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When subordinates do not follow: A typology of subordinate resistance as perceived by leaders



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ABSTRACT

Whereas a plethora of research investigated subordinates who accept their leaders' influence attempts (i.e., those who follow), we focus here on the reversed perspective, namely subordinates who decide not to follow their leaders' requests. For example, a subordinate may intentionally lower their effort, regularly passoff work tasks to colleagues, or take the leader for a fool. The purpose of the present study was to develop a conceptual account of this phenomenon. More specifically, we aimed to develop a classification of subordinate resistance as perceived by leaders that can guide future research on this multifaceted phenomenon. To achieve this goal, we conducted 40 semi-structured interviews with organizational leaders. We utilized topic modeling to map out five categories of subordinate resistance (i.e., entitlement, contact seeking/avoiding, effort minimization, emotionally fluctuating communication, and undermining team cohesion). In a second study (N = 1,229), we investigated the frequency with which leaders experienced each category of resistance, and explored leader-related antecedents (demographics, cognitive ability, personality) we well as situational antecedents (industry). We discuss a proposed nomological net of subordinate resistance, consequences that subordinates (and leaders) might face when engaging in (experiencing) subordinate resistance, and how the person–situation debate may contribute to understanding when subordinate resistance occurs.

"There is a wide variety of that [resistance]. [...] Some subordinates express that very openly. [...] With others, you notice that they withdraw somehow."

-Interview 11

Among the primary concerns of a leader are their subordinates, whom the leader tries to influence to achieve common goals (Antonakis & Day, 2018; Bass & Bass, 2008). When subordinates accept this leader's influence over them, these subordinates turn into "followers" (Bastardoz & van Vugt, 2019). However, it is possible that subordinates may occasionally or even chronically decide not to follow their leader. Specifically, subordinates may enact resistance (i.e., instances of opposition to complying with leaders' requests; Falbe & Yukl, 1992) in several ways that include openly or covertly undermining their leader's attempts to influence them. Anecdotes from the daily working lives of leaders vividly describe the phenomenon of subordinate resistance: There are, for example, subordinates who deceive or intentionally withhold information from their leaders or openly refuse to comply with leader demands such as

being asked to complete work tasks, cooperate with co-workers, or support a new project idea from the leader (Engel, 2021; Gallo, 2016; Offermann, 2004).

The real-life experiences of leaders who are confronted with subordinate resistance, however, have not yet been reflected in a rigorous scholarly understanding of the different facets of this phenomenon, its prevalence, and related constructs (i.e., antecedents and outcomes of perceived subordinate resistance). This shortcoming is surprising, as research has underlined that leaders act based on their perceptions of subordinates' behaviors (Hoogervorst et al., 2013; Whiteley et al., 2012). In particular, leaders' perceptions of subordinate resistance (which can but must not reflect the subordinate's actual behavior) may influence the leaders' behavior such as increase retaliatory or abusive behaviors towards the subordinates (Güntner et al., 2021; Martinko et al., 2011). Thus far, scholars interested in "the other side of leadership" have mainly studied subordinates who accept the influence attempts of their leaders (i.e., followers) and the corresponding positive effects of such supportive followers on leaders (Carsten et al., 2017; Epitropaki & Martin,

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2005; Mesdaghinia, 2014; Xu et al., 2018). An exception in that regard is research that focused on developing typologies that conceptually contrast ideal followers with passive or alienated subordinates (cf. Carsten et al., 2010; Chaleff, 1995; Kelley, 1992; Zaleznik, 1965), defined subordinate resistance as either functional or dysfunctional behavior (Tepper et al., 1998; Tepper et al., 2001; Tepper et al., 2006), or considered concrete incidents of subordinate resistance using experimental designs (Güntner et al., 2020; Güntner et al., 2021). Although this research provides useful insights into examples of subordinate resistance, it is still limited in that resistance is often conflated with its destructive consequences or that it only considers a unidimensional perspective on subordinate resistance. Thus, there remains a need to uncover the full range of subordinate resistance. Doing so would allow scholars to explore the antecedents of such resistance and their impact (both constructive and destructive) on leaders, subordinates, and, ultimately, organizations while being able to discern cause from effect. Accordingly, we aim to initiate a new conversation that expands the followership literature by employing a data-driven approach to capture the wide variety of subordinate resistance.

Specifically, we seek to make three contributions to the literature. First, we develop an empirically derived classification of subordinate resistance as perceived by leaders based on interview data that we analyzed with a machine learning technique (i.e., topic modeling). Our classification broadens the predominant focus in the literature on supportive or engaged followership and presents a more realistic picture that elucidates the possibility of subordinate resistance. In doing so, we offer a foundation for future research to rigorously study (e.g., via observational experiments in the lab setting or field studies that take into account endogeneity concerns) how leaders and subordinates are impacted by and react to the identified five categories of subordinate resistance. Second, we provide evidence for the prevalence of the leaders' experience of the identified five categories of subordinate resistance through a large-scale study with 1,229 leaders. The resulting data offer insights into how often each of the five categories of resistance is experienced by leaders and include leader ratings of the perceived destructiveness of the different categories. Third, we explore possible leader-related antecedents (demographics, cognitive ability, personality) of reporting instances of follower resistance and situational contexts influences (industry). By exploring such leaderrelated antecedents, we highlight the possibilities that subordinate resistance (at least partly) depends on the type of leader who exerts influence and that leaders might (unwittingly) promote subordinate resistance.

Theoretical background

Speaking to the notion that subordinates actively shape leadership (Oc et al., 2023), investigating a leader's perception of subordinate resistance is one puzzle piece to understanding how subordinates' non-following can influence how leadership can take place. This is because the leaders' mental representation and perception of subordinates' behaviors drive leadership outcomes. In this regard, research showed that how leaders perceive their subordinates' actions impact their decision-making processes (e.g., performance ratings, Tepper et al., 2006; rating of the relationship quality, van Gils et al., 2010) as well as the leaders' use of specific leadership behavior (Hoogervorst et al., 2013). But how do leaders perceive their subordinates, and how can the wide range of subordinate reactions to leader influence be categorized? Providing answers to these questions is essential to conceptually embed the perception of subordinate resistance in the followership literature (Oc et al., 2023). We, therefore, first differentiate the term "follower" from the term "subordinate" and then turn to extant research that touches upon the resistant behaviors of subordinates.

Defining followers, subordinates, and followership

Followers are defined as "individuals working in a follower (i.e., non-leadership) role" in a recent review of followership research (Oc et al., 2023, p. 2). This implies that not working in a follower role by showing resistance disqualifies a person in that situation as a follower; however, they are still formally a subordinate (cf. Ashford & Sitkin, 2019; Bastardoz & Day, 2022; Bedeian & Hunt, 2006). Evidently, subordinates can still generally follow (and then be described as followers) but transiently not follow. Of note, the literature so far has not always been clear about this differentiation; for example, the typologies of followership that we introduce below (e.g., Chaleff, 1995; Kelley, 1992) also use the term "follower" when describing instances of resistance. Here, we want to remind scholars again of the necessary nuance in the wording. Accordingly, although we see our work as a contribution to the followership literature, we purposefully refer to subordinates when describing how individuals in a hierarchical relationship with a leader act (as perceived by their leader) when they do not follow. Specifically, our research is guided by the following overarching research questions: Which categories of perceived behavioral indicators characterize subordinate resistance, and how often do leaders experience subordinate resistance in their working

To understand that subordinate resistance is not a stable characteristic of a person or a forced reaction, it is helpful to relate our research to a role-based approach to followership (Baker, 2007; Uhl-Bien et al., 2014). This approach emphasizes that followership refers to (1) the following behavior exhibited by an individual occupying the hierarchical role of a subordinate in relation to a leader and that these behaviors occur as (2) active and voluntary participation in the leadership process. First, this means that the set of behaviors that a subordinate shows can vary between different situations with the same or different leaders and thus does not describe an individual with inherent characteristics. In other words, followership (and non-following) is not about a certain follower personality (Jonason et al., 2012) but rather about behavioral choices when fulfilling a subordinate role (Uhl-Bien et al., 2014). Such behavioral choices as a reaction to leadership are (at least partly) influenced by the leader (e.g., leader behavior, leader personality, leadership style)¹. The positioning of subordinate resistance in relation to a leader allows to clearly differentiate it from general employee behavior, which occurs outside of the leader-subordinate dyad and leadership process (Uhl-Bien et al., 2014). Accordingly, we understand subordinate resistance as activities occurring in relation to a leader, which clearly differ from general employee resistance or employee deviance that are directed toward an organization as a whole (Bennett & Robinson, 2000).

Second, followers (and subordinates in more general terms) are not passive subjects in the leadership process but rather actively influence it through their own initiative or by reacting in self-determined ways to the leaders' request. This understanding emphasizes the voluntary nature of subordinate behaviors, which entails that subordinates can choose between a range of behavioral options. That is, the range of subordinate behavioral options also include resistance (i.e., nonfollowing behaviors) that reject a leader's influence attempt because deciding not to follow is also an active and deliberate choice of enacting the subordinate role. Subordinate resistance is, therefore, distinct from incompetence (i.e., a lack of skills or intelligence leading to limited behavioral options) because incompetent behaviors are not rooted

¹ Of note, whether subordinate resistance can be considered as constructive or destructive depends on the interpretative perspective and the applied norms (Warren, 2003). For example, whether subordinate resistance is judged as destructive cannot be considered independently of the leader (e.g., resisting an unethical or ineffective leader might lead to constructive organizational outcomes), the eye of the beholder (e.g., although resisting unethical demands might be constructive for the organization, the resisting subordinate might face destructive outcomes such as punishment from the leader), and the applicable norms (e.g., what is defined as unethical might differ between organizations).

in deliberate choices (Krasikova et al., 2013). In sum, we understand subordinate resistance as the result of voluntary behavioral choices that are rooted not in incompetence or the absence of other behavioral options but rather in active decisions concerning how not to follow.

