived as a capable and skilled rival for

the hierarchical position (Leheta et al., 2017; Maner & Mead, 2010). To eliminate the threat from below, power-hungry leaders engage in self-protection strategies that are directly targeting and harming competent followers when they perceive their position is in peril (Case & Maner, 2014; Maner & Mead, 2010). When powerful people receive threatening information about their own competence level, they react aggressively (Fast & Chen, 2009) and devalue the competence of others (Cho & Fast, 2012). Research suggests that leaders who feel inept as leaders are vulnerable to the indirect critique that voice entails, and respond to followers who speak up by denigrating their competence (Fast et al., 2014). Leaders therefore seem to retaliate by devaluing followers in the domain of competence, the same domain that was indirectly targeted by the follower when speaking up. By devaluing the followers' competence, and subsequently disregarding the followers' inputs, leaders signals their own competence and thus their resource-holding potential (Parker & Rubenstein, 1981). Building upon prior work by Fast et al. (2014), to manage hierarchical threat, leaders may seek to defend their positions by neutralizing the threat of appearing incompetent, and hence, devalue the follower's competence. In sum, our second hypothesis was therefore:

Hypothesis 2: The leader's perception of hierarchical threats is positively related to the follower's perceived futility of speaking up through the leader's devaluation of the follower's competence.

Path two: The leader's devaluation of the follower's benevolence

An alternative path to why a leader's perception of hierarchical threat increases a follower's perception of futility is by the leader's devaluation of the follower's benevolence. Hierarchical threats make leaders more prone to increased suspiciousness regarding potential malevolent intentions of others (Kramer & Gavrieli, 2005). This inclination may lead to a bias toward negative interpretations of the ambiguous behavior of followers. Thus, when followers

speak up, threatened and suspicious leaders may perceive their doing so as an indirect intimidation, making the leaders less likely to implement their suggestions.

Yet, the threat from below may not represent solely a (mis)perception of others' intentions. High-rank positions are coveted (Anderson, Hildreth, & Howland, 2015; Lammers, Stoker, Rink, & Galinsky, 2016), which may motivate people in the low ranks (e.g., followers) to engage in strategic action to pursue hierarchical positions when they perceive the hierarchy as malleable (Hays & Bendersky, 2015). Recent research has highlighted how offering unsolicited inputs and opinions may reflect the motivation to enhance one's own power (Schaerer et al., 2018), and that speaking up enhances the follower's own hierarchical position (McClean, Martin, Emich, & Woodruff, 2017). Thus, speaking up may not always originate from a benevolent motivation to support the organization, but may instead be motivated by a desire to enhance the follower's own hierarchical rank, a result that may be at odds with the leader's interest. Non-detection of others' malevolent intentions may represent a costly error (Haselton & Nettle, 2006), because it increases the probability of losing the hierarchical position (Brion & Anderson, 2013). Thus, Kramer and Gavrieli (2005) argued from a functional perspective that leaders are therefore prone to distrust others' intentions (i.e., paranoid thinking) as an adaptive response to safeguard their own position. Hence, an alternative mechanism behind a leader's decreased willingness to implement suggestions from followers may reflect the leader's increased perceptions of malevolent intentions in followers. As such, the leader may acknowledge the competence of the follower, yet not trust the benevolent intention behind the follower's unsolicited offer of inputs in the decision task. Our third hypothesis was therefore:

Hypothesis 3: The leader's perception of hierarchical threats is positively related to the follower's perceived futility of speaking up through the leader's devaluation of the follower's benevolence.

To sum up, we suggest that the leader's perception of hierarchical threat increases the follower's perception that speaking up is futile. Second, we argue that there are two theoretically plausible mechanisms for why hierarchical threat increases the futility of voice: through the leader's devaluations of competence and/or benevolence. Because the two theoretically plausible mechanisms might operate simultaneously, and are not mutually exclusive, we included both in a dual-path model (see Figure 1 for the hypothesized model).

Figure 1

Theoretical dual-path model
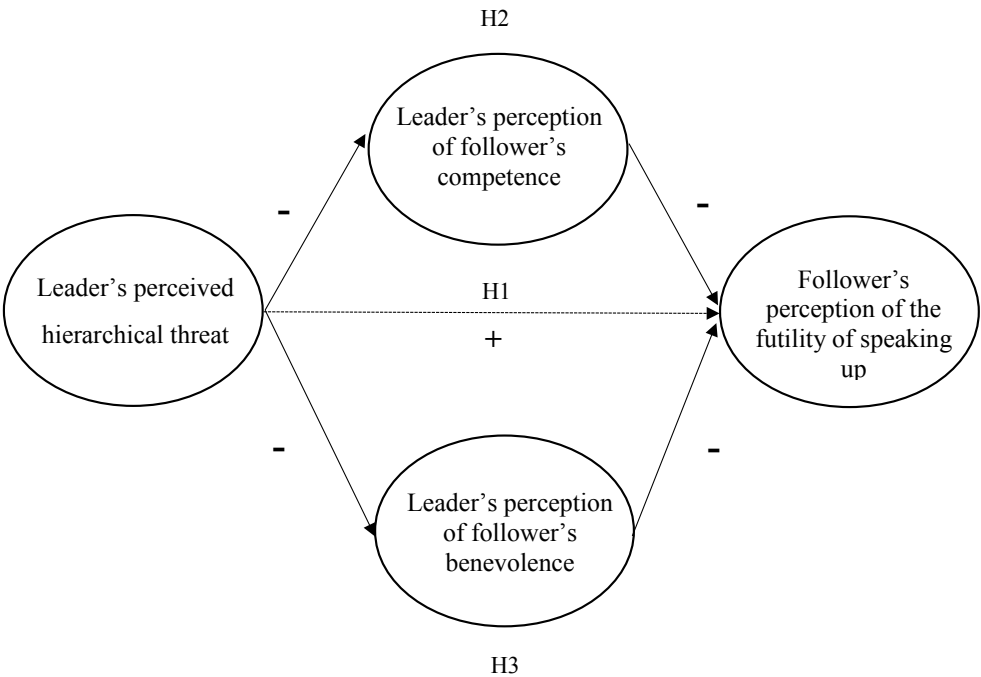
Methodology

Context and procedure

The field study was part of a larger data collection in the Norwegian branch of a multinational corporation offering consultancy services. The organization invests significant emphasis, time, and effort in employee competence development. In addition, it is organized by a strict hierarchical differentiation of employees, characterized by an "up or out" system whereby employees are expected to deliver according to a set of high standards to be able to advance or keep their position.

Prior to data collection, ethical approval regarding confidentiality was obtained from the Norwegian Social Science Data Services (NSD). We obtained permission from the top management to distribute the survey to employees at the partner level, constituting leaders in our study, and to employees at one to three levels below the partner level, constituting followers in our study. The HR department provided a roster of leader-follower dyads and the CEO announced the study to the leaders and employees. Thereafter, the organization was not further involved in the data collection or analysis to ensure impartiality and anonymity.

Each employee was sent an e-mail using Qualtrics prior to the study. To limit method bias that may influence responses, we followed established recommendations (Conway & Lance, 2010; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012) and aimed to follow recent recommendations regarding methodological transparency (Aguinis, Ramani, & Alabduljader, 2017). With respect to procedural features of the design, employees received a cover letter by e-mail containing written assurance of confidentiality and aggregate reporting. Specifically, to ensure anonymity (Podsakoff et al., 2003), respondents were informed that the identifying information would be stored separately in encrypted files for data collection and data-matching processes (match leader with

follower), and would be eliminated by a predetermined date. Further, the e-mail included a link to give their informed consent to allow the matching of their data with that of their proposed partner/opposite (i.e., leader or follower).

The study had a time-lagged, multisource design to reduce the risk of method bias (Podsakoff et al., 2012). The independent variable and demographics were measured in wave one. The mediating variables and control variables were measured approximately two weeks later in wave two. The dependent variable was measured in wave three approximately five weeks after the independent variable was measured. Different sources were used to obtain the independent variable (leader) and the dependent variable (follower) (Podsakoff et al., 2012). Participants received no financial compensation, but the top management team was offered aggregated reports of the results of our research project.

Sample

At Time 1, 89 leaders (57.8% response rate) and 285 followers (48.3% response rate) responded to the survey. The NSD ethics protocol necessitated consent from both parties of a leader-member pair to match responses; hence, in data collection waves two and three, survey invitations were sent to leaders and followers if both had responded in wave one. Therefore, at Time 2, 62 leaders of the possible 78 leaders responded (79.5% response rate), and finally, at Time 3, 146 followers of the possible 171 responded (85.4% response rate). The final sample consisted of 126 leader-follower dyads where both parties had provided their consent, responded to the focal variables, and confirmed the leader-follower dyad as suggested by the HR department. Since we experienced attrition, we conducted a missing-completely-at-random test (Little, 1988) using the SPSS 25 Missing Value Analysis with the expectation maximization technique. The result suggests that the missing data points of our focal variables were missing completely at random $\chi^2(21, n = 305) = 21.92, p = .40$), indicating that missingness did not depend on our focal variables of interest. Hence, we continued the

analysis with the sample where we had data points from all waves, from both leader and follower.

Each leader had on average 2.38 followers who had responded to the survey. The sample of leaders consisted of 87% men and 13% women, of whom 82% reported their highest education as being a master degree. A total of 60% were between 46 and 55 years of age, and all were full-time employees with managerial responsibilities, with an average tenure in the organization of approximately 16 years. The sample of followers consisted of approximately 60% men and 40% women, of whom approximately 91% reported their highest education as being a master degree. Approximately 83% were between 26 and 45 years of age, all were full-time employees, and 41% had worked in the organization between seven and 12 years. Approximately 36% of followers reported between four and six years of service with their leader.

Measures

All continuous measures were assessed on a 5-point Likert scale, with responses that ranged from 1 (strongly disagree) to 5 (strongly agree). All measures were administered in Norwegian, and were all back-translated to Norwegian in line with recommendations (Brislin, 1970).

Futility of speaking up. To assess perceptions of the futility of speaking up, we used previous items developed by Burris et al. (2008). Items were (1) "Trying to improve things around here by speaking up is a waste of time"; (2) "It is useless for me to suggest new ways of doing things here"; (3) "Nothing changes even if I speak up to managers." The estimated reliability was $\alpha = .93$.