When acknowledging the participation of subordinates in the leadership process, it is important to differentiate the direction of the leaders' and subordinates' respective influence attempts (i.e., downward versus upward). Although both roles simultaneously contribute to the manifestation of leadership, leaders engage in leadership, and leading behavior, and subordinates can enact followership and following behavior as well as resistance towards the leader (Shamir, 2007). For example, authentic leadership behaviors are positively associated with proactive subordinate behaviors (Leroy et al., 2015). Simultaneously, subordinates who exhibit proactive behaviors can encourage leaders to behave authentically (Leroy et al., 2015). Indeed, simultaneity is innate in almost every leadership or followership concept (Bass & Bass, 2008; House, 1971, 1996). However, many leadership and followership studies have fallen short in terms of addressing this simultaneity issue methodologically or statistically and have thus presented biased estimates (Antonakis et al., 2010; Güntner et al., 2020). Of course, one can study only one part of the estimation (i.e., only the leader or only the subordinate) as long as the independent variable (i.e., leader or subordinate behavior) is exogeneous to subordinate or leader reciprocal behavior (see Meslec et al., 2020) or if one statistically corrects for simultaneity (Güntner et al., 2020). A prerequisite for manipulating leader or subordinate constructs or measuring their antecedents and consequences is a clear understanding of their behavioral building blocks (i.e., the leader or subordinate behaviors that constitute the focal construct). We aim to offer a starting point by studying how leaders perceive instances of subordinate resistances; this, of course, still requires the verification of these building blocks in future studies that objectively capture the identified subordinate behaviors.

How can subordinates be categorized?

To enhance the field's conceptual understanding of how individuals enact their subordinate role, scholars proposed different typologies (Carsten et al., 2010; Chaleff, 1995; Kelley, 1992; Zaleznik, 1965). The purpose of such typologies is to classify several behavioral tendencies into overarching categories that represent qualitative differences between people. Typologies can thus be linked to a trait perspective on subordinates. Whereas we refrain here from adopting an individual difference (i.e., trait) perspective and instead seek to describe categories of perceived subordinate resistance that can vary between situations, we nevertheless consider it a useful endeavor to briefly review the four most well-known typologies to (a) thoroughly position our work within the field and (b) identify their respective typological assumptions concerning subordinate resistance. We conclude this section with a brief review of extant research that identified specific instances of subordinate resistance and summarize why a comprehensive categorization of subordinate resistance could help to advance the followership literature.

The pioneering work in the area of subordinate² typologies was conducted by Zaleznik (1965), who formulated one of the first typologies of subordinates. More specifically, Zaleznik (1965) differentiated four subordinate types by placing subordinates between the poles of dominance–submission and activity–passivity. Subordinates categorized on the dominance–submission scale can be located between the desire to be controlled by the leader (the masochistic and withdrawn subordinate type) and the desire to dominate the relationship and perhaps even the leader (the compulsive and impulsive subordinate type). The activ-

ity-passivity scale differentiates subordinates who fall near one end into types who actively initiate interactions and tasks (the impulsive or masochistic subordinate type), whereas those who fall near the other end describe types who remain quiet and barely participate (the withdrawn or compulsive subordinate type).

Zaleznik's (1965) work soon sunk into oblivion, where it remained until Kelley (1992) introduced what has likely been the most influential subordinate typology thus far. Kelley (1992) maintained the differentiation between active and passive subordinates but redefined the dominance-submission distinction by referring to critical thinking and dependency instead. In search of the exemplary subordinate, Kelley (1992) categorized five different subordinate types falling into a quadrant (alienated, exemplary, conformist, passive, and, at the center category, pragmatist). Kelley's (1992) view was that every subordinate should develop into an exemplary subordinate who rates high in critical thinking and activity and is therefore capable of taking initiative and supporting the needs and interests of their leader. In contrast, the alienated subordinates are considered to have the potential to become troublemakers and to cause conflict due to their tendency to think critically paired with a passive and cynical attitude that represents the lack of interest to support the leader (Kelley, 1992). With the exception of this alienated type, which actively resists the leader, all other subordinate types miss characteristics of resistance. Specifically, passives, conformists, and pragmatists, are defined as almost blindly obeying to the leader's demand, which - depending on a leader's need for corrective input - may bring about either positive or negative consequences (Kelley, 1992).

A third classification stems from Chaleff (1995), who adapted the subordinate types proposed by Kelley (1992) and identified courageous subordinates as the essence of effective followership. Based on the two defining components of courageous subordinates, Chaleff (1995) positioned subordinates on a continuum ranging from low to high support and low to high challenge, which results in four subordinate types, referred to as the partner, implementer, individualist, and resource types. Similarly to Kelley (1992), Chaleff (1995) identified one subordinate type, the partner (i.e., a subordinate who exhibits both high support and high challenge), as the most effective and courageous subordinate type because such subordinates provide high levels of assistance to leaders and exhibit the courage required to challenge leaders with critical thinking. The individualist type (i.e., a subordinate who exhibits both low support and high challenge) also displays such critical thinking but does not align with the leader's mission given that such subordinates tend to think for themselves and to pursue their own goals. In contrast to the partner and individualist subordinate types, the implementer and resource types fulfill their leaders' demands without further questioning or resistance. For example, the implementer simply fulfills demands without engaging in critical thinking, whereas the resource does not actively participate or question the leader's actions.

A more recent classification employs a continuum ranging from passive to proactive subordinates to identify attributes that enable or impede successful followership (Carsten et al., 2010). Based on a qualitative approach that involved conducting 31 semi-structured interviews with individuals in non-supervisory, supervisory, and middle management positions, Carsten et al. (2010) proposed three types of subordinates: the passive type, who exhibits deference and obedience toward the leader; the active type, who constructively questions the leader and shares their opinion when solicited by their leader; and the proactive type, who takes the initiative to constructively challenge the leader without being asked to do so. Although the proactive type can hypothetically exhibit resistance, the authors did not specify any indicators of subordinate resistance.

To summarize the extant typology literature, the existing typologies evolved from a focus on active versus passive subordinates who are positioned on a continuum ranging between submissive or dependent on the one end and dominant or independent on the other

² Although some typologies originally referred to subordinates as followers, we consistently use the terminology of subordinates to nuance that not all subordinates are followers (i.e., those who resist cease to be a follower).

(Kelley, 1992; Zaleznik, 1965) to a more thorough definition of what is meant when referring to an individual who is proactive in the subordinate role (Carsten et al., 2010; Chaleff, 1995). Regarding proactive subordinates, Chaleff (1995) emphasized the role of courage, whereas Carsten et al. (2010) focused on initiative-taking. All of the abovementioned typologies share an interest in defining the optimal subordinate; that is, they are intended to indicate how an active subordinate helps to improve a leader's outcomes. However, these typologies largely fall short in terms of specifying concrete behavioral indicators and denoting the other end of the continuum, namely differentiating among different types of subordinate resistance that go beyond being passive or exhibiting overly critical subordinate behavior.

The lack of focus on deriving a comprehensive classification of subordinate resistance is surprising given that the idea of subordinates not contributing to the achievement of a leader's goal is implicit in the reviewed typologies and related literature streams. That is, the existing subordinate typologies define compliant/ideal subordinates by contrasting it with more resistant types (e.g., alienated or individualist). The approach of contrasting functional with dysfunctional behavior has been addressed more explicitly by Tepper et al. (2001), who suggested classifying subordinate resistance as either functional (i.e., negotiating subordinate behavior, which is defined as constructive behavior that seeks to logically persuade the leader) or dysfunctional (i.e., refusing subordinate behavior, which is defined as destructive behavior that ignores and directly rejects the leader's demands). Adding to this line of research by drawing on qualitative data, Almeida et al. (2021) identified two types of subordinate resistance (i.e., active and passive resistance), as well as four additional obedient subordinate types (i.e., passive obedience, conflict avoidance, support, and mixed). Last but not least, experimental research has also provided preliminary evidence for a causal effect of one specific type of subordinate resistance - namely verbal expressions that indicate either low resistance (i.e., the subordinate communicates doubts in their leaders' demands) or high resistance (i.e., the subordinate confidently communicates their resistance) to complying with a request by a leader (Güntner et al., 2020; Güntner et al., 2021) - on the leader's reactions. In summary, although individual studies have identified some indicators of subordinate resistance and begun to test antecedents and outcomes (Güntner et al., 2020; Güntner et al., 2021), thus far, the literature has not captured the holistic phenomenon of subordinate resistance as a multifaceted concept.

To enrich the scientific understanding of subordinate resistance, we empirically explore (1) which categories of subordinate resistance are perceived by leaders, (2) how often leaders experience these categories of subordinate resistance in their working lives, and (3) which leader-related antecedents (i.e., demographics, cognitive ability, personality) and situational context (i.e., industry) are associated with subordinate resistance. To do so, we identified facets of subordinate resistance from interview data (N = 40) in Study 1. We then conducted a second study with N = 1,229 leaders to obtain an impression of the base rate of the phenomenon (i.e., how often do these previously derived forms of subordinate resistance occur?) and the destructiveness of each category (i.e., the extent to which leaders perceive these facts of subordinate resistance as destructive and conducted an exploratory investigation into leader-related antecedents of subordinate resistance and situational context factors.

Study 1

Topic modeling

In Study 1, we applied topic modeling to identify facets of subordinate resistance. Topic modeling enables a "bottom-up" inductive anal-

ysis of qualitative data based on an unsupervised machine learning algorithm that carves out clusters of words that co-occur (Banks, Woznyj, et al., 2018; Kobayashi et al., 2018; Tonidandel et al., 2021). In contrast to grounded theory approaches that solely relies on human coders, topic modeling represents an automated and datadriven process that paves the way for easily replicable and objective qualitative data analysis (Baumer et al., 2017; Schmiedel et al., 2019). Whereas scholars committed to grounded theory have increasingly encouraged the validation of their coding by multiple coders, interrater agreements is rarely high on individual coding units (Aguinis & Solarino, 2019; Baumer et al., 2017). Low interrater agreement, however, raises concerns regarding subjectivity and demanddriven results in qualitative research (Aguinis & Solarino, 2019). Topic modeling contributes to counteracting this concern by not requiring pre-modeling annotations (i.e., deductive assumptions concerning the themes that underlie the data) and instead allowing for an objective examination of word bundles and data-driven identification of themes in the data (Banks, Woznyj, et al., 2018). Topic modeling is particularly suitable for the aim of the current study (i.e., developing a novel classification system of subordinate resistance), given that it allows a reproducible and inductive examination of latent categories in the qualitative interview data (Hannigan et al., 2019).

The analytical topic modeling process is based on three main assumptions: (1) the nature of the qualitative data is generated by "hidden (latent) probabilistic variables" (p. 454) - that is, the topics (Banks, Woznyj, et al., 2018); (2) the individual documents that construe the data (in this study, interview excerpts) are a mixture of topics and therefore contain words from several topics (Banks, Woznyj, et al., 2018); and (3) the topics that generate the qualitative data are themselves a mixture of words. It should be noted that the mixture of words that define each topic allows for both synonymy and polysemy - that is, words can hold the same or different meaning across topics (e.g., "get" can mean "understanding" in both topics, or it can have the different meanings of "becoming" and "understanding"; Doldor et al., 2019). As an illustration, consider the example of restaurant reviews: By analyzing all individual documents (in this case, restaurant reviews) using a topic modeling approach, the data may reveal that most individuals touch upon two topics in their reviews (i.e., the data is generated by two topics). The individual reviews contain words belonging to both topics (i.e., the reviews are a mixture of topics). The most common words in the first topic might be "light," "music," and "furniture," whereas the second topic may consist of words such as "delicious," "variety," and "fresh." To understand the underlying topics, the human coder now needs to make sense of the words allocated to each topic. The human coder could, for example, decide to label the first topic "ambiance" and the second topic "food."

In applying the topic modeling approach, we followed best-practice recommendations by Banks, Woznyj, et al. (2018). Fig. 1 depicts the four main steps of our data analysis.

Step 1: Research question

Our research seeks to answer the following question: Which categories of indicators characterize subordinate resistance?

Step 2: Design and data collection

Participants

We conducted 40 semi-structured interviews with leaders (50% first-line managers, 30% middle managers, 20% top-level managers) who worked in various industries in Germany. To enhance the generalizability of the findings and to capture a broad range of experiences and perspectives, we applied a cross-sectional sampling method (Bryman, 2004). We included leaders with expertise in, among other industries, health care and social assistance, information, manufactur-

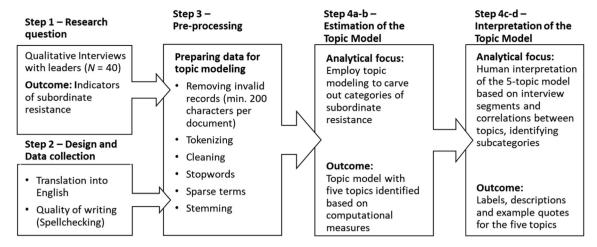


Fig. 1. Analytical process topic modeling.

ing, professional, scientific, and technical services. Of the interviewed leaders, 50% were female and 50% were male. All leaders in our sample had held positions with direct employee responsibility for more than two years. Thirty-five percent of the participating leaders had been in a leadership role for more than 10 years, 35% from five to 10 years, and 30% from two to four years. In terms of age, the interviewed leaders ranged from 29 to 61 years (M = 43.4; SD = 21.56). At the time of the data collection, 22.5% were responsible for small teams (i.e., one to four subordinates), 42.5% for mediumsized teams (i.e., five to 10 subordinates), and 35% for large teams (i.e., more than 10 subordinates). Regarding the leaders' frequency of contact with subordinates, 80% of the participants reported having contact with their subordinates several times per day, 7.5% once per day, and 12.5% once per week. Against the backdrop of the diversity of the sample (i.e., different industries, hierarchy levels, gender, tenure, age, team size, and subordinate contact) and the fact that we encouraged each manager to report the full range of subordinate resistance that they were confronted with over the whole course of their leadership career, we consider 40 in-depth interviews an adequate data base for holistically capturing subordinate resistance. Table 1 provides an overview of the demographic characteristics.

Procedure

We invited leaders via e-mail to participate in interviews to learn more about their personal experiences in the leader role. Of the initially contacted leaders, 91% agreed to participate in the interviews. The first author and a research assistant conducted the interviews, which lasted on average 32 min (SD=12.63). All interviews were audio-recorded and transcribed.

We conducted all interviews based on a semi-structured interview guideline and informed participants that the interviews would be recorded. The participants provided informed consent at the beginning of the interviews. Because the type and order of questions were likely to influence participants' responses (Schwarz, 1999), we systematically arranged the order of questions and kept the order constant across interviews. Specifically, we began each interview by providing general information and asking low-threshold questions concerning the participants' own understanding of both their role as leaders and the subordinate role to create an atmosphere of trust. The subsequent questions concerning experiences with subordinates started with positive aspects to mitigate the negativity bias common in recalling workplace events (Dasborough, 2006). We then used a critical incident technique (Bott & Tourish, 2016; Flanagan, 1954) to openly ask for examples of "subordinate behavior perceived as either supportive or destructive." Although in the present study we only analyzed the behaviors perceived as destructive, we included the supportive behav-

Table 1 Demographic information interview partner (N = 40).

	Categories	N	Range
Gender	Male	20	
	Female	20	
Age		43.4	(29-61
Hierarchical level	First-line manager	20	
	Middle management	12	
	High-level management	8	
Years of leader experience	<5	12	
•	5–10	12	
	>10	14	
Number of subordinates	<5	9	
subordinates	5–10	17	
	>10	14	
Contact with	Multiple times per day	32	
	once a day	3	
	once a week	5	
Business sector	Accommodation and Food Services	1	
	Arts, Entertainment, and Recreation	1	
	Educational Services	1	
	Health Care and Social Assistance	3	
	Information	5	
	Manufacturing	14	
	Other Services (except Public	2	
	Administration)		
	Professional, Scientific, and Technical	9	
	Services		
	Public Administration	1	
	Retail Trade	2	
	Transportation and Warehousing	1	
Length of interview		32.2	10–58
(min)			

iors in the interview to avoid biased responses that result from sampling only the dependent variable (cf. Denrell, 2003)³. Throughout the interviews, we applied these two broad categories (supportive and destructive) based on the recommendation by Gioia et al. (2013) that existing definitions should not be imposed on interview partners, given that doing so can potentially result in biased responses. Our goal was to create "rich opportunities for discovery of new concepts rather than affirmation of existing concepts" (Gioia et al., 2013, p. 17). For each incident that a participant recalled, we posed the following three questions: "What was the situation in which the incident occurred (and the

 $^{^3}$ Raw data on supportive subordinate behavior can be found on $\underline{\text{OSF}}$.

antecedents thereof)?", "can you describe as precisely as possible what your subordinate did that affected you in your leadership position?", and "how did you react to the incident/what followed the incident?". As the participants described their experiences, the interviewer summarized and paraphrased the responses several times to encourage the participants to go beyond monosyllabic answers and provide detailed information about every incident. Participants could report any incident that seemed subjectively important to them, which entailed that their responses were not limited to situations involving their current subordinates. As the final question, we asked participants about their views on the ideal characteristics of both subordinates and leaders.

After each interview, we translated the original interview data into English⁴ and ensured the data quality by checking the spelling of the transcripts.

Step 3: Pre-processing the data

The third step in topic modeling comprises the pre-processing of the data to ensure that only meaningful text is analyzed. In line with our research question, we focused our analysis on instances of subordinate resistance, which entailed that we removed invalid statements from the data (i.e., those concerning the interviewees' backgrounds, the definitions of the subordinate and leader roles, positive subordinate behavior, the consequences of subordinate resistance, and ideal subordinate types).

As recommended in best practices for topic modeling, we additionally removed words that carry little information from the data to reduce the vocabulary size and thereby the complexity of the subsequent computational processing (Banks, Woznyj, et al., 2018; Grimmer & Stewart, 2013; Piepenbrink & Gaur, 2017). Using the STM package in R (Roberts et al., 2019), we removed infrequent terms following the suggested threshold of 0.5–1% (i.e., the minimum number of documents a word needs to appear in to be kept retained for further analysis; (Banks, Woznyj, et al., 2018; Grimmer & Stewart, 2013). At the end of the data pre-processing, the data corpus that served as the foundation for our analysis contained 40 documents, 413 terms, and 2,693 tokens (i.e., words). For a detailed description of the stopword analysis, see Appendix A (Table A1).

Step 4a-b: Estimation of the topic model

In the next step, we identified the number of topics contained in the data. Banks, Woznyj, et al. (2018) recommend selecting the number of emerging topics based on the principle of interpretability and the need for parsimony. The authors (Banks, Woznyj, et al., 2018) further suggest grounding the selection of topics in different indicators involving both data-driven and human judgments. We used the STM algorithm to run models that included between two and 20 topics (see Appendix A Fig. A2). As recommended by Roberts et al. (2016), we used spectral initialization with a set seed to generate the same results when rerunning the analysis.⁵

When deciding on the most suitable number of topics, we relied on four statistical metrics to evaluate the characteristics of the topic models (Schmiedel et al., 2019). First, we considered the held-out likelihood, which measures how well each model predicted words within the documents (Wallach et al., 2009). Second, we considered the dispersion of residuals in the model, where lower values indicate a better-specified model (Taddy, 2012). Third, we considered the semantic coherence of

the topics of each model. Semantic coherence is a statistical measure indicating how interpretable topics are based on the likelihood of the most probable words associated with a given topic co-occurring (Mimno et al., 2011). This measure of a topic's internal quality correlates moderately to high with human judgment of topic quality (Mimno et al., 2011). The held-out likelihood, the dispersion of residuals, and the semantic coherence indicate a good fit for models of four-, five-, and six-topic solutions. Lastly, we calculated the exclusivity of words, which indicates the distinctiveness of topics in the same model (i.e., how unique the most probable words are to one topic and the likelihood of them not representing other topics; (Schmiedel et al., 2019). For a graphically illustration of the comparison of semantic coherence and exclusivity of the four-, five-, and six-topic solutions see Appendix A (Fig. A3). These four computational measures (i.e., low held-out likelihood, low residuals, high semantic coherence, and high exclusivity) showed the best values for the model with five topics. Thus, the computational metrics indicated that the five-topic solution best represents the topics underlying the data.