Leader's perception of follower's competence. To assess the leader's perception of the follower's competence, we used three items from Mayer and Davis (1999), slightly modified

to refer to the follower (denoted as X). Items were (1) "X has much knowledge about the work that needs to be done," (2) "I feel very confident about X's skills," and finally (3) "X has specialized capabilities that can increase our performance." The estimated reliability was $\alpha = .83$.

Leader's perception of follower's benevolence. To assess the leader's perception of the follower's benevolence, we used three items from Mayer and Davis (1999), slightly modified for the frame of reference toward the follower (denoted as X). Items were (1) "X is very concerned about my welfare," (2) "X would not knowingly do anything to hurt me," and finally (3) "X will go out of its way to help me." The estimated reliability was $\alpha = .82$.

Perceived threat to hierarchical position. To assess perceived threat to hierarchical position, we used the measure of perceived threat at work employed previously by Kouchaki and Desai (2015). The items were (1) "I experience threats to my status at work," (2) "I experience threats to my ability to access resources at work," (3) "I experience threats to my ability to exert power at work," and (4) "I experience threats to my ability to achieve my goals at work." The estimated reliability was $\alpha = .88$.

Control variable. The decision to include control variables should be made according to whether there is a theoretical relationship with the focal variable[4] (Bernerth & Aguinis, 2016). A leader's perception of hierarchical threat is theoretically meaningfully related to a leader's managerial self-efficacy. Previous research has found that leaders' managerial self-efficacy influences the degree to which followers share their inputs with leaders (Fast et al., 2014). Therefore, we controlled for managerial self-efficacy by using a short version of the scale

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[4] Using the SPSS PROCESS macro from Hayes (2018, Model 4) and using 5,000 resampled percentile bootstrap, we tested the robustness of our dual-path model by including controls that are either conventionally controlled for or that have been empirically established. Including the leader's gender, the leader's tenure in the position, and the number of subordinates as control variables together with managerial self-efficacy did not alter the conclusion of an indirect effect of the leader's devaluation of competence. Further, testing the dual-path model without controlling for the leader's managerial self-efficacy did not alter the conclusion of an indirect effect of the leader's devaluation of competence.

used by Fast et al. (2014). The items were (1) "I will be able to achieve most of the goals that I have set for myself as a leader," (2) "In general, I think that I can obtain outcomes that are important to me as a leader," and (3) "I believe I can succeed at most any endeavor to which I set my mind." The estimated reliability was $\alpha = .78$.

Analytical strategy

The dependent variables were conceptualized at the individual level. However, since followers were clustered within leaders, we assessed the potential for a multi-level approach. Accordingly, the intraclass correlation (ICC) and design effect values (DEFF) (Heck & Thomas, 2015) were calculated for the dependent variable (futility of speaking up) and for the proposed mediating variables (competence and benevolence perceptions). At the item level, the ICC values for futility were .07 (futility item 1), .12 (futility item 2), and .10 (futility item 3), whereas the ICC values for the leader's perception of the follower's competence were .39 (competence item 1), .23 (competence item 2), and .26 (competence item 3), and of benevolence were .39 (benevolence item 1), .46 (benevolence item 2), and .46 (benevolence item 3). Hence, the items' values were above the suggested threshold of .05 (Dyer, Hanges, & Hall, 2005), indicating a certain degree of between-level variance. However, a DEFF value below the threshold of 2 indicates little systematic variance between groups, and in such situations, continuing the analysis at the individual level is warranted (Heck & Thomas, 2015, p. 419). We therefore proceeded with calculating the DEEF values: 1.09 (futility item 1), 1.17 (futility item 2), 1.14 (futility item 3), 1.54 (competence item 1), 1.32 (competence item 2), 1.36 (competence item 3), 1.54 (benevolence item 1), 1.64 (benevolence item 2), and finally 1.64 (benevolence item 3), all below the suggested threshold of 2. The DEEF values suggest that the shared variance at the leader level is rather limited, warranting analysis at the individual level (Heck & Thomas, 2015). Hence, we employed the analysis at the individual level.

Results and discussion

Table 1 reports the descriptive statistics and correlations among the variables. The leader's perception of hierarchical threat was positively related to the futility of speaking up reported by followers ($r = .18$, $p = .04$), giving preliminary support to Hypothesis 1. Importantly, the leader's perception of hierarchical threat was negatively related to the leader's perception of the follower's competence ($r = -.22$, $p = .01$), which in turn was negatively related to the follower's perception of the futility of speaking up ($r = -.30$, $p = .001$), giving preliminary support to Hypothesis 2. However, whereas the leader's perception of hierarchical threat was negatively related to the leader's perception of the follower's benevolence ($r = -.35$, $p < .001$), the leader's perception of the follower's benevolence was not related to the follower's perception of the futility of speaking up ($r = -.16$, $p = .08$), thus at odds with Hypothesis 3.

Table 1
Correlation and Descriptive Statistics Field Study

Variables	Mean	*SD*	1	2	3	4
1. Leader efficacy	4.08	.34				
2. Threat	2.69	.97	-.22*			
3. Competence perception	4.21	.62	-.03	-.22*		
4. Benevolence perception	4.17	.61	.02	-.35***	.47***	
5. Futility of voice	2.20	.81	.06	.18*	-.30**	-.16

Note: $N = 126$
* p < .05
** p < .01
*** p < .001

Confirmatory factor analysis

We conducted a single-level confirmatory factor analysis (CFA) using the maximum likelihood estimator in M*plus* 8 (Muthén & Muthén, 1998-2017) to assess the factor structure (Byrne, 2013). The fit of the specified five-factor structure was evaluated using common guidelines, the root mean square error of approximation (RMSEA) < .06, the comparative fit index (CFI) ≥ .95, the Tucker-Lewis index (TLI) ≥ .95, and the standardized root mean square residual (SRMR) <.08 (Hu & Bentler, 1999). The proposed five-factor structure achieved a decent fit of the data ($\chi^2(94)$ = 149.52, RMSEA = .07, CFI = .95, TLI = .94, SRMR = .06). All factor loadings were statistically significant, ranging from .66 to .96 for perception of hierarchical threat, from .72 to .89 for perception of followers' competence, from .69 to .91 for perception of followers' benevolence, from .86 to .97 for perceived futility of speaking up, and from .63 to .87 for managerial self-efficacy. The hypothesized five-factor model fits the data better than all the alternative models do (see Table 2).

Table 2
Confirmatory factor analysis results Field Study (CFA)

Model	χ^2	*df*	RMSEA	SRMR	*p*	CFI	TLI
Hypothesized five-factor model	149.52	94	.07	.06	.00	.95	.94
Four-factor model (HT and ME combined into one factor)	258.35	98	.11	.10	.00	.86	.82
Alternative four-factor model (BP and CP combined into one factor)	239.22	98	.11	.08	.00	.87	.85
Three-factor model (HT and ME combined into one factor, BP and CP combined into one factor)	348.29	101	.14	.11	.00	.78	.74
Two-factor model (HT, ME, BP, and CP combined into one factor)	551.56	103	.19	.16	.00	.60	.53
One-factor model	854.95	104	.24	.19	.00	.33	.22

Note: HT = Leader's perceived hierarchical threat; ME = managerial self-efficacy; CP = Leader's perception of follower's competence; BP = Leader's perception of follower's benevolence

Hypothesis testing

We first tested the extent to which a leader's perceived hierarchical threat increased a follower's perception that speaking up is futile using percentile bootstrap procedures (Fritz, Taylor, & MacKinnon, 2012; Preacher & Hayes, 2008) in M*plus* 8 (Muthén & Muthén, 1998-2017). The result of a 5,000 resampled percentile bootstrap revealed that a leader's perception of hierarchical threat was positively related to a follower's perception of the futility of speaking up (β = .20, *SE* = .09, *p* = .03, 95% CI [.02, .38], controlling for managerial self-efficacy, thus in line with our first hypothesis.

Further, we tested our two proposed indirect effects of a leader's devaluation of a follower's competence (Hypothesis 2), and/or a leader's devaluation of a follower's benevolence (Hypothesis 3) as the mechanism accounting for the effect of a leader's perceived hierarchical threat on a follower's perception of the futility of speaking up. The zero-order correlations were in line with our first hypothesis, but not our second hypothesis. To directly examine the two proposed indirect effects, controlling for managerial self-efficacy, we used structural equational modeling (SEM) employing a 5,000 resampled percentile bootstrap procedure (Fritz et al., 2012; Preacher & Hayes, 2008) in M*plus* 8 (Muthén & Muthén, 1998-2017).

Figure 2 shows the path coefficients yielded by SEM for the dual-path model. Because the confidence interval does not contain zero, our second hypothesis was supported (β = .10, *SE* = .06, 95% CI [.013, .226]), suggesting that a perception of hierarchical threat is related to devaluing of the follower's competence, which in turn is related to perception of the futility of speaking up as perceived by the follower, controlling for the leader's managerial self-efficacy. The alternative indirect path through a leader's devaluation of a follower's benevolence, controlling for the leader's managerial self-efficacy, was not supported, because

the confidence interval contained zero ($\beta = -.056$, *SE* = .06, 95% CI [-.198, .053]). Thus, we did not find support for the third hypothesis.

Figure 2

Standardized path coefficients of the hypothesized relationships, controlling for managerial self-efficacy
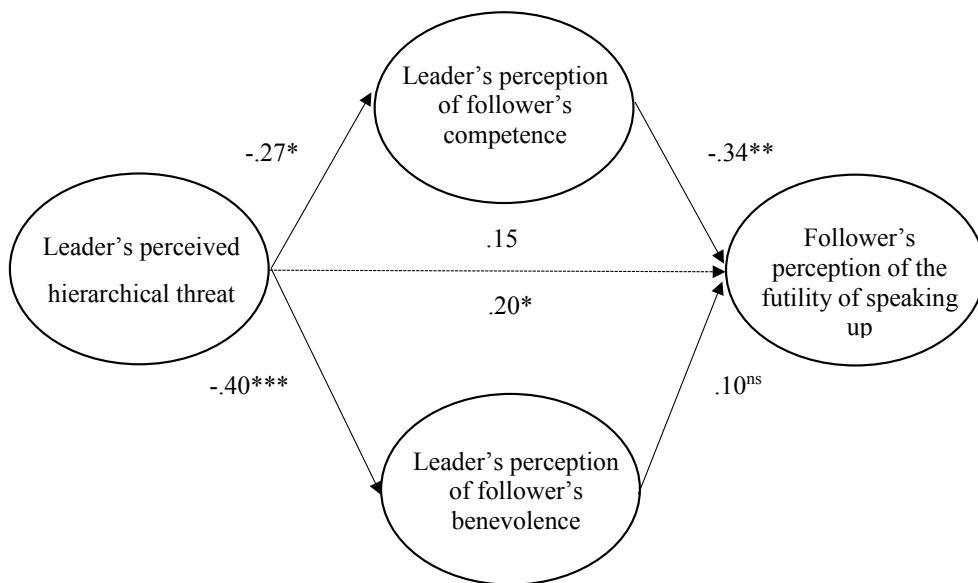
Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Leader's managerial self-efficacy is excluded from the graphical presentation for the sake of clear presentation.