Step 4c-d: Interpretation of the topic model

Although the quantitative measures (e.g., coherence) are highly related to expert judgments of topic quality (Mimno et al., 2011), using a more inductive, researcher-guided approach is crucial to evaluate the face validity of the five topics (Doldor et al., 2019). That is, in the last step in the topic modeling process, we aimed to interpret the topics and set topic labels, topic descriptions, and identify key quotes (i.e., the most representative text passages) for each topic. When examining the emerging five topics, we considered three computer-guided measures to direct the process of defining and labeling each topic: (1) the correlation between the topics (i.e., the dimensionality of the model), (2) the document-topic loadings (i.e., the output of the most probable documents per topic), and (3) key quotes (i.e., text passages containing the FREX [FRequent and Exclusive] words in the documents; Banks, Gooty, et al., 2018).

First, we analyzed the dimensionality of the model by calculating the correlations between the five topics (see Appendix A Table A3), which allow identifying conceptual overlaps among the emerging topics (Banks, Woznyj, et al., 2018; Roberts et al., 2019). The evaluation of the topic correlations did not indicate any dimensionality issues for the five-topic solution (i.e., all topics showed small correlations ranging between -0.17 and -0.31). An analysis of the respective proportions of the five topics in the data indicates an equal distribution of the five topics in the interviews, with no topic being predominant (see Appendix A Fig. A4). Second, more information about the central contents expressed in each topic can be found in the documents with the highest proportion of the topic based on the document-topic loadings (i.e., theta value; see Appendix A Table A4). Following best practice recommendations from Doldor et al. (2019) we identified the top five documents representing each topic. Lastly, to identify key quotes that represent the content of each topic, we subsequently highlighted the respective FREX words in the top five documents. We retrieved the FREX words with the STM for each topic of the five-topic solution.⁶ The five highest FREX words per category can be found in Table 2. Based on these key quotes and FREX words, the first and second author generated a topic label, topic description, and identified the most representative key quotes for each topic. Both authors then exchanged labels and discussed discrepancies until agreeing on a label for each of the five topics (for an equivalent approach see Banks, Woznyj, et al., 2018; Schmiedel et al., 2019; Tonidandel et al., 2021). For instance, the top words for Topic 4, which we labeled "Entitlement," were "right," "see," "longer," "lie," and "problem," which suggested when examining

⁴ The German words used in the interview questions were "Führungskraft" for "leader" and "Mitarbeiter(in)" for "subordinate".

⁵ As spectral initialization is deterministic (i.e., running it with a different seed can result in different results), it should not be interpreted as identifying the "true" number of topics Roberts et al. (2019). However, this approach has been identified as a useful starting point for identifying a valid number of topics when complemented with human judgment Roberts et al. (2019).

⁶ The underlying metric of FREX words is a combination of semantic coherence and exclusivity of words per topic that balances the absolute word frequency and increases the models' interpretability Airoldi and Bischof (2016).

Table 2Final Five topic model with topic labels, topic descriptions, FREX words, and example statements.

Topic	Label	Description	FREX	Example statement
1	Entitlement	The employees' enactment of an exaggerated self-image	Right See Longer Lie Problem	"And what you [the subordinate] yourself think is right" (Interview 3) "[] who saw himself as a mega team player, who is the only one who works at all." (Interview 10)
2	Contact-seeking/ avoiding	The employees shaping their relationship with the leader through the amount of contact seeking or avoiding	Talk Think Question Us Begin	"What sometimes happens is that people are not independent enough. In other words, they constantly ask: 'How should I do it?'" (Interview 15)"[] you would have to at least coordinate and say: "So look, I have an appointment here now, is it somehow feasible and so on". But not debating that and just going, I find uncomfortable." (Interview 5)
3	Effort minimization	The employees prevent and reject their own workload	Chang Get Manag Help Case	"Deadlines are no longer met, and just the work they get from you only slip to priority 2." (Interview 14) "[] it's very difficult to move them, so everything is set in stone, and they're not willing to change." (Interview 13)
4	Emotionally fluctuating communication	The employee varying communication dependent on the employees' current moods/ emotions	Communic Mood Topic Front Present	"And then there are, of course, people who become emotional, who then communicate in the emotionality, then also quite hard" (Interview 11)"[] the 'good mood man,' when he was in a good mood. He was really the 'shitty mood man' when he had a bad day" (Interview 23)
5	Undermining team cohesion	The employees exhibit negative behavior toward the team structure or spread a toxic attitude in the team	Meet Said Tabl Negat Team	"[] always only these extremely destructive and negative, there is always only grumbling and complaining because it takes on such a negative spiral for the whole team at some point" (Interview 33)"I really have employees who are very self-centered and who actually ignore the team." (Interview 1)

Note. The FREX words are stemmed before analysis, that means, reducing each word to its root or word stem (e.g., "communication" and "communicating" are reduced to "communic").

the respective quotes containing these words, that the topic concerned perceived subordinate behavior, such as expressing that they are right and know better than the leader. Specifically, quotes pertaining to this topic contain descriptions of subordinates who express that they know better than their leaders, exaggerate their problems, and seem to protect their inflated self-images using any means such as lying to the leader. Table 2 summarizes the five topics together with the assigned labels, topic descriptions, FREX words, and key quotes (Doldor et al., 2019). In the remainder of this paper, these topics will be referred to as categories of subordinate resistance.

To capture different manifestations of the investigated facets of resistance, we next identified subcategories, following the process outlined by Doldor et al. (2019). Specifically, we systematically analyzed 87.5% (N = 35) of the documents that had the highest probability of representing each topic (i.e., a document-topic loading higher than 0.5; see Appendix A Table A4). This exploratory analysis entailed the use of an inductive researcher-led coding approach to identify fine-grained semantical differences in the data (Doldor et al., 2017) and complemented the higher-level categories from the computational analysis (i.e., Steps 4a-d) by simultaneously leveraging "the richness of qualitative data" (Doldor et al., 2019, p. 11). Taking the five defined categories as a starting point, we examined the documents for subcategories (i.e., facets belonging to each of the topics; see Appendix A Table A5). For instance, in Topic 2 (contact-seeking/avoiding), the leaders reported different forms of subordinate-leader interactions: some described subordinates as being highly dependent on their leaders when it came to planning activities and proceeding with working tasks (e.g., "[they] constantly ask 'how I should do it?", Interview 15). In contrast, the leaders described interactions with other subordinates who "just want to do their own thing and not exchange information at all" (Interview 6). These nuances in perceived subordinate behaviors represent important facets within the identified categories of subordinate resistance. Being guided by the standards of good qualitative research (Dacin et al., 2010), we validated the process of human coding by asking three independent researchers to sort the identified subcategories into the five categories of subordinate resistance. These researchers reached a satisfactory level of agreement of 81% ($\kappa=0.80$; Fleiss, 1971; see Doldor et al., 2019). Adhering to the criteria for transparency in qualitative research (Aguinis & Solarino, 2019), we provide an extensive overview of these subcategories and the respective quotes from the interview data (see Appendix A Table A5).

Results

Our guiding research question asked how leaders experience subordinate resistance and how these perceived instances of subordinate resistance can be categorized. To preview our findings, the topic modeling provided empirical support for five distinct facets, namely (1) effort minimization, (2) undermining team cohesion, (3) emotionally fluctuating communication, (4) entitlement, and (5) contact-seeking/avoiding. Next, we illustrate the five facets of subordinate resistance in more detail and illustrate each category with their respective subcategories and corresponding quotes from the interview data. Fig. 2 presents the final framework of subordinate resistance derived from the interview data.

Entitlement

This category refers to leaders' perception of subordinates' exhibition of an exaggerated self-images and occurs in 17.17% of the analyzed data. Leaders in interviews 3, 10, 12, 18, and 39 provided particularly illustrative examples of this facet of perceived subordinate resistance. Entitlement refers to perceived subordinate behaviors that can be sorted into the following subcategories: displaying a need to always be right, exhibiting an exaggerated self-evaluation, challenging leaders' decisions, overemphasizing one's own problems, denigrating others, and protecting one's positive self-image through lying.

To begin, leaders describe entitlement on the part of subordinates as taking the form of a need to demonstrate that they know better than their leaders (i.e., that subordinates are always right). The interviewed leaders reported subordinates who only accepted that which they thought was right: "What you [the subordinate] yourself think is right"

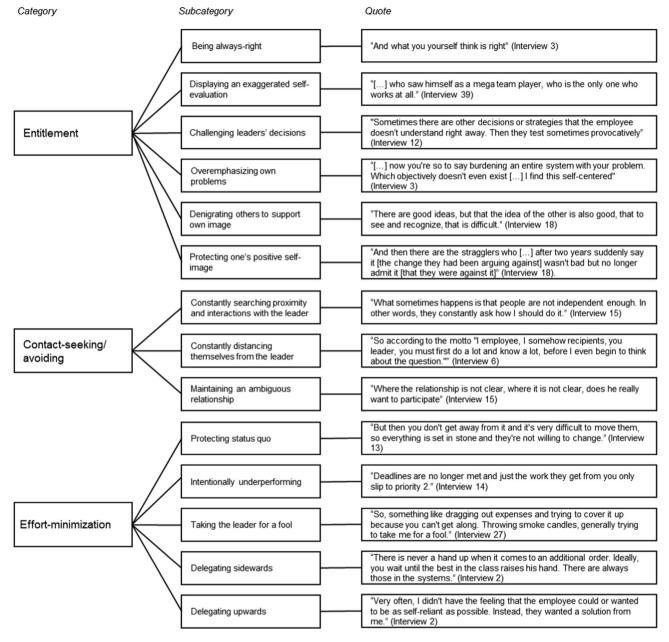


Fig. 2. Overview of the framework derived from interview data (N = 40).