Discussion

In sum, the results from our field survey suggest that a leader's perception of hierarchical threat is positively related to a follower's perception of the futility of speaking up, through the indirect path of the leader's devaluation of the follower's competence. Although an increased perception of hierarchical threat was positively related to a leader's devaluation of a follower's benevolence, benevolence perception was not related to futility perceptions,

and hence did not figure as a mechanism of the relationship between a leader's hierarchical threat and a follower's futility perceptions.

Theoretical contributions

Our research makes three distinct contributions. First, we contribute to the literature on leadership by showing how the dynamics in social hierarchies, such as the perception of hierarchical threat, influence leaders' interpersonal evaluations and subsequently behavior, as experienced by their followers. In line with theoretical propositions by Leheta et al. (2017), our results indicate that leaders' perception of hierarchical threats is related to dysfunctional reaction patterns and is a derailment from the common expectations and responsibilities of leaders to endorse and value followers' competence and constructive inputs. At an abstract level, our results may suggest that the perception of hierarchical threat changes leaders' interpersonal perceptions, from perceiving followers as allies to perceiving them as contestants and rivals who impinge on the self-interest goals of leaders to preserve their high-rank position. Thus, our results demonstrate that leaders' perceptions of hierarchical threats have negative consequences for their followers.

Second, we contribute to the silence literature by explaining the role of the leader in triggering followers' perceptions of the futility of speaking up. Previously, research on silence has predominantly focused on followers' characteristics in explaining followers' perceptions that speaking up is futile. A focus on followers' characteristics as antecedents for futility perceptions might insinuate a form of victim blaming, where efforts aimed at decreasing the futility of speaking up should be directed at followers, and not leaders. However, leaders are the main recipients of followers' inputs, and having the power to implement desired changes, they have an undisputed role in responding in such ways that followers perceive speaking up

as effective. We contribute to silence research by putting the leader back in focus, because the responsibility for fostering followers' perceptions that speaking us is worth the effort rests squarely on the shoulders of leaders. Further, we contribute by deciphering the distinct interpersonal mechanism by which hierarchical threat is positively related to followers' perception of the futility of speaking up. Specifically, our findings suggest that threatened leaders devaluate followers' competence, suggesting that leaders might retaliate in the same domain that was indirectly criticized when followers decided to speak up.

The theoretical understanding of speaking up (reflected in the normative assertion of voice as beneficial for organizations, and the various definitions of voice) tends to highlight the positive aspects of voice. Yet, the act of speaking up is inherently ambiguous as to how it should be interpreted by those who are target for voice. Our research joins recent efforts highlighting the intimidating aspects of voice for leaders, suggesting that forces within leaders (Fast et al., 2014) that make them feel threatened increase their susceptibility to react negatively to followers who speak up. Moreover, recent findings also question whether voice or inputs from others always reflect a benevolent motive (McClean et al., 2017; Schaerer et al., 2018), suggesting that leaders who feel threatened are aware of and react to others' potential social maneuvers to gain power.

Third, our results complement previous findings in the functional literature on leadership that highlight the inherent conflict between leaders and followers, and the dominant role that competence perceptions play in social hierarchies. While research on leadership commonly assumes that leaders prefer to have capable followers to accomplish group goals (Leheta et al., 2017), functional theories on leadership highlight the fundamental tension in the relationship between leaders and followers that may hamper how leaders perceive and respond to their capable followers (Maner & Case, 2016). Under the condition of hierarchical threats, leaders may choose to act according to self-interest to regain power and

status, even if doing so may be at odds with followers' or organizational needs of sharing vital information. Thus, our results provide additional empirical support for the theoretical claims by functional theories of leadership, that us, threatened leaders react negatively to their followers.

Moreover, while prior research has mainly investigated the role of competence evaluations in the attainment of high-rank positions (Anderson & Kilduff, 2009b; Antonakis & Dalgas, 2009), our results suggest a role of competence evaluations in the maintenance of high-rank positions. Thus, in response to hierarchical threat, leaders devalue followers' competence. Although our hypothesis of a mediating effect of leaders' devaluation of followers' benevolence in the relationship between hierarchical threat and futility perceptions was not supported, leaders' perception of hierarchical threat was related to their devaluation of the follower's benevolence. Thus, hierarchical threat seems to be related to negative perceptions of followers in multiple domains. Combined, our results suggest that degrading followers may be one way leaders respond to hierarchical threats.

Practical implications

Leaders are the main recipients of their followers' ideas and opinions intended to bring about constructive changes. The futility of speaking up to threatened leaders may result in systematic underuse of competence in organizations. Further, the long-term adverse consequences for followers who experience that their informed inputs are ignored by their leaders should not be underestimated. Perceiving that speaking up is futile is an important antecedent of follower silence (Morrison, 2014). When followers remain silent, organizations are likely to be at a disadvantage. If organizations aim to reduce silence, our results suggest that bringing the leader into the equation is important. Exclusively focusing on creating interventions aimed at followers to reduce their perception that speaking up is futile may be in vain if their leaders are threatened.

Aiming to totally eliminate hierarchical threat seems naïve because vertical structures in social groups are to a certain extent malleable, and hence people on the top are bound to perceive threat often. If organizations value followers who speak up and who do not resort to silence, one possible solution is to decrease organizational events that escalate the frequency or intensity by which leaders perceive hierarchical threat. For instance, organizational practices such as "up or out" are likely to create perceptions of threats in leaders that ultimately may decrease their willingness to listen to their followers. The ultimate goal for organizations is to design hierarchies that have a sufficient degree of malleability to ensure that ill-performing leaders may be replaced, without creating unnecessary fear in leaders on a daily basis.

Limitations and future research

Our correlational research design also has limitations regarding the causal relationship. Future research might therefore investigate the reported relationship using an experimental design that allows for causal inferences. Relatedly, specifying the origins of hierarchical threat as coming from above, laterally, or from below might further illuminate theoretically important conditional effects, such as how leaders manage threat differently depending on which hierarchical level the threat originates from.

Recapitulating, the indirect path of a leader's evaluation of benevolence in explaining the relationship between hierarchical instability and the futility of voice was not supported. While hierarchical threat increased the devaluation of benevolence, benevolence was not related to the futility of voice. While the futility of speaking up is one important determinant for deciding whether to speak up, followers also assess the perceived psychological risk involved with speaking up (Morrison, 2014). Perceived psychological risk entails the potential adverse consequences of speaking up both for the follower him/herself and for the relationship between the leader and the follower (Morrison, 2014). The perception of

benevolence is related to how much the leader trusts the follower's intentions, and this judgment is of particular concern for relationship quality (Fiske, Cuddy, & Glick, 2007). If the leader perceives the follower as malevolent, the leader may act in a way that increases the follower's perception that speaking up is unsafe. Further, a threatened leader may retaliate in harmful ways against the follower that he/she perceives as malevolent (e.g., by giving overly negative performance ratings, by assigning the follower undesirable projects, by firing the follower, etc.). While a perception of an incompetent, malevolent follower may constitute a threat, a greater risk for the leader is associated with a competent, malevolent follower because this person may be more adept at harming the leader's interest. Future research might therefore explore if a leader's evaluation of benevolence increases a follower's perception of the psychological risk of speaking up, and if leaders who perceive their followers as both malevolent and competent retaliate in more severe ways when followers speak up.

Future research might also benefit by investigating the conditional effects of the relationship between hierarchical threat and the futility of speaking up. One potential conditional effect may be individual differences in how readily leaders perceive and react to hierarchical threat. Relevant traits may include individual differences in personality, motivation, and physiology that have previously been shown to play a marked role in the attaining or maintaining of a hierarchical position. For instance, Grijalva and Harms (2014) suggest that people high in the personality trait of narcissism show an increased vigilance toward threats, and as such may be more prone both to perceive hierarchical threats more readily and to react more fiercely to such threats (Bushman & Baumeister, 1998).

Conclusion

People feel their voice matters when allowed to influence decisions. An important responsibility of leaders is to use the competence their followers possess, and to engage in ways to encourage followers to share their constructive inputs on how to improve the

organization. Our findings suggest that hierarchical threat may provide an important condition that hampers leaders' ability to perceive and respond positively to their followers by showing how leaders' hierarchical threat relates to devaluing followers' competence, which in turn makes followers perceive that speaking up is futile.

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Chapter 5

When followers' voice is sought: The mediating role of leaders' perception of hierarchical threat on the relationship between followers' leader-member exchange relationship and leaders' voice solicitation

By

Ingvild Seljeseth and Robert Buch

Abstract

We extend leader-member exchange (LMX) research by using an evolutionary, functional perspective of leadership to investigate the potential advantage for leaders of having followers perceive a high-quality LMX relationship. We argue that a high-quality LMX relationship benefits leaders by decreasing their perception of hierarchical threat, which in turn increases their voice solicitation. To test this notion, we conducted a multisource, time-lagged field study using leader-follower dyads ($N = 201$). The results were consistent with the prediction that the follower's perception of LMX was positively related to the leader's voice solicitation. In addition, the leader's perception of hierarchical threat mediated the relationship between the follower's perception of LMX and the leader's voice solicitation. These findings underscore the importance of social considerations, such as leader-follower relationship quality and leaders' apprehensions regarding hierarchical position, to understand leaders' willingness to solicit voice.

Keywords: LMX, solicited voice, hierarchical threat

Introduction

Followers' voice, defined as the expression of constructive ideas, inputs, and information about work-related affairs to persons that might be able to take appropriate action (Burris, 2012; Dyne, Ang, & Botero, 2003; Morrison, 2014), is important to the survival and prosperity of organizations. One straightforward way leaders may access followers' voice is by soliciting it (Tangirala & Ramanujam, 2012). Yet, leaders frequently avoid asking for followers' inputs (Fast, Burris, & Bartel, 2014). On the one hand, by soliciting voice, the leader could access vital ideas and suggestions that might improve work- or organization-related conditions (Morrison, 2014). On the other hand, by soliciting voice the leader risks also being confronted with an implicit critique of him or herself, a threat from the ranks below, where followers challenge the current status quo for which the leader is responsible (Detert & Burris, 2007). Given this double-edged nature of voice, the present investigation aims to shed light on factors that determine the extent to which leaders solicit voice from followers.

More specifically, we extend leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995) by using an evolutionary, functional perspective of leadership (Boehm et al., 1993; Keltner, Van Kleef, Chen, & Kraus, 2008; Van Vugt, Hogan, & Kaiser, 2008) to generate predictions about factors that might affect leaders' willingness to solicit voice. While both LMX and functional theories consider the relationship between leaders and followers as a critical determinant of leadership behavior, functional theories of leadership provide an additional meta-theoretical layer by proposing that relationship quality, as perceived by the follower, has functional benefits for the leader. Relying on a functional perspective, we propose that high-quality relationships with followers (i.e., followers' perception of LMX) decrease the overall threat to the leader's hierarchical position by securing the leadership position via alliances. Thus, in this paper, we seek to investigate how a follower's perceptions

of LMX are related to a leader's voice solicitation, and the underlying mechanism for this relationship.

The intended contribution is threefold. First, by investigating how leaders are affected by followers' perceptions of LMX, we aim to contribute to a LMX literature that has largely overlooked the effects of followers' perceptions of LMX on leaders. This omission is problematic because "LMX relations not only [*sic*] shape the subordinate's experience of work, but also that of the leader" (Martin, Epitropaki, Thomas, & Topaka, 2010, p. 51). The lack of research into how followers' perceptions of LMX influence the leader is perplexing since a central tenet in the LMX research is how leaders and followers reciprocally influence each other. Moderate levels of agreement between followers' evaluations of LMX and leaders' evaluations of LMX (Sin, Nahrgang, & Morgeson, 2009) suggest that leaders are to some extent aware of, and aligned with, how followers perceive the relationship (Cogliser, Schriesheim, Scandura, & Gardner, 2009). The moderate overlap in LMX evaluations between leaders and followers makes it probable that followers' perceptions of LMX relationships are related to outcomes of the leader. Specifically, we seek to answer the call by Erdogan and Bauer (2014) by investigating how followers' perceptions of LMX may benefit the leader.

Second, we aim to contribute to the voice literature by investigating factors related to leaders' voice soliciting. Although the bulk of voice research has investigated factors that influence the extent to which followers speak up unsolicited, by soliciting voice, leaders may circumvent follower characteristics that inhibit them from taking the initiative of speaking up, and increase the leaders' probability of attaining vital information. Further, we aim to extend previous research that takes into account leaders' psychology when trying to understand leaders' aversion to voice (Ashford, Sutcliffe, & Christianson, 2009; Fast et al., 2014). Finally, we seek to contribute to functional theories of leadership by empirically testing the

extent to which relationship quality, as perceived by followers, is related to leaders'
perceptions of hierarchical threat. While there are strong theoretical claims for this
relationship (Boehm et al., 1993; Keltner et al., 2008), prevailing research using empirical
quantitative data from human leaders is somewhat limited.

Theory and hypotheses

The relationship between LMX and a leader's voice solicitation

Although research on voice has predominantly focused on antecedents and
consequences of speaking up unsolicited (from the perspective of the follower) (Greenberg &
Edwards, 2009; Liang, Farh, & Farh, 2012; Morrison, 2014), leaders may actively seek
followers' inputs and ideas on how to improve the organization, instead of waiting for them to
speak up. While factors related to how the followers perceive the leader partly determine the
extent to which followers voice (Detert & Edmondson, 2011; Detert & Treviño, 2010; Liu,
Zhu, & Yang, 2010), followers may fail to share information for a host of reasons unrelated to
the leader. For instance, extant research suggests that followers may fail to speak up because
they lack a central position in the workflow (Venkataramani & Tangirala, 2010), plan to quit
their jobs (Burris, Detert, & Chiaburu, 2008), or possess individual traits that impede speaking
up (e.g. lack of proactive personality Crant, Kim, & Wang, 2011; lack of self-esteem LePine
& Van Dyne, 1998). Therefore, by soliciting voice, the leader increases the probability of
accessing vital information by circumventing the inhibiting forces unrelated to the leader that
prevent followers from speaking up on their own initiative. Indeed, followers who perceive
their leaders to ask for voice also speak up to a greater extent (Tangirala & Ramanujam,
2012). By soliciting voice, the leader shows a general interest and willingness to let the
followers influence important decisions in the organization.

Whereas a growing body of research has documented how leaders respond to followers' voice behavior, less is known about which leaders are more, or less, willing to solicit voice in the first place. The research by Fast et al. (2014) provides an important exception, suggesting that characteristics within leaders, such as how they evaluate themselves as managers, determine the extent to which they solicit voice from their followers. That is, when leaders perceive themselves to have low managerial self-efficacy, their followers perceive them to be reluctant to solicit voice (Fast et al., 2014). Since the leaders' aversion toward voice was eliminated when leaders were able to self-affirm core values, these findings suggest that voice, for some leaders, is ego-threatening, fueled by leaders' interpretation of voice as an indirect critique of themselves (Fast et al., 2014).

When followers actually do speak up, it may also be socially threatening for leaders. Speaking up is an attempt by those in the lower ranks to influence and direct those in the higher ranks. As such, leaders can interpret followers' voice behavior as a challenge to the status quo, a social upheaval, a threat from below in the hierarchy. In various definitions, leadership is often depicted as top-down influence, whereby leaders influence their followers toward the accomplishment of common goals (Day & Antonakis, 2012; Van Vugt et al., 2008; Yukl, 2013). By soliciting voice, leaders reverse the general, and often role-prescribed, direction of influence.

These ego-threatening and socially threatening interpretations of voice are in stark contrast to the theoretically defined voice that often tends to highlight the constructive intention behind the constructive expression of ideas to improve the organization (Burris, 2012; Dyne et al., 2003; Morrison, 2014). Yet, as highlighted by (Detert & Burris, 2007), when followers speak up, they "may challenge and upset the status quo of the organization and its power holders" (p. 869). There are certainly many aspects that have the potential to influence the extent to which leaders interpret voice in a more, or less, positive way. The

research field of LMX suggests a special role for the LMX relationship between leaders and followers, suggesting that relationship quality in general affects important psychological and behavioral outcomes for both leaders and followers (Erdogan & Bauer, 2014; Graen & Uhl-Bien, 1995).

High-quality LMX relationships are characterized by a long-term orientation with mutual trust, respect, and liking, developed through a diffuse obligation to reciprocate social exchanges (Graen & Uhl-Bien, 1995; Kuvaas, Buch, Dysvik, & Haerem, 2012). Followers in a high-quality LMX relationship are seen as "trusted assistants" (Graen & Uhl-Bien, 1995, p. 227) who are committed to the leader (Walumbwa, Cropanzano, & Goldman, 2011). A high-quality LMX relationship is related to many positive consequences for followers (for extensive reviews of the burgeoning LMX research see Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997; Martin et al., 2010; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016), such as increased job performance (Bauer & Green, 1996; Buch, Thompson, & Kuvaas, 2016), job satisfaction (Graen, Novak, & Sommerkamp, 1982; Volmer, Niessen, Spurk, Linz, & Abele, 2011), organizational citizenship behavior (Deluga, 1994; Li, Liang, & Crant, 2010), decreased turnover intention (Harris, Wheeler, & Kacmar, 2009), and burnout (Thomas & Lankau, 2009).

A central aspect of a high-quality LMX relationship is bidirectional influence, where one member is able to exert influence on the other member (Erdogan & Bauer, 2014; Graen & Uhl-Bien, 1995). Previous research suggests that followers in high-quality LMX relationships perceive themselves to have a greater possibility to participate, to provide input, and to influence decision processes at work (Deluga & Perry, 1991; Scandura, Graen, & Novak, 1986; Van Dam, Oreg, & Schyns, 2008). Leaders and followers in a high-quality relationship communicate more frequently with each other on a daily basis (Sin et al., 2009). The content of the exchange with followers in high-quality LMX relationships also differs; leaders in

high-quality LMX relationships tolerate more challenges and disagreements than leaders in low-quality LMX relationships do (Fairhurst & Chandler, 1989) and rate the performance of followers who speak up higher (Geertshuis, Morrison, & Cooper-Thomas, 2015). Research also suggests that LMX relationship quality is related to leaders' approval of followers' voice (Burris et al., 2008; Hsiung, 2012; Van Dyne, Kamdar, & Joireman, 2008; Wang, Gan, & Wu, 2016). Thus, a high-quality LMX relationship may also influence the extent to which leaders solicit voice. In a high-quality LMX relationship, the leader is more willing to diminish his or her own control and provide the follower with more influence over decisional outcomes, reflected in the increased perceptions by followers that their leaders consult with them (Yukl & Fu, 1999).

Thus, an essential feature of high-quality LMX relationships is that leaders involve their followers in decision-making, both by letting their followers speak up on their own initiative and by promoting their voice by soliciting it. Therefore, in line with previous research, we propose that a high-quality LMX relationship is related to increased solicitation behavior of the leader.

Hypothesis 1: The follower's perception of the LMX relationship is positively related to the leader's voice solicitation.

The mediating role of the leader's perceived hierarchical threat

High-rank positions, such as leadership positions, are often afforded power and status (Magee, Gruenfeld, Keltner, & Galinsky, 2005), and as such they may be coveted and pursued by others (Hays & Bendersky, 2015). Leaders may therefore experience hierarchical threats whereby the power, status, and ease of goal attainment associated with the position are perceived by the leader to be in peril, and possibly lost (Sapolsky, 2005). Although leadership positions in organizations are often defined formally, they are also to a great extent

interpersonally defined and secured by the strength of the relational bonds between leaders and followers (Keltner et al., 2008). As famously put, "A leader without followers is simply a guy taking a walk" (Dionne Jr., 2015, September).