(Interview 3). For example, subordinates may involve themselves in processes they are not qualified to engage in: "[H]e thought he has to solve absolutely every problem, [also those] which do not belong into his field of activity" (Interview 18). Furthermore, the interviewed leaders described entitlement on the part of subordinates existing alongside exaggerated self-images, with one leader referring to a subordinate "[...] who saw himself as a mega team player, who is the only one who works at all" (Interview 10). Such an exaggerated self-image can become evident when a subordinate openly challenges their leaders' decisions based on a belief that they know better. One leader described a subordinate who would "not following instructions, always the classic: 'Yes, but we could...'" (Interview 18). For example, subordinates may challenge their leaders' allocation of resources due to the subordinates feeling neglected or that they were not appropriately taken into consideration. In such cases, subordinates may proactively criticize their leaders and position the latter in the role of "the enemy, because I [the leader] allocate the resources (...) the wrong way" (Interview 3). In addition to striving for access to resources and leaders' attention and recognition, subordinates can exhibit a self-centered perspective by overemphasizing their problems. Subordinates can express this focus on themselves by devoting excessive time in meetings to their own issues, which one leader described as "[...] burdening an entire system with your problem. Which objectively doesn't even exist [...] I [the leader] find this self-centered" (Interview 3). That said, subordinates may try to increase their image through denigrating of other team members. Leaders describe subordinates who engage in such behavior as disregarding the achievements of others which is exhibited as follows: "That the idea of the other is also good, that to see and recognize, that is difficult" (Interview 18). Similarly, if a subordinate's exaggerated self-image is challenged through their own mistakes or misbehavior, that subordinates may engage in self-protective behavior. In such cases, leaders describe subordinates as lying or distorting the facts in their own favor: "And then there are the stragglers who [...] after two years suddenly say it [the change they had been arguing against] wasn't bad but no longer admit it [that they were against it]" (Interview 18).

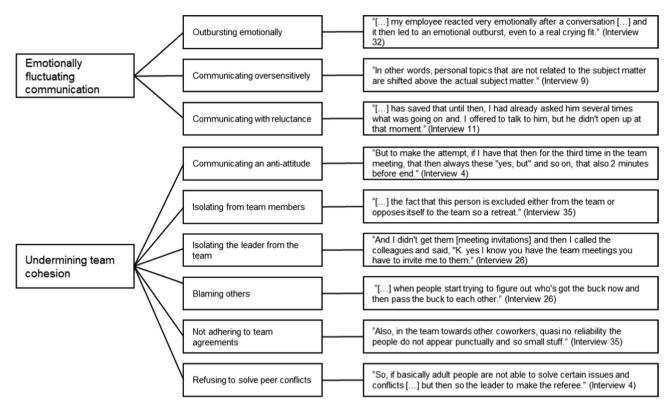


Fig. 2 (continued)

Contact-seeking/avoiding

This category refers to perceived contact-seeking and distancing behavior on the part of subordinates. Such perceived behavior is found in 15.83% of the analyzed data, and interviews 5, 6, 15, 19, and 40 provided examples thereof. Contact seeking/avoiding refers to perceived subordinate behavior that can be sorted into the following subcategories: constantly searching proximity to and interactions with the leader, constantly distancing oneself from the leader, and maintaining an ambiguous relationship with the leader by switching between proximity- and distance-seeking behavior.

Subordinates' search for proximity to and interaction with the leader can cause an excessive amount of leader-subordinate interaction. For example, a subordinate may seek proximity at the beginning of a task by excessively asking the leader for guidance: "What sometimes happens is that people are not independent enough. In other words, they constantly ask 'How should I do it?'" (Interview 15). In addition, they may request support in the process of performing a task: "They frequently come back to me and ask how they should proceed" (Interview 15). Seeking interactions with leaders on the part of subordinates can become evident through frequent subordinate reports on their work status, with the goal of providing such reports being to receive confirmation from the leader. However, the interviewed leaders indicated, that they preferred subordinates who were less dependent on appreciation by the leaders. Putting themselves in their subordinates' place, the leaders would not like to "[...] be dependent on someone else who tells me [the subordinate] what to do because then I'm actually so dependent or dependent on criticism" (Interview 5).

In contrast to making an excessive number of contact requests, subordinates can also distance themselves from their leaders. This perceived distancing behavior on the part of subordinates is defined as refusing to communicate with the leader (i.e., never asking for feedback or withholding information from the leader to avoid any interaction): "[W]hat I find challenging is when people don't say what they think" (Interview 15). Furthermore, subordinates can create distance between themselves and their leader by critically examining the latter's role. Leaders evaluate such behavior as follows: "Where there is a questioning of my leadership position or for me as the person responsible, where I am then questioned" (Interview 15).

The final aspect of contact-seeking/avoiding behavior on the part of subordinates is leaders' perception of subordinates maintaining an ambiguous relationship with the leader. When engaging in this type of behavior, subordinates are perceived as switching between seeking proximity (e.g., seeking communication and feedback) and distancing behavior (e.g., avoiding communication and engaging in critical assessment of the leader). This ambiguous behavior makes it difficult for the leader to grasp the subordinates' motives. Leaders described such behavior as generating an unclear relationship, namely "where it is not clear, does he really want to participate" (Interview 15) and indicating a lack of transparency on part of the subordinates. The desire of transparency described one leader as follows: "[...] of course; you also want to be met with the necessary transparency" (Interview 40).

Effort minimization

This category describes leaders' perception of subordinates pushing away their workloads. The behaviors that belong to this category are particularly illustrated in interviews 2, 13, 14, 27, and 28, and leaders reported this behavior in 23.23% of the analyzed data. Effort minimization includes perceived subordinate behaviors that can be sorted into the following subcategories: protecting the status quo, intentionally underperforming, taking the leader for a fool, delegating sidewards, and delegating upwards.

Protecting the status quo is reflected in subordinates rigidly insisting on existing practices: "For example, by insisting even more strongly on the fact that one should embrace traditional ways: 'we have always done it this way, why should we change everything

now, it has worked well so far" (Interview 27). A more passive way of decreasing one's workload is intentional underperformance (i.e., subordinates lower the quality of their work outcomes). For example, "deadlines are no longer met, and just the work they get from you [the leader] only slips to priority two" (Interview 14). In another approach, instead of lowering the quality of work outcomes, subordinates are perceived by leaders as taking their leader for a fool and exploit distraction on the leader's part to minimize their own efforts. Subordinates who exhibit this behavior may lie about their current work status, sabotage deadlines by downplaying time constraints, or distract the leader with trivial topics. The interviewed leaders described subordinates "[...] who just didn't want to do the job, where I [the leader] really tried to motivate them and get them to perform, but then they always tried to play funny games, be dishonest, or do things behind my back or something" (Interview 30).

Another form of perceived effort minimization on the part of subordinates is delegating work tasks. This delegation of tasks is described by leaders in two ways: sideward delegation to colleagues, with employees "[...] knowing that the others will have to work all the harder" (Interview 2), and upward delegation to the leader. When delegating sidewards, subordinates are described as never raising "a hand up when it comes to an additional order. Ideally, you wait until the best in the class raises his hand" (Interview 2). When delegating upwards to the leader, subordinates redirect work tasks and decisions back to the leader. The interviewed leaders described this behavior as "[...] exhausting, [because] the leader has to take care of it. Very often, I [the leader] didn't have the feeling that the employee could or wanted to be as self-reliant as possible. Instead, they wanted a solution from me" (Interview 2).

Emotionally fluctuating communication

This category refers to perceived communication behavior on the part of subordinates that is highly dependent on their current mood and emotions. This topic occurs in 20.99% of the analyzed data, and interviews 8, 9, 11, 23, and 32 provided examples of such impressions of behavior. Emotionally fluctuating communication on the part of subordinates can be divided into the following subcategories: emotional outbursts and oversensitive or reluctant communication.

Impressions of behaviors belonging to this facet are characterized by a high degree of unpredictable, impulsive, and excessively emotional communication. Leaders described instances where subordinates engaged in emotional outbursts: "People who become emotional, [and] then communicate in the emotionality, then also quite hard" (Interview 11). Furthermore, leaders reported being exposed to such overly emotional communication by subordinates while being alone (e.g., over the phone or via an email) as well as in front of teams: "[...] she was really very vociferous about it [disagreement with the leader] in front of everyone else" (Interview 34). Leaders describe this communication style as "[...] somewhat abusive" to them (Interview 34).

Another component of emotionally fluctuating communication is subordinates impairing communication through their oversensitivity, with one interviewee describing employees who engage in such behavior as "carrying 15,000 sensitivities in front of them" (Interview 9). Subordinates were perceived by leaders as hindering and introducing personal topics into work-related communication – "in other words, personal topics that are not related to the subject matter are shifted above the actual subject matter" (Interview 9). Such behavior can vary based on subordinates' moods – for example, a leader described one subordinate as being "[...] the 'good mood man' when he was in a good mood. He was really the 'shitty mood man' when he had a bad day" (Interview 23) or be highly dependent on the time of day (e.g., a subordinate may routinely complain in the morning and be proactive in the afternoon). Due to such forms of emotionally fluctuating communication, leaders may experience constant insecurity as to how to

avoid conflict when interacting with subordinates who engage in such behavior. To avoid conflict, leaders may arrange tasks around their subordinates' moods: "There are people who are so time-dependent. [...] Then you have to know in the morning time that nothing works" (Interview 11).