Acknowledging that leaders need to manage relationships with those above them in a hierarchy to secure their positions (Ferris et al., 2005), functional theories on leadership stress the necessity of having strategic relationships with those in the lower ranks (i.e., followers) (Boehm et al., 1993; De Waal, 2007; Keltner et al., 2008; Van Vugt et al., 2008). The evolution of complex collaborative skills in humans (Tomasello, 2014) created the fundament for a reversed dominance hierarchy, that is, followers can unite and overthrow their leader (Boehm et al., 1993). Hence, the relationship between leader and followers went from a leader-based, vertically constructed dominance relationship to include more reciprocally, egalitarian determined leader-follower relationships (Van Vugt et al., 2008). Thus, in the latter, followers can to a greater extent constrain, control, and dethrone leaders when leaders are unsuccessful in meeting the group's demands (Keltner et al., 2008).

While this interdependency may enhance leaders' altruistic behavior toward group members in general, it also prompts leaders to forge strong alliances and relationships with followers that function to preserve their positions (Boehm et al., 1993; Keltner et al., 2008). In his seminal work, primatologist De Waal (2007) described how the alpha male maintained his position as a function of alliances to group members of lower rank, and the menacing consequences to the alpha male when alliances were weakened. In a high-quality LMX relationship lies an informal alliance, mutually benefiting the leader and the follower. In these prioritized relationships, the leader reciprocates social exchanges by sharing a greater proportion of valued resources and allows greater participation in decision making, and in return, the follower defers and shows commitment to the leader (De Waal, 2007). Since leaders can, to some extent, hold their hierarchical position only by having the goodwill of

their followers, it follows that the relationship quality, as perceived by the followers, determines the longevity of the leaders' hierarchical position.

We propose that one functional benefit of high-quality LMX relationships for leaders is to secure their hierarchical position through alliances with their followers. Followers with high-quality LMX relationships have increased influence over decision tasks (Scandura et al., 1986), increased access to resources (Van Dam et al., 2008), experience a lower level of conflict with their leaders (Paglis & Green, 2002), enjoy increased opportunities for development and learning (Erdogan & Bauer, 2014), and have greater access to valuable resources (Liden & Graen, 1980); thus, those followers have fewer reasons to revolt against their leader. On the contrary, the development of high-quality LMX relationships signifies high levels of trust and respect in the relationship (Graen & Uhl-Bien, 1995), where followers experience a long-term obligation to reciprocate (Kuvaas et al., 2012). With an increasing number of high-quality relationships with followers, the possible threat to the leader's hierarchical position is likely to be reduced. Hence, high-quality LMX relationships should work as a buffer against leaders' perceptions of hierarchical threats. Conversely, when followers perceive low-quality LMX relationships, there are lower levels of trust in the relationship (Graen & Uhl-Bien, 1995). In such relationships, the followers' commitment to their leader is low (Walumbwa et al., 2011), and followers are more concerned with satisfying their own self-interest goals than with the prosocial motivation to assist the leader (Buch et al., 2016). Hence, low-quality LMX relationships may intensify leaders' perception of hierarchical threats because leaders are devoid of high-quality alliances to secure their leadership position.

When under threat, leaders are more likely to perceive followers as rivals to their position (Leheta, Dimotakis, & Schatten, 2017). In such situations, leaders should avoid actions that strengthen followers, to attenuate the overall threat to their hierarchical position.

The consequence of participative leadership behaviors, such as soliciting and implementing voice, increases followers' sense of power (Schaerer, Tost, Huang, Gino, & Larrick, 2018) and their hierarchical rank in the organization (McClean, Martin, Emich, & Woodruff, 2017), ultimately resulting in the empowerment of followers (Huang, Iun, Liu, & Gong, 2010). It is probable that perceptions of hierarchical threat work as a barrier to leaders' voice solicitation, enacted to avoid reinforcing potential rivals. A leader's refraining from soliciting voice should also function to cement the hierarchical order because the leader engages in a dominance display of autocratic decision-making, signaling the leader's preferred direction of influence and disinterest in followers' inputs. On the other hand, if leaders sense that their position is secure and unthreatened, the socially threatening aspects of soliciting voice are potentially less intimidating. Accordingly, extending LMX theory with evolutionary, functional perspectives of leadership, we propose that leaders' perceptions of hierarchical threat is one mechanism through which LMX relates to the leader's voice solicitation (see Figure 1 for the conceptual model). Stated more formally:

Hypothesis 2: The leader's perception of hierarchical threat mediates the relationship between the follower's perceptions of the LMX relationship and the leader's voice solicitation.

Figure 1

Conceptual model
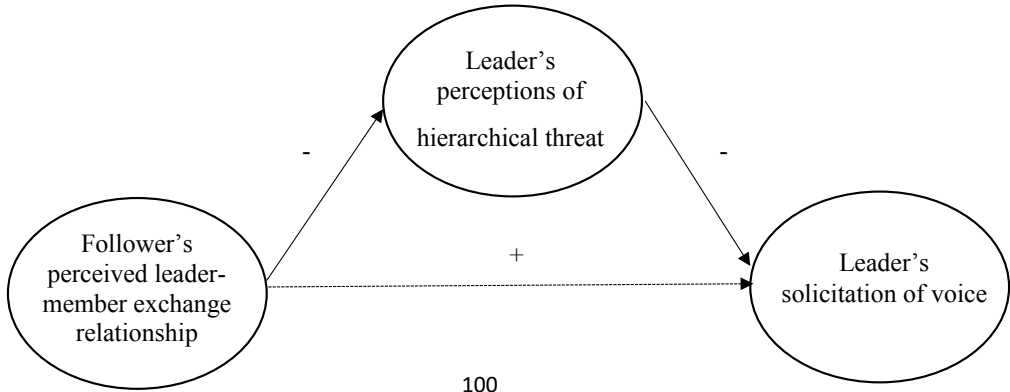
Methodology

Context and procedure

The field study was part of a larger data collection in the Norwegian branch of a Fortune 500 company offering professional consultancy services. Before data were collected, ethical approval regarding confidentiality was obtained from the Norwegian Social Science Data Services (NSD). The top management group permitted distribution of the survey to employees at the partner level, constituting leaders in our study, and to employees at one to three levels below the partner level, constituting followers in our study. The leader-follower dyads were identified by a roster provided by the HR department. The CEO announced the study to enhance response rate, but the organization was not further involved in the data collection or analysis to ensure impartiality and anonymity. We offered no financial compensation to respondents, and the top management group was offered aggregated reports of the results.

Prior to the study, each employee was sent an e-mail, using Qualtrics, that contained general information about the study. We followed established recommendations to limit potential method bias that may influence the participant's responses (Conway & Lance, 2010; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012) and aimed to follow recent recommendations regarding methodological transparency (Aguinis, Ramani, & Alabduljader, 2017). Employees (leaders and followers) received a cover letter by e-mail containing written assurance of confidentiality and aggregate reporting, specifying that identifying information would be stored separately in encrypted files for data collection and data-matching processes (match leader with follower), and would be eliminated by a predetermined date (Podsakoff et al., 2003). Next, the e-mail included a link to use for

giving their informed consent to participate in the study, and allowed data matching with the HR-indicated partner/opposite.

The study had a time-lagged, multisource design. At Time 1, we measured the independent variable (follower rated), the mediating variable (leader rated), and demographics. To reduce potential common method variance (Podsakoff et al., 2012), we measured the dependent variable (leader rated) and control variables approximately two weeks later (Time 2). Different sources were used to obtain the independent variable (follower) and the dependent variable (leader) (Podsakoff et al., 2012).

Sample

At Time 1, 89 leaders (57.8% response rate) and 285 followers (48.3% response rate) responded to the survey. The NSD ethics protocol necessitated consent from both parties of a leader-member pair to match responses. At Time 2 we sent survey invitations only to leaders where both leader and follower had responded at Time 1. Therefore, at Time 2, 62 leaders of the possible 78 leaders responded (79.5% response rate). The final sample consisted of 201 leader-follower dyads where both parties had provided their consent, responded to the focal variables, and confirmed the leader-follower dyad as suggested by the HR department. We conducted a missing-completely-at-random test (Little, 1988) using the SPSS 25 Missing Value Analysis with the expectation maximization technique to investigate the pattern of missingness caused by attrition. The result suggests that the missing data points of our focal variables were missing completely at random $\chi^2(24, n = 319) = 30.6, p = .17)$. Hence, we continued the analysis with the sample where we had complete data points.

Each leader had an average of 3.66 responding followers. The sample of leaders consisted of 89% men and 11% women, of whom 83% reported their highest education as being a master degree. A total of 58% were between 46 and 55 years of age, and all were full-

time employees with managerial responsibilities, with an average tenure in the organization of approximately 16.30 years ($SD = 7.00$). The sample of followers consisted of approximately 63% men and 37% women, of whom approximately 92% reported their highest education as being a master degree. Approximately 87% were between 26 and 45 years of age, all were full-time employees, and approximately 41% reported a tenure with the organization of seven to twelve years. Approximately 63% of followers reported a tenure of four to nine years with their leader.

Measures

All continuous measures were assessed on a 5-point Likert scale, with responses that ranged from 1 (strongly disagree) to 5 (strongly agree) with the exception of leaders' solicitation of voice, where leaders were asked to indicate their frequency of voice solicitation on a scale that ranged from 1 (not at all) to 5 (frequently, if not always). All measures were administered in Norwegian. The measures that did not have a Norwegian version a priori were all back-translated to Norwegian in line with recommendations in the literature (Brislin, 1970).

Leader's solicitation of voice. A four-item scale was adapted on the basis of Fast et al. (2014), and included the solicitation of both suggestions and concerns. The items were (1) "I encourage my subordinates to express their suggestions on how we can improve things," (2) "I invite my subordinates to share their concerns about the organization with me," (3) "I solicit ideas from my subordinates about issues they care about and want to see improved," and (4) "I ask my subordinates to give me inputs on how we can improve things." The estimated reliability was $\alpha = .77$.

Leader's perceived threat to hierarchical position. To assess the leader's perceived threat to hierarchical position, we used the measure of perceived threat at work, employed previously

by Kouchaki and Desai (2015). The items were (1) "I experience threats to my status at work," (2) "I experience threats to my ability to access resources at work," (3) "I experience threats to my ability to exert power at work," and (4) "I experience threats to my ability to achieve my goals at work." The estimated reliability was $\alpha = .87$.