Another form of emotionally fluctuating communication is the leaders' impression of subordinates communicating with reluctance. In contrast to emotionally loaded communication, subordinates described as engaging in reluctant communication interact in a very reserved manner and only share necessary information. One leader described reluctant communication behaviors as subordinate: "[I]f one communicates so very little, is very closed" (Interview 11). Even when leaders directly communicate with such subordinates, the latter may refuse to share insights, regardless of whether such insights are task- or relationship-related. A leader provided an example of a subordinate who "[...] has saved that [resentment about the work situation] until then [a team meeting], I [the leader] had already asked him several times what was going on and I [the leader] offered to talk to him, but he didn't open up at that moment" (Interview 11).

Undermining team cohesion

This category refers to the leaders' perception that subordinates undermine the leader's team structure and spreading a toxic attitude in teams. This subordinate behavior was illustrated in interviews 4, 16, 26, 33, and 35, and leaders reported this facet in 22.88% of the analyzed data. Undermining team cohesion refers to perceived subordinate behaviors that can be sorted into the following subcategories: communicating an anti-attitude, isolating oneself from team members, isolating the leader from the team, blaming others, not adhering to team agreements, and constantly fighting with peers.

Subordinates who are evaluated by the leaders as undermining the cohesion of their teams exhibit an anti-attitude and thereby negatively impact the moods of other team members. Leaders describe these subordinates' behaviors as follows "[...] when actually everything is okay, but [they have] always only these extremely destructive and negative, there is always only grumbling and complaining because it takes on such a negative spiral for the whole team at some point" (Interview 33). Another form of undermining team cohesion is described by leaders as subordinates who are isolated from other team members: "[...] this person is excluded either from the team or opposes itself to the team, so a disengagement" (Interview 35). This separation from a team becomes evident to leaders when subordinates "don't talk to other team members [...] 'I don't want to work with that one, I kind of just want to work with that one" (Interview 16). In contrast to excluding themselves from their teams, subordinates are also described as isolating their leaders from their teams. This isolation can become visible in the form of behaviors such as not having lunch with the leader or not inviting the leader to specific meetings: "And I didn't get them [meeting invitations], and then I called the colleagues and said: 'Yes, I know you have the team meetings, you have to invite me to them" (Interview 26).

Another facet of undermining team cohesion is blaming others, which refers to "[...] when people start trying to figure out who's got the buck now and then pass the buck to each other" (Interview 26). Such behavior becomes evident to leaders, when subordinates blame each other when the leader highlights a mistake. Additionally, leaders evaluate subordinates as undermining team cohesion when the latter is not adhering to team agreements: "[...] when you leave colleagues hanging, so this issue of commitment [to help other colleagues]" (Interview 33). The lack of team cohesion makes it then difficult for the leader to create a functioning team: "to work well in a team or at work, I have to be able to rely on it [the agreements]" (Interview 33).

Furthermore, leaders reported subordinates constantly having interpersonal conflicts with peers thereby resisting the leaders' demand to work jointly as a team. Leaders who had dealt with such behavior linked their experience to "constantly forced to do this [solve conflicts], somewhat like teachers who somehow have a few chaotic students in the class" (Interview 4). The subordinates are perceived as showing a lack of interaction with each other and promote conflict within the team: "If they did not want to do it [solve the conflict] then they call for the leader. [...] Employees did not talk to each other [...] but then make the leader the referee" (Interview 4).

Study 2: Prevalence and antecedents of subordinate resistance

We conducted a follow-up study to address the second part of our research question, namely how often leaders experience each of the five identified categories of subordinate resistance in their working life. Furthermore, we wanted to explore how leader-related antecedents (i.e., demographics, cognitive ability, personality) and the situational context (i.e., industry) are associated with the prevalence of subordinate resistance and the leaders' perceptions of the degree of destructiveness of these perceived instances of resistance.

Against the backdrop that we conceptualize subordinate resistance not as a trait but as an intentional choice, it follows that the prevalence of subordinate resistance can be influenced by leader-related and situational characteristics. This assumption can theoretically be substantiated by the path-goal theory, which states that effective leaders provide their subordinates with a clear path-goal direction (House, 1971, 1996). Accordingly, it can be assumed that subordinates show less resistance when leaders are effective in determining and communicating what they expect from subordinates and why. In contrast, when subordinates perceive their leaders as not effective or not convincing (e.g., subordinates do not understand which path to follow, the goal is not clear, the goal is not well communicated), subordinates may be more likely to engage in resistance such as pushing through their own ideas or covertly performing workarounds (Milosevic et al., 2019). These examples illustrate that whether subordinates resist the leaders' demands or not (at least partly) depends on leader-related characteristics that are related to the leaders' ability to clearly define paths and goals. We focus here on widely studied leader demographic characteristics, namely age, gender, tenure, working hours, and leader experience, as well as stable characteristics (i.e., personality). These characteristics have been demonstrated to account for meaningful variance in ratings of workplace behaviors and leader effectiveness (e.g., Felfe & Schyns, 2006; Silverthorne, 2001; Walumbwa & Schaubroeck, 2009; Wang et al., 2019). Moreover, we include leader cognitive ability in the exploratory analysis because it is conceivable that incompetent leaders experience more subordinate resistance as subordinates seek to mitigate the incompetent leaders' harm by not complying with the leader's demands (Antonakis et al., 2017). Additionally, path-goal theory (House, 1971, 1996) would suggest that more intelligent leaders should be more capable of clearly outlining the path and the goal to subordinates, thus triggering less subordinate resistance. Finally, we also consider the situational context in the form of industry. The destructive leadership literature suggests that the environment may influence the occurrence of nonnormative behavior in the workplace (Padilla et al., 2007). Accordingly, we seek to examine whether the prevalence of subordinate resistance varies between industries, thereby exploring the effect of the context on subordinate resistance. Of note, these leader-related and situational characteristics may not only influence whether a specific subordinate resistance is experienced by the leader (Henle & Gross, 2014), but also the degree to which a specific subordinate resistance is evaluated as destructive by the leader (Yucheng Zhang & Bednall, 2016).

In sum, we conducted Study 2 to investigate (1) the base rate of subordinate resistance as reported by leaders, (2) the extent to which the prevalence of subordinate resistance is related to leader characteristics (i.e., demographic characteristics, leader personality, leader

ability) and situational factors (i.e., industry), and (3) the leaders' evaluations of the destructiveness of this subordinate resistance.

Procedure

We recruited people working full-time in a leader role via the crowdsourcing platform ProlificAcademic. Participants received a fixed compensation of £2.33 (3.21 USD at the time) for participating in this study. Considering that research suggests that incentivized responses increase response quality (Krupka & Weber, 2013), we offered two bonus payments of each £1.33 (57% of the total reward; cf. Jensen et al., 2021) for (1) correctly estimating how often other leaders on average experience subordinate resistance, and (2) achieving the highest result in a cognitive ability test.

To further ensure high data quality, we followed recommendations for online data collection, which include the use of multiple screeners (Thomas & Clifford, 2017). First, we used an ex ante exclusion via the platform's integrated pre-screening procedure, which made the study available only to a pre-defined population (Klonek et al., 2020; Porter et al., 2019). Specifically, the pre-screening criteria included current country of residence (US or UK); first language = English; employment status = full-time (during and after COVID-19); number of subordinates ≥ 1 ; supervisor duties = Yes. If participants passed the platform-internal pre-screening, they could open a link to the survey. After reading a brief description of the study, we asked individuals to provide their informed consent to participate in this survey. Second, we also implemented screening for bots (Litman et al., 2018). Third, at the beginning of the study, we asked participants to fill in items concerning their demographic information that again captured the same screening criteria outlined previously. Through this approach, we sought to ensure that participants whose Prolific profiles were not up to date (which may have allowed them to pass the internal prescreening) would still be excluded from the study. Fourth, participants conducted a language test to assess their understanding of English grammar and vocabulary (see Appendix B; Klonek et al., 2020). Participants were excluded from the survey when they did not fulfill the inclusion criteria or failed the English test.

Participants who passed the quality checks were then directed to the main survey. Here, we presented the participants with each of the five categories of subordinate resistance that we identified in Study 1 (i.e., entitlement, contact seeking/avoiding, effort minimization, emotionally fluctuating communication, and undermining team cohesion) and asked the leaders to rate for each category how often they have experienced it, how often other leaders may have experienced it, and how destructive they perceived it. To avoid primacy effects, we presented the categories in random order. Following the items in which the participants rated the subordinate resistance, we included an attention check that asked the participating leaders to indicate the topic that was covered in the previous questions (Thomas & Clifford, 2017). Next, participants completed a personality test (which contained six bogus items; (Meade & Craig, 2012) and a cognitive ability test. After completing the survey, participants received a short debriefing note and were redirected to the Prolific website with a completion code with which they could receive the payment for their participation and the possible bonus payment.

Our final sample consisted of 1,229 participants. We initially recruited 2,199 participants and excluded 486 participants because they did not meet our demographic inclusion criteria, 166 because they failed the English test, 279 because they did not pass the additional attention checks throughout the survey, and 39 because they

ProlificAcademic (https://www.prolific.co) is an online crowdsourcing platform that is designed for data acquisition for scientific purposes. Research reported that common quality parameters (i.e., data quality, participant honesty, and participant diversity) in data collected via ProlificAcademic outperform those from data gathered via competing platforms such as Amazon Mechanical Turk (MTurk) or CrowdFlower (Peer et al.,2017).

did not fill in the personality and/or cognitive ability test. A more detailed overview of all exclusion criteria can be found in Appendix B (Table B1). On average, the participating leaders required 29.25 min to answer the survey (8.96–141.22 min; SD=11.59). Of the 1,229 participants who fulfilled the inclusion criteria, answered the attention checks correctly, and completed the survey, 624 identified as female, 602 as male, and three as another gender. The leaders ranged in age from 19 to 69 years (M=38.12; SD=9.79) and had on average 7.77 years leadership experience (1–37; SD=6.78). They were responsible for 2 to 1,500 direct employees (M=12.22; SD=49.93) and worked from 35 to 90 h per week (M=42.80; SD=7.13). The participating leaders lived mainly in the UK (N=894; 72.7%) and worked in a variety of industries, including retail trade, construction, arts, entertainment, and recreation (for an overview of industries, see Table 6).