Followers' perceptions of the leader-member exchange (LMX) relationship. To assess followers' perceptions of the LMX relationship, we used the measure developed by Kuvaas et al. (2012) that focuses on the social aspect of the LMX relationship. The items were (1) "My relationship with my manager is based on mutual trust," (2) "My manager has made a significant investment in me," (3) "I try to look out for the best interest of my manager because I can rely on my manager to take care of me," and (4) "The things I do on the job today will benefit my standing with my manager in the long run." The estimated reliability was $\alpha = .83$.

Control variables. Because previous research has found that leaders' managerial self-efficacy influences their solicitation behavior (Fast et al., 2014), we controlled for managerial self-efficacy ($\alpha = .81$) by using a short version of the scale used by Fast et al. (2014). The items were (1) "I will be able to achieve most of the goals that I have set for myself as a leader," (2) "In general, I think that I can obtain outcomes that are important to me as a leader," and (3) "I believe I can succeed at most any endeavor to which I set my mind." Further, we controlled for followers' tenure with a leader, because tenure has been shown to affect voice evaluation (Van Dyne & LePine, 1998), and hence leaders may solicit voice more frequently from experienced followers.

Results

Table 1 reports the descriptive statistics and correlations among the variables. As expected, followers' perception of the LMX was positively related to leaders' voice

solicitation ($r = .15$, $p = .04$). Followers' perception of the LMX was also negatively related to leaders' perceived hierarchical threat ($r = -.17$, $p = .02$), which in turn was negatively related to leaders' voice solicitation ($r = -.27$, $p < .001$), giving preliminary support for the second hypothesis, which poses a mediating effect of hierarchical threat on the positive relationship between the LMX and leaders' voice solicitation.

Table 1

Correlations and Descriptive Statistics

	Mean	*SD*	1	2	3	4
1. Leader tenure	2.81	1.17				
2. Leader efficacy	4.08	.37	-.11			
3. LMX	4.06	.67	-.15*	-.01		
4. Hierarchical threat	2.67	.98	-.27***	-.29***	-.17*	
5. Solicitation	3.90	.53	-.11	.05	.15*	-.27***

Note: N = 201.
 * p < .05
** p < .01
*** p < .001

Confirmatory factor analysis

To assess the factor structure (Byrne, 2013), we conducted a confirmatory factor analysis (CFA) using the weighted least squares with a mean and variance adjustment (WLSMV) estimator for categorical data in M*plus* 8 (L. K. Muthén & Muthén, 1998-2017) in line with recommendations by Jöreskog (2005) on how to treat ordinal variables. The WLSMV estimator provides a precise treatment of categorical data (i.e., the data represent ordinal variables), and provides a robust estimation which does not rest upon strict assumptions of normality (Brown, 2006; Rhemtulla, Brosseau-Liard, & Savalei, 2012).

The fit of the specified four-factor structure was evaluated using common guidelines, the root mean square error of approximation (RMSEA) < .08, the comparative fit index (CFI) $\geq$ .95, and the Tucker-Lewis index (TLI) $\geq$ .95 (Hu & Bentler, 1999; Marsh, Hau, & Grayson,

2005). The proposed four-factor structure achieved an overall decent fit of the data ($\chi^2(84) =$ 219.94, RMSEA = .09, CFI = .97, TLI = .96). It should be noted that RMSEA was slightly above the recommended value of .08, but still within the general accepted cut-off of .10 (Browne & Cudeck, 1993). All factor loadings were statistically significant (i.e., $p < .001$), ranging from .74 to .97 for LMX, from .73 to .98 for perceived hierarchical threat, from .71 to .88 for leaders' solicitation of voice, and from .83 to .97 for managerial self-efficacy. To investigate if the hypothesized four-factor model fitted the data better than more parsimonious alternative models did, I ran χ^2 difference test using the DIFFTEST option in Mplus. However, the alternative three-factor model, two-factor model, and one-factor model provided a significantly worse fit with the data ($p < .001$).

Followers were nested under leaders, hence the data were not independent. To assess the need to conduct multilevel analysis, we calculated the intra-class correlation (ICC) and the design effect (DEFF) for the LMX measure. Whereas the ICC refers to the "proportion of variance that lies between macro-level groups" (Heck & Thomas, 2015, p. 34), the DEFF also takes into account the cluster size as a parameter in deciding if to use a single-level or multilevel analysis (B. O. Muthén & Satorra, 1995). When DEFF is below 2, there is little systematic variation between groups, and a single-level analysis is warranted (Heck & Thomas, 2015). For the LMX measure, ICC ranged from .035 to .13. However, when computing DEFF values, all values were below the suggested threshold of 2 (DEFF ranged from 1.09 to 1.35), implying a single-level analysis approach. Hence, we proceeded with a single-level analysis.

Hypothesis testing

We first tested Hypothesis 1, which predicted that followers' perceptions of LMX was positively related to leaders' solicitation of voice, controlling for leaders' self-efficacy and followers' tenure with leaders, by using structural equational modeling (SEM) in M*plus* 8 (L.

K. Muthén & Muthén, 1998-2017). Hypothesis 1 was supported, β = .17, *SE* = .08, *p* = .03,

suggesting that followers' perceptions of LMX were positively related to leaders' solicitation

of voice. We proceeded to test the proposed mediation effect of leaders' perceived

hierarchical threat (Hypothesis 2) on the relationship between followers' perceptions of LMX

and leaders' solicitation of voice, controlling for managerial self-efficacy and followers'

tenure with a leader using SEM in M*plus* 8 (L. K. Muthén & Muthén, 1998-2017). The

confidence interval of the indirect path did not contain zero, β = .09, *SE* = .04, *p* = .01, 95%

CI [.022, .159], thus in line with an indirect effect of hierarchical threat in the relationship

between followers' perceptions of LMX and leaders' solicitation of voice (Fritz, Taylor, &

MacKinnon, 2012; Preacher & Hayes, 2008). Figure 2 shows the path coefficients yielded by

SEM for the indirect-effect model.

Figure 2

Path coefficients of the hypothesized relationships, controlling for managerial self-efficacy and followers' tenure with a leader
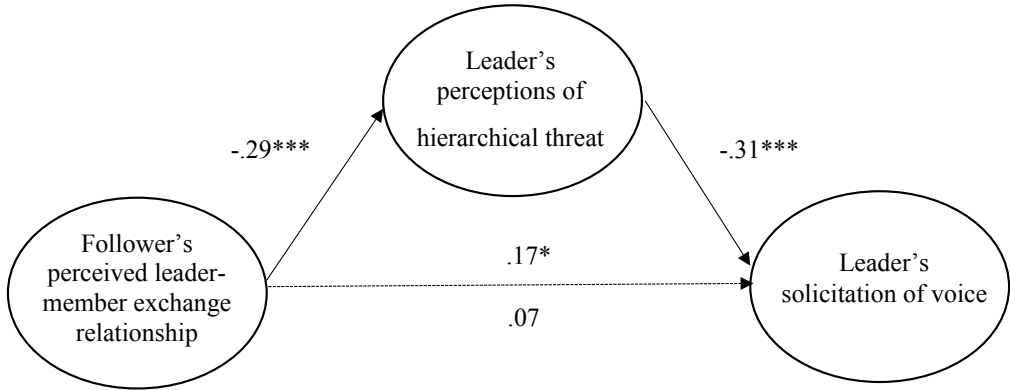
Note: * = *p* < .05, ** *p* < .01, *** *p* < .001

Leader's managerial self-efficacy and followers' tenure with a leader are excluded from the graphical presentation for the sake of clear presentation.

Discussion

The aim of this study was to investigate the extent to which followers' perceptions of the LMX relationship related to leaders' solicitation behavior, and to examine the potential indirect process behind this proposed association. In line with our predictions, a positive relationship between followers' perceptions of the LMX and leaders' voice solicitation was unveiled. Further, we also found support for a mediating effect of leaders' perception of hierarchical threat on the relationship between followers' perceptions of LMX and leaders' voice solicitation.

Theoretical contributions and practical implications

By investigating the proposed relationships, the present investigation makes several distinct contributions to the research streams of LMX, voice, and the functional perspectives on leadership. First, we contribute to the literature on LMX by showing how leaders are affected and benefited by high-quality LMX relationships. Traditionally, the research field of LMX has focused on how high-quality LMX has positive outcomes for followers (Burris et al., 2008; Ilies, Nahrgang, & Morgeson, 2007; Van Dyne et al., 2008). Whereas calls to understand how LMX affects the outcomes of leaders were made three decades ago (Liden et al., 1997), and more recently (Martin et al., 2010), these calls have largely been overlooked (for an exception to this claim see Bernerth & Hirschfeld, 2016). While the benefit for followers of having a high-quality LMX relationship is supported by a wealth of research, the results of our study suggest that leaders benefit too. More specifically, leaders with followers reporting high levels of LMX perceived less threat to their hierarchical position and reported increased willingness to solicit important information from their followers.

Second, we contribute to the voice literature by illuminating factors that are related to leaders' voice solicitation. The literature about voice has primarily focused on the extent to

which followers speak up unsolicited, often documenting inhibiting forces that reduce followers' voice. Instead of waiting in vain for followers to speak up on their own initiative, leaders may take an active approach by soliciting inputs (Tangirala & Ramanujam, 2012; Yukl & Fu, 1999). Leaders are responsible for organizational outcomes; hence, it should be in their interest to get a full picture of the necessary information before making decisions. We extend prior research that has focused on aspects of the leader's psychology that hamper voice solicitation (Fast et al., 2014), by highlighting the positive role of high-quality relationships with followers, more specifically high-quality LMX relationships, for leaders' willingness to solicit voice. Further, the result of this study complements previous studies that have suggested a pivotal role of threat for leaders' aversion to soliciting and implementing voice (Fast et al., 2014), by demonstrating that social threats (i.e., perceived hierarchical threats) decrease leaders' voice solicitation.

Finally, our study contributes to functional theories of leadership. While there is a strong theoretical foundation for the functional benefits for leaders of having high-quality relationships with followers, the idea has not yet received much empirical testing with human leaders. Functional theories of leadership often rest upon a conflict perceptive, highlighting a fundamental tension between the motivations of followers and leaders (Maner & Mead, 2010; Van Vugt et al., 2008). Whereas followers may strive to overthrow the leader either to claim a high-rank position for themselves or to avoid being exploited, leaders may resort to domination to prevent loss of power. A leader may experience hierarchical threats from above, laterally, and/or from below; by nourishing a high-quality relationship with followers, the threat from below is neutralized. The result of our study supports that the interdependency between leaders and followers, suggested to be evolved by followers' ability to impose constraints upon leaders, is still relevant in the execution of modern leadership. Solving this interdependency by developing high-quality relationships attenuates the inherent tension and

conflict between leaders and followers. Thus, the result of our study indicates that high-quality LMX relationships may function as a buffer mechanism against the leader's perceptions of hierarchical threat.

A practical implication of the results, aligned with previous research on LMX, is that leaders should invest time and resources to develop high-quality relationships with followers. While previous research suggests that high-quality LMX relationships are positive for followers and organizational outcomes, our result suggests that leaders also benefit from high-quality LMX relationships by the reduction of hierarchical threat. The implementation of voice is central for the survival of organizations. A prerequisite and preceding step to voice implementation is that leaders gain access to followers' inputs, whereby one straightforward solution is to ask for it. To enhance leaders' willingness to solicit voice, organizations may therefore employ interventions that increase the rate of high-quality LMX relationships (Graen et al., 1982).

Limitations and future research

There are several limitations of this study that should evoke cautiousness when interpreting the results. First and foremost, the data were correlational, preventing the establishment of causal directions. To investigate causality, future research might seek to examine these relationships with experimental designs that capture different levels of LMX relationships, and the extent to which different levels of LMX relationships influence leaders' perceived hierarchical threat and voice solicitation.

Second, the discrepancy between what people say they do and what they actually do is well known (Podsakoff & Organ, 1986). Hence, leaders' self-reported frequency of voice solicitation behavior may not represent their actual voice solicitation, but rather their inclination to depict themselves in a favorable light. A stronger test of the hypothesized

relationship would be to examine leaders' actual solicitation behavior by external observation. Although a high-quality LMX relationship increases leaders' propensity to solicit voice, it does not necessarily follow that leaders will implement all the proposed changes. External factors, which may be unbeknownst to the followers, may impede leaders' ability to act on followers' voiced concerns (Burris, Rockmann, & Kimmons, 2017). Since LMX relationships are built upon the expected reciprocal exchange, repeated failures of leaders in high-quality LMX relationships to comply with influence attempts by followers impose a risk of rupturing the fundament for these relationships. Relatedly, research by Matthijs Bal, Chiaburu, and Jansen (2010) suggests that employees react more strongly to psychological contract breach when they are in a high social exchange relationship than do those in a low social exchange relationship. These results suggest that violations of expectations (such as followers' repeated experiences of non-implemented voice) should have a stronger effect in high-quality relationships. Thus, future research could explore the long-term consequences on followers' perceptions and behavior from having leaders who solicit voice but are restrained from complying.

Third, future studies might also benefit by specifying where the leader perceives the hierarchical threat to originate from. Whereas we have argued and empirically shown that a general threat perception may evoke a general threat response (i.e., refraining from soliciting voice), specifying and investigating the specific level in the hierarchy that is the root cause of the leader's hierarchical apprehensions might provide theoretical refinement. From a theoretical framework of functional leadership theory, leaders react differently to threat from above than they do to threat from below in the hierarchy (Fournier, Moskowitz, & Zuroff, 2002), which ultimately may affect their voice solicitation behavior. Thus, to improve precision in future research, researchers can develop items that specify the degree to which the threat originates from above, laterally, and/or from below.

Conclusion

Followers' voice is central for organizations' viability. Leaders may increase their access to voice by asking for it. The results of this study suggest that the quality of the relationship between followers and leaders, as perceived by the followers, is positively related to the leader's solicitation of voice by reducing the leader's perceived hierarchical threat. While the LMX stream of research has documented the benefits of high-quality relationships for followers' outcomes, our findings suggest that a high-quality relationship benefits leaders too.

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Chapter 6

Brief summary of main findings

The objective of this dissertation was to investigate when and why hierarchical (in)stability and threat decreases leaders' openness to others' inputs. To do so, I used various theoretical frameworks and research methodologies. Table 1 provides a summary of the three articles in this dissertation.

Article one proposed that hierarchical instability influences the degree to which leaders follow unsolicited advice. The results of the first experiment suggest that leaders in unstable hierarchies decreased advice-following compared to leaders in stable hierarchies. Further, whereas leaders in stable hierarchies increased advice-following from an expert relative to a non-expert advisor, the advisor's expert level did not influence the degree of advice-following by leaders in unstable hierarchies (experiment 2). On the other hand, whereas leaders in unstable hierarchies increased advice-following from a non-human relative to a human advisor, the advisor's humanness did not influence the degree of advice-following by leaders in stable hierarchies (experiment 3).

Article two examined the generalizability of the experimental conclusions from article one by investigating the extent to which leaders' perceptions of hierarchical threat were related to followers' perceptions that speaking up was futile. Further, article two provided a more in-depth investigation of the mechanisms by using a dual-path approach. Results from a time-lagged, multisource field study were in line with the prediction that followers perceive as futile speaking up to leaders who perceive hierarchical threat. The mechanism for this relationship was leaders' devaluation of followers' competence, but not leaders' devaluation of followers' benevolence.

Article three complemented the previous articles by looking at how the relational quality between leaders and followers influences leaders' voice solicitation, through the mechanism of leaders' perception of hierarchical threat. The results of a multisource, time-lagged field study involving leader-follower dyads were consistent with the prediction that followers' perceptions of the LMX were positively related to leaders' voice solicitation. Leaders' perception of hierarchical threat was the mechanism in the relationship between followers' perceptions of the LMX relationship and leaders' voice soliciting.

Table 1

Summary of the three articles in this dissertation

Article number	Research design	Sample	Independent variable	Process (mechanism)	Operationalization of openness to others' inputs	Summary findings
Article 1	Randomized experiments, moderation of process design	Total $N = 504$ Undergraduate and graduate students	Hierarchical instability (objective)	Different weighting of task vs. cost of advice-following	Degree of unsolicited advice-following	Hierarchical instability decreased leaders' unsolicited advice-following, explained by social cost concerns.
Article 2	Time-lagged (three waves), multisource field study	Total $N = 126$ (dyads) Professional consultants	Hierarchical threat (perceived by leader)	Devaluations of followers' competence vs. devaluations of followers' benevolence	Futility of speaking up (perceived by follower)	Hierarchical threat was positively related to followers' perceiving speaking up as futile, explained by leaders' devaluations of followers' competence (but not benevolence)
Article 3	Time-lagged (two waves), multisource field study	Total $N = 201$ (dyads) Professional consultants	Relationship quality leader and follower (perceived by follower)	Hierarchical threat (perceived by leader)	Leader voice soliciting (rated by leader)	High-quality LMX relationship as perceived by follower is positively related to leader's voice solicitation, explained by leader's perceptions of hierarchical threat

Theoretical contributions and practical implications

The notion that leaders might perceive threats to their hierarchical position is not much dwelled upon in the literature of leadership. In line with this notion, Leheta et al. (2017) recently proposed that a common assumption in the leadership literature is that leaders perceive their hierarchical positions as static, secure, and stable. According to the functional perspective on leadership, this assumption is not warranted (De Waal, 2007; Sapolsky, 2005). I contribute to the leadership literature by examining both the characteristics of leader-follower relations that are associated with leaders' perceptions of hierarchical threat and the consequences for others and followers of such threats. Threat to a hierarchal position might arise from below, from the subordinates the leader is to develop, guard, and protect, with the consequence that positive characteristics of followers, such as pro-activeness and competency, are viewed unfavorably by the leader when threatened (Leheta et al., 2017). This thesis complements the literature on leadership by showing how leaders' hierarchical perseverance concerns trigger responses that may be at odds with the general expectations of how leaders should perceive and behave toward their followers. More specifically, while a high level of competence and the sharing of constructive inputs regarding improvements may, presumably, be desired characteristics of followers, they may be threatening to a leader with a tenuous hierarchical position.

The results of this dissertation also contribute to the literature on social power. I extend previous research on power by showing how the dynamic properties of hierarchies, hierarchical instability and perceived hierarchical threat, in some instances may increase the negative effects of power, more specifically decrease leaders' openness to others' inputs (i.e., their soliciting and following of others' inputs). Currently, the bulk of research is in line with the proposed reversed effect of hierarchical instability on the actions of the powerful, hinting at hierarchical instability as a potential way organizations might curb unwanted effects of

power. By showing how hierarchical instability and threat may decrease openness to others' inputs, my findings suggest that increased social constraints imposed by hierarchical instability might not always lead to increased social adjustment, but instead lead to inflexibility and unwillingness to change.

While not testing the relationships directly, the results from this dissertation implicitly question the extent to which hierarchical instability and threat activates the behavioral inhibition system (BIS), as suggested by Keltner et al. (2003). Originally, Gray and McNaughton (2003) proposed that the BIS is activated when the animal experiences an approach-avoidance conflict, for example, when the animal is motivated to approach a resource (such as food), but simultaneously motivated to avoid the resource (for instance, because a potential predator is present). Triggering the BIS leads to an active risk assessment of the current situation, and is related to avoidance and withdrawal as part of the animal's defense systems, and to emotions of negative valence such as anxiety (Gray & McNaughton, 2003). On the other hand, the behavioral approach system (BAS) is supposedly activated when there is no potential for harm, and is related to positive emotions. However, research has questioned the extent to which the BAS is solely related to emotions of positive valence by showing that the BAS is also related to anger (Carver & Harmon-Jones, 2009; Harmon-Jones, 2003). Thus, the BAS, and the associated anger, may be the motivational system responsible for leaders' willingness to confront and approach hierarchical threats, and stand up for themselves, and not the BIS. Future research might investigate the role of the neurobiological motivational system underpinning reactions to hierarchical instability and threat.

The combined results suggest that leaders, when threatened, do not respond compliantly. Most would agree that it is beneficial for the group interest if malfunctioning leaders, experiencing hierarchical instability and threat because they acted selfishly or

deviantly, step down from their hierarchical position, instead of resisting. However, because this dissertation did not investigate or specify the cause of hierarchical threat, the argument is more complex. If leaders who are generally behaving according to the group interest always would defer and yield when experiencing hierarchical threats, the hierarchical structure of the group would be highly volatile, approaching anarchy. In general, hierarchical disputes are negative for group outcomes (Bendersky & Hays, 2012; Greer, de Jong, Schouten, & Dannals, 2018; Hays & Bendersky, 2015). Thus, although leaders might react in self-protective ways when threatened, such behavior may also be beneficial for the group if the leaders' efforts create stability within the group.