Measures

Demographics

We asked leaders to report their age, gender, native language, and country of residence, as well as to provide information about their current work status (i.e., mean working hours, industry, leadership role, leadership experience, and team size). Against the backdrop that people's reporting of their age is often inaccurate due to age heaping (i.e., the tendency of individuals to round their age to the nearest 5 or 10, (Mason & Cope, 1987), we calculated the Whipple index to account for this bias in age reporting. Specifically, we utilized the R package "simPop" (Whipple Index = 107.826) and modeled the reliability of age to be 0.96, which can be considered the proportion of true variance (Antonakis et al., 2017; Bollen, 1989).

Individual prevalence of subordinate resistance

To determine a baseline for subordinate resistance, we asked the leaders to indicate the frequency with which they experienced each category of subordinate resistance (i.e., "In an average year, how often did you experience that one or more of your employees showed [category label]?") on a 5-point Likert scale (1 = Never to 5 = Always).

General prevalence of subordinate resistance

We additionally asked the leaders to estimate how often leaders in general experience the respective category of subordinate resistance (i.e., "If you think about the average leaders' experiences: In an average year, how often did other leaders experience that one or more of their employees showed [category label]?") on a 5-point Likert scale (1 = Never to 5 = Always). We added this incentivized question to capture the true prevalence of subordinate resistance because we expect that participants can accurately extrapolate how often all leaders experience subordinate resistance (irrespective of their age, personality, cognitive ability, and social desirability biases; cf. Jensen et al., 2021). To reach high-quality responses, we incentivized accurate estimations (Jensen et al., 2021; Krupka & Weber, 2013). More specifically, for giving accurate estimates over all five categories, participants could achieve a total bonus incentive of £1.33. This incentive represents 57% of the total compensation for completing the survey and can therefore be considered a high-powered incentive (Jensen et al., 2021).

Individual evaluation of subordinate resistance

To exploratively examine how leader evaluate the different dimensions of subordinate resistance for them as an individual, we asked leaders to report for each category of subordinate resistance on a 5-point Likert scale ($1 = Not \ at \ all \ to \ 5 = Extremely$) how destructive the subordinate resistance was to them (i.e., "How destructive was this behavior for you as a leader?").

Personality

We used the English version of the HEXACO-PI-R (Ashton & Lee, 2009) to measure leader personality. We assessed the six global dimensions Honesty-Humility ($\alpha=0.77$), Emotionality ($\alpha=0.81$), Extraversion ($\alpha=0.82$), Agreeableness ($\alpha=0.82$), Conscientiousness ($\alpha=0.78$), and Openness to Experience ($\alpha=0.81$) with 10 items each. The participants rated the items on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Cognitive ability

We used the short 16-item version of the ICAR cognitive ability test (i.e., ICAR 16) that has an average completion time of eight minutes and demonstrates good reliability and validity (Condon & Revelle, 2014; Young et al., 2019). We instructed the leaders to finish as many items as possible in 16 min. The 16 items consisted of four item types: Letter and number series, verbal reasoning, three-dimensional rotation, and matrix reasoning. The items were coded 1 for correct and 0 for incorrect responses and summarized to determine the total cognitive ability score of each leader ($\alpha=0.75$).

Situational context

To explore whether subordinate resistance occurs more frequently in specific contexts, we also asked leaders to indicate the industry in which they worked; they could choose from 20 industry categories (for a list see Table 5).

Results

Table 3 shows the mean, standard deviations, and correlations between the control variables, the leaders' ratings of their own experience with subordinate resistance (self), the general estimation of the experiences of subordinate resistance (other incentivized), the HEX-ACO personality scores, and the ICAR scores. When comparing the leaders' self-ratings of subordinate resistance (i.e., how often did you experience it?) with the incentivized other-ratings for each category of subordinate resistance (i.e., how often do you think leaders in general experience it?), the data indicate that leaders rate their own experience of subordinate resistance (M = 2.70, SD = 0.63) as less frequent than they estimate the overall prevalence of subordinate resistance (M = 3.19, SD = 0.49; see Table 4). The difference between the self-rating and other-rating is significant, t(1,228) = -31.97, p < .001, d = 0.53, 95% CI [-0.52, -0.46]. A descriptive inspection of the frequency ratings for each category shows a consistent pattern for all five categories in terms of leaders rating their own experience of subordinate resistance as less frequent than for leaders in general. Moreover, in terms of the most frequent categories, the self- and other-rated frequencies indicate a comparable order. Specifically, leaders report entitlement as the most frequently experienced subordinate resistance in both measures (prevalence in self-rating = 2.95, prevalence in other-rating = 3.39) but not as the most destructive one. In that regard, leaders perceive undermining team cohesion as the most destructive subordinate resistance (destructiveness = 3.06; see

As mentioned before, we asked participants to estimate the average reported subordinate resistance of all leaders in general (i.e., the overall prevalence) with an incentivized measure. This approach also allows us to explore whether a leader's estimate is associated with their cognitive ability such that smarter leaders gravitate closer to the actual overall mean (Jensen et al., 2021). To test this assumption, we analyzed whether there are differences among the leaders who underrate (i.e., estimate a general prevalence below the overall mean) and leaders who overrate (i.e., estimate a general prevalence above the overall mean). We use the seemingly unrelated estimation (SUEST) model in Stata to test the split samples simultaneously (Weesie, 1999). The SUEST model combines the estimation results of both models and uses parameter estimates and their associated (co) variance

Table 3 Means, standard deviations, and inter-correlations between the control and study variables (N = 1,229 leaders).

		М	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Age	38.12	9.79	(.93)													
2	Weekly work hours	42.80	7.13	.02	-												
3	Leader experience (in years)	7.77	6.78	.68**	.03	-											
4	Number of employees	12.22	49.93	.03	.03	.04	-										
5	Prevalence of SR (self)	2.70	.63	11**	.04	06*	.06*	-									
6	Prevalence of SR (other)	3.19	.49	08 ^{**}	.03	08**	.01	.57**	-								
7	Destructiveness of SR (self)	2.70	.85	16 ^{**}	.04	09**	.04	.66**	.39**	-							
8	Emotionality	3.21	.69	12^{**}	06*	12**	02	.04	.09**	.06*	(.81)						
9	Extraversion	3.36	.65	.13**	.02	.12**	.09**	10**	02	05	08**	(.82)					
10	Honesty-Humility	3.42	.65	.18**	04	.12**	.02	14**	06*	03	10**	.07*	(.76)				
11	Agreeableness	3.21	.65	.06*	03	.02	01	13**	07*	04	10**	.21**	.32**	(.82)			
12	Conscientiousness	3.90	.53	.05	.05	.05	.08**	02	.05	.01	01	.21**	.25**	.12**	(.78)		
13	Openness	3.54	.70	.08**	.06*	.05	.00	01	04	.01	.00	.15**	.11**	.16**	.14**	(.81)	
14	ICAR	7.56	3.35	03	.01	08**	06*	13**	07*	09**	05**	10**	.06*	.01	.06*	.05	(.75)

Note. ** p < 01, * p < 05.; SR = Subordinate Resistance; Reliabilities of age and multi-item measures in diagonal.

Table 4 Descriptive statistics of the five categories of subordinate resistance (N = 1,229).

Category		M	SD
Overall subordinate resistance	Frequency (self)	2.70	.63
	Frequency (other)	3.19	.49
	Destructiveness	2.70	.85
Effort minimization	Frequency (self)	2.67	.95
	Frequency (other)	3.23	.75
	Destructiveness	2.91	1.23
Undermining team cohesion	Frequency (self)	2.51	.97
	Frequency (other)	3.11	.76
	Destructiveness	3.06	1.35
Emotionally fluctuating communication	Frequency (self)	2.71	.89
	Frequency (other)	3.09	.75
	Destructiveness	2.57	1.10
Entitlement	Frequency (self)	2.95	.91
	Frequency (other)	3.39	.72
	Destructiveness	2.85	1.15
Contact-seeking/ avoiding	Frequency (self)	2.67	1.01
	Frequency (other)	3.11	.81
	Destructiveness	2.13	1.01

Note: Frequency: 1 = Never to 5 = Always; Destructiveness: 1 = Not at all to 5 = Extremely.

matrices to allow statistical testing of differences between the underand overrater models (Edwards, 1995). We apply a Chow test to simultaneously compare all coefficients between the under- and overrater models. The results indicate that the underrater parameters differ significantly from the overrater parameters, $\chi^2(28, 1229) = 52.52$, p < 01 (Chow, 1960). Targeted Wald tests comparing the estimates between the under and overrater model reveal that the estimates for ICAR in under and overrater sample are not the same, $\chi^2(1) = 4.58$, p < 0.05 (Hausman, 1978). Specifically, the assumption of a significant effect of cognitive ability on the prevalence estimation is only partially supported for the overraters. Here, the data indicate that the smarter they are, the closer their estimates are to the actual overall mean. These findings underline the effectiveness of the incentivized measure especially for individuals who overrate.