Second, the results of this thesis contribute to voice and advice-following research by highlighting how social aspects, more specifically social hierarchical dynamics, influence the willingness to ask for and follow others' inputs. The normative perspective in both voice and advice-following research has highlighted the benefits of implementing others' inputs (for the leader, group, and organization). Yet, this perspective does not fully incorporate the potential adverse social consequences of following others' ideas and inputs. Because hierarchical positions are interpersonal they are also socially negotiated, where competence, independence, and assertiveness are valued leader characteristics that leaders prefer to signal. In a state of hierarchical threat, either objective or perceived, the results of this dissertation suggest that leaders are wary about behaving in ways contrary to these preferred leader attributes. The investigation of two social, salient contexts for leaders (hierarchical instability and threat and relationship quality with followers) underscores how social dynamics and relational properties influence low-level and everyday behaviors of leaders, such as their willingness to follow others' ideas and opinions.

As argued previously, leaders' reactions to voice and advice may be seen as social responses to preserve their coveted position. The results from this thesis extend prior power

research that has investigated how powerful positions are attained (Cheng et al., 2013), or the consequences of experiencing a high-rank position (Anderson & Brion, 2014), by indicating one potential way in which powerful leaders attempt to maintain their position. While previous research in the domain of power has mainly investigated how hierarchical disputes and positioning have been solved by non-verbal behavior displays, recent research suggests that what on the surface seems innocent, such as giving unsolicited advice, may be motivated by the desire to enhance one's own level of power (Schaerer et al., 2018). Thus, the results from this dissertation nicely complement this recent finding by showing that leaders experiencing hierarchical instability and threat are sensitive to the potential social costs of following others' unsolicited inputs. At a higher level, leaders' reluctance to follow such inputs and advice might reflect one path that leaders seek to settle the unstable hierarchy.

A general important practical implication from the results of this dissertation is that a common institutionalized system of checks and balances, such as the threat of losing power, may have contradictory effects on the behavior of powerful leaders from the ones intended. In other words, constraints imposed on leaders by hierarchical instability and threat do not always constrain, but my backfire by increasing negative behaviors in leaders. This implication is important from a practical viewpoint because organizations may threaten leaders with restricted future power to manage their underperformance or misbehavior. The usefulness of the attempt to constrain the leader by hierarchical threat, caused by either formal or informal structures, may therefore depend on what type of leader behavior is targeted for change. If organizations attempt to increase leaders' openness to others' inputs, practices that increase hierarchical instability and threat may be counterproductive.

It would be wrong to infer from this dissertation that organizations should erase hierarchical instability and threat by creating static, inflexible, and irrevocable hierarchies. When leaders have immutable power, there is a high risk that followers might be exploited

(Boehm et al., 1993b; Keltner et al., 2008). The implication is therefore that although organizations cannot (and should not) eliminate hierarchical instability and threat, they should cautiously consider the necessity of practices that increase hierarchical instability and threat. By showing moderation when it comes to threat-triggering practices, they might reduce the frequency and intensity of hierarchical instability and threat, and such reduction might ultimately increase leaders' openness to others' inputs.

Last, given that social hierarchical dynamics are inevitable, the last article speaks to one domain that organizations and leaders may nurture to limit perceptions of hierarchical threat. Organizational or leadership practices that enhance the relationship quality between leaders and followers may act as a buffer to leaders' perception of hierarchical threat. Together, a practical implication from this thesis is that leaders' perception of stability and security cannot be taken for granted, but that organizational practices that decrease perceptions of threat or enhance social connections between leaders and followers might increase leaders' openness to others' inputs.

General limitations and suggestions for future research

While all the articles have specific limitations pertinent to the research design and method discussed in detail in each article, there are also some general limitations in the conceptual framework for this thesis.

Two ways up – one way down?

One important limitation is the lack of differentiation of power and status in the experimental manipulation of hierarchical instability, and in the measurement of hierarchical threat. Although I used previously established manipulations of power instability and measures of threat, threats to power and threats to status may arguably be inextricable in the

chosen operationalization of hierarchical instability and threat. Although power and status are often inseparable in real life as well, the failure to separate these constructs is a threat to the construct validity given previous research suggesting that people are differently affected by the experience of high levels of power versus high levels of status (Anicich, Fast, Halevy, & Galinsky, 2015; Blader & Chen, 2012; Fast, Halevy, & Galinsky, 2012). The theoretical background for the different effects of power and status has been suggested to reflect that power, to a greater extent than status, is an autonomous property of the powerholder. While power (i.e., resource control) is something one possesses, status is an interpersonal judgment, governed by others (Magee & Galinsky, 2008). Thus, people may react differently to power threats versus status threats because the mechanisms that exhort their behavior are different. In this thesis, the opportunity to dissect each construct's potential unique contribution on behavior is eradicated by the possible confounding.

Previous research by Cheng et al. (2013) suggests that there are two ways to the top, where the degree to which people resort to power (i.e., dominance strategy, cf. Blader and Chen (2014)) or status (i.e., prestige strategy) to gain hierarchical rank will differently affect their behavior. If there are two ways up, perhaps there are two ways down as well? In other words, how people react to threats to their hierarchical position might hinge on whether the base of their hierarchical position is power or status. Interestingly, the limited research in this domain suggests that when people experience threats to their status, they engage in strategic behavior to remain in their position (Pettit, Doyle, Lount, & To, 2016; Pettit, Yong, & Spataro, 2010), in line with the proposition of this thesis. Therefore, current research hints at the possibility that although there are two ways to the top, there is only one way down. Future research might contribute to theory by investigating the extent to which this is true, or if threats to power and status affect the behavior of leaders differently. Whereas this may be considered a theoretical exercise, it is also practically relevant because it is possible to

imagine situations where leaders experience threats to their power but not to their status, and vice versa. Orthogonally rotating threats to status and threats to power (i.e., a 2 × 2 between-subjects design, with manipulations of status (no threat, threat) and power (no threat, threat), inspired by the set-up in Blader and Chen (2012)) may illuminate if, when, and how threats to power and status differently affect leaders' behavior. Last, the extent to which there is only one way down may also be conditional on individual characteristics or contextual factors.

Boundary conditions of defensive reactions to hierarchical threat

Another important limitation of this dissertation is that it does not investigate how individual differences might influence how leaders react to hierarchical threat. As in most social phenomena, individual differences between leaders potentially moderate the negative relationship between leaders' hierarchical threat perception and their openness to follow others' input. A general assumption underlying this thesis, and most scientific work within the domain of hierarchy, power, and status, is that high-rank positions are coveted (Lammers et al., 2016). Accordingly, people will strive to gain or maintain such positions. However, research by Anderson, Willer, Kilduff, and Brown (2012) suggests that individuals who perceive themselves to have low value to the group prefer a hierarchical rank position at the lower levels. Likewise, people with low levels of testosterone, a hormone commonly linked to hierarchical-rank behavior (Mazur & Booth, 1998; Mehta, Lawless DesJardins, van Vugt, & Josephs, 2017), show signs of physiological and emotional distress when placed in high-rank positions (Josephs, Sellers, Newman, & Mehta, 2006). Thus, these results question the universalistic assumption that people generally prefer high-rank positions. Thus, leaders with high levels of submissiveness (i.e., low baseline levels of testosterone), or who perceive themselves to have little value to the group, might not be willing to defend their position when experiencing hierarchical threats. As such, an important, uninvestigated boundary condition is whether individual differences between leaders influence leaders' reactions to hierarchical

threat. While people with low levels of individual traits related to the attainment of hierarchical positions potentially might not strive to gain leadership positions in the first place, it is also probable that, when unwillingly put in leadership positions, they also show decreased propensity to defend their position.

Another potential boundary condition of theoretical interest is the extent to which the possible loss of a high-rank position represents solely the loss of control over others, or the loss of freedom from others' control. Almost invariably, a high-rank position represents both control over others and freedom from others' control. However, research by Lammers et al. (2016) suggests that what really drives the search for high-rank positions is autonomy, or freedom from others' control, not the desire to control others. As such, a possible boundary condition to my conclusion is that leaders' reactions to hierarchical threat might hinge on whether losing hierarchical position is characterized by a loss of autonomy or a loss of control over other people. In organizational life the possible different reactions to loss of control over others versus loss of freedom from others' control are important because they have implications for how organizations choose to solve the demotion of leaders.

On the other hand, what motivates people to seek high-rank positions might be different from what motivates people to try to retain high-rank positions. In essence, although people are motivated to climb the ladder not to gain control over other people (but to gain personal freedom), following the traditional "power corrupts" argument (Kipnis et al., 1976), the experience of having control over other people might shift leaders' motivation. More specifically, when control over others is threatened, even though personal autonomy is assured, leaders might react defensively to maintain social control over others. To shed light on these different theoretical perspectives, future research might investigate them by an experimental design where autonomy loss versus social control loss is manipulated orthogonally.

Concluding remarks

This thesis demonstrates that leaders' willingness to ask for and listen to others' inputs depends upon the context of hierarchical stability, either objectively or perceived, and the quality of the relationship between leaders and followers. In line with the proposition made almost 2,500 years ago, when leaders experience threats to their hierarchical position, they show an inclination to fight for their position, and hence, fall into Thucydides's Trap. Indeed, a cursory glance at current headlines in the news suggests that leaders do not step down from their lofty positions easily, and in some situations are determined to remain in their position no matter the cost.

Is current powerholders' response to hierarchical instability and threats inevitable, as Thucydides claims? Departing from Thucydides's fatalism, the results from this thesis suggest a modest inclination toward a non-violent fight to preserve one's hierarchical position. Thus, leaders' responses to threat could be described more as a propensity than as an inescapable outcome. Moreover, an evolutionary functional framework suggests that reactions to hierarchical threat are not impervious to change. Knowledge of how leaders respond to hierarchical threat also allows for the careful design of organizational context that might decrease the extent to which leaders feel threatened or that might shape leaders' reactions to threat. Although war (regrettably) may be inevitable, falling into Thucydides's Trap is not.

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