Next, we explore whether the frequency of subordinate resistance (self-reported) and reported destructiveness are related to the leaders' demographics, leaders' personality (i.e., HEXACO dimensions) and leaders' cognitive ability (i.e., ICAR score). We included dummy-coded industry variables in the regression to account for fixed-effects of industry. To correct for measurement error (Antonakis et al.,

2010), we run the Errors-in-variables (EIVREG) model in R, thereby accounting for the estimated reliabilities of each covariance (for an overview of how the estimates differ between ordinary least squares regression and EIVREG, see Table 5; for a separate analysis of the five categories of subordinate resistance see Appendix B Table B3). The regression model for the EIVREG (see second column in Table 5) indicates that the leaders' Honesty-Humility (b=-0.111, SE=0.048, p=0.020, CI[-0.204, -0.018]), Extraversion (b=-0.111, SE=0.040, p=0.05, CI[-0.189, -0.034]), Agreeableness (b=-0.096, SE=0.042, p=023, CI[-0.179, -0.013]), and leaders' cognitive ability (b=-0.032, SE=0.007, p<001, CI[-0.046, -0.018]) significantly negatively relate to the frequency of experienced subordinate resistance.

Additionally, we explored how specific leader-related and situational characteristics are related to the perceived destructiveness of subordinate resistance (see last column in Table 5). The EIVREG regression model indicates that the leaders' age (b=-0.015, SE=0.004, p<001, CI[-0.015,-0.013]) and cognitive ability (b=-0.021, SE=0.010, p=026, CI[-0.021,-0.016]) are significantly negatively related to the reported destructiveness of subordinate resistance. In contrast, Emotionality (b=0.110, SE=0.048, p=022, CI[0.110, 0.092]) and Conscientiousness (b=0.134, SE=0.066, p=043, CI[0.134, 0.096]), showed significantly positive relationships with the reported destructiveness.

We also tested whether there is an effect of industry on the reporting of subordinate resistance with the errors-in-variables regression in Stata (StataCorp, 2021). The model indicated an overall significant effect of industry on the reporting of subordinate resistance, $\chi^2(19,$ 1229) = 80.18, p < 001. Holding constant all other covariates at their mean values (which we pooled in the constant of the regression), we report the marginal effects of subordinate resistance by industry (see Table 6). The highest marginal mean values in subordinate resistance are reported by leaders working in mining, quarrying, and oil and gas extraction (M = 3.44, SD = 0.42), accommodation and food services (M = 2.92, SD = 0.08), and health care and social assistance (M = 2.88, SD = 0.04). We also compare these marginal values to the overall mean observed value by industry, which indicates a slight difference between the observed and corrected marginal means (see Appendix Fig. B1). Additionally, we test whether there is a difference among the industries. Specifically, applying a correction for multiple tests, the difference between "administrative and support and waste management and remediation services" ($\chi^2(1, 1229) = 21.49$, p < 001), "agriculture, forestry, fishing and hunting" ($\chi^2(1,$ 1229) = 16.22, p < 01), "construction" ($\chi^2(1, 1229) = 16.31$,

Table 5
Prevalence of subordinate resistance for self-rated (OLS and EIVREG), Other Measure (EIVREG) and perceived destructiveness of subordinate resistance (EIVREG).

	Model 1:	Model 2: EIVREG	Model 3:	Model 4:
	OLS		EIVREG	EIVREG
Dependent Variable	SR	SR	SR	Destructiveness
•	(self)	(self)	(other incentivized)	
Constant	3.70***	3.85***	3.34 ***	2.93 ***
	(14.83)	(13.52)	(14.89)	(7.44)
Fixed-effects of industries	included	included	included	included
Age	00*	01	.00	02 ***
	(-1.98)	(-1.84)	(53)	(-3.80)
Working hours	.00	.00	.00	.01
	(1.16)	(1.02)	(.94)	(1.60)
Experience in the leader role	.00	.00	.00	.00
	(.09)	(.19)	(-1.58)	(1.00)
Honesty-Humility	08**	11*	01	05
	(-2.68)	(-2.33)	(26)	(78)
Emotionality	.01	.00	.02	.11*
	(.20)	(14)	(.72)	(2.29)
Extraversion	08**	11**	04	.01
	(-2.72)	(-2.83)	(-1.31)	(.21)
Agreeableness	09**	10*	02	07
	(-2.81)	(-2.27)	(63)	(-1.21)
Conscientiousness	.03	.06	.04	.13 *
	(.88)	(1.25)	(.90)	(2.02)
Openness	.05	.07	.04	01
	(1.70)	(1.91)	(1.44)	(28)
ICAR	02***	03***	02***	02 *
	(-4.51)	(-4.60)	(-3.44)	(-2.12)
R^2	.09	.12	.05	.09

Note. N = 1,229, *p < 05, *p < 01 (two-sided); t statistics in parentheses; SR = Subordinate resistance; OLS = Ordinary least squares; EIVREG = Errors-invariables regression.

Table 6 Industries of Participating Leaders (N = 1,229) and Reporting of Subordinate Resistances Across Industries.

Industry			Marginal Me	an
	N	%	M	Delta-method std. err.
Accommodation and Food Services	34	2.8	2.92	.08
Administrative and Support and Waste Management and Remediation Services	7	.6	2.77	.18
Agriculture, Forestry, Fishing and Hunting	5	.4	2.32	.10
Arts, Entertainment, and Recreation	57	4.6	2.47	.08
Construction	27	2.2	2.75	.12
Educational Services	201	16.4	2.53	.05
Finance and Insurance	109	8.9	2.68	.06
Health Care and Social Assistance	171	13.9	2.88	.05
Information	65	5.3	2.71	.09
Management of Companies and Enterprises	14	1.1	2.45	.17
Manufacturing	80	6.5	2.68	.06
Mining, Quarrying, and Oil and Gas Extraction	3	.2	3.44	.42
Other Services (except Public Administration)	63	5.1	2.76	.08
Professional, Scientific, and Technical Services	134	1.9	2.70	.05
Public Administration	79	6.4	2.59	.08
Retail Trade	105	8.5	2.83	.05
Real Estate and Rental and Leasing	11	.9	2.86	.19
Transportation and Warehousing	34	2.8	2.86	.09
Utilities	19	1.5	2.65	.17
Wholesale Trade	11	.9	2.46	.17

p<001), "professional, scientific, and technical services" ($\chi^2(1,1229)=9.63,\,p<05$) and the other industries is significant.

General discussion

In this study, we developed a classification of different types of subordinate resistance that leaders perceive in their daily working life. In doing so, we add nuance to the followership literature, which has thus far either focused on followers who follow (Chaleff, 1995; Kelley, 1992; Zaleznik, 1965) or scattered instances of descriptions of subordinate resistance (Güntner et al., 2021; Tepper et al., 2001). Using topic modeling to analyze data obtained through interviews with leaders, we identified five unique categories of how leaders perceive subordinate resistance, namely (1) entitlement, (2) contact-seeking/avoiding, (3) effort minimization, (4) emotionally fluctuating communication, and (5) undermining team cohesion. Our classification of subordinate resistance emphasizes that subordinate resistance is a multifaceted phenomenon that includes both passive acts of resistance (e.g., self-isolation, reluctant communication) and proactive expressions of resistance toward the leaders' requests (e.g., taking the leader for a fool, instrumentalizing emotional outbursts, or delegating

upwards). Furthermore, we explored the frequency with which leaders experience each resistance category in their working lives and whether leader-related antecedents and situational factors are related to the leaders' reported prevalence and their perceptions of the destructiveness of subordinate resistance.

Theoretical implications

In contrast to the romanticized picture of the supportive or submissive follower that has been common in the literature (Carsten et al., 2017; Epitropaki & Martin, 2005; Mesdaghinia, 2014; Oc et al., 2023; Xu et al., 2018), the present study adopts a more realistic conceptualization of what subordinates do in their role. In doing so, we (re-)introduce the notion that the term followership according to its meaning excludes any non-following action undertaken by an individual in the subordinate role. As a consequence of the predominant focus on "following", subordinate resistance (i.e., expressing opposition to leaders' requests) has remained underrepresented as one possible way of enacting the role of a subordinate. To further understand the multifaceted phenomenon of subordinate resistance, we asked leaders about the different types of subordinate resistance that they perceive in their daily working life. We chose this focus because the leaders' perceptions of subordinate resistance drive their reactions; for example, they may lead to punishing behaviors by leaders (Martinko et al., 2011). To illustrate, subordinates who are perceived as resisting the leaders' influence attempts particularly negatively impact the leaders' mood and increase subsequent destructive leadership (Güntner et al., 2021). As such, understanding how leaders perceive subordinates who resist their influence attempts can provide valuable insights into how leadership unfolds (or not) through the leaders' reaction to subordinate influence (Oc & Bashshur, 2013; Uhl-Bien & Carsten, 2018). With Study 1, we lay the foundation for studying subordinate resistance as an underdeveloped phenomenon and derive a classification of leaders' perception of qualitatively different instances of subordinate resistance. As we outlined in more detail below, we encourage future research to build on this classification and complement our findings with observational designs and behavioral coding. Such behavioral coding can then validate whether the subordinates' enacted behavior resemble the leaders' description thereof and/or whether further behavioral anchors need to be added (Fischer et al., 2021).

The call for complementary behavioral coding does not imply that (leaders' or subordinates') perceptions of behaviors should be ignored but instead suggests developing a better understanding of how actual behaviors and perceptions of these behaviors relate to each other (Fischer et al., 2021). As such, it is important to separate the (perception of) the behavioral instance from the evaluation of this behavior. In Study 2, we followed this line of thought and provide an example of a separate measurement that captures not only a leader's perceived prevalence of subordinate resistance (i.e., how often a leader experienced subordinate resistance) but also the leader's evaluation of such perceived behavior (i.e., how destructive the subordinate resistance was for the leader). With this measurement approach, we contribute to the ongoing discussion on establishing theoretically sound concepts in the leadership literature that specify the boundaries of a concept based on closely related antecedents and outcomes (Fischer et al., 2021; MacKenzie, 2003). Specifically, we found that subordinate resistance in the form of entitlement (undermining team cohesion) was the most (least) frequently reported category by leaders, whereas subordinate resistance in the form of undermining team cohesion (contactseeking/avoiding) was rated the highest (lowest) in terms of destructiveness.

In the following sections, we elaborate in more depth on potential antecedents and consequences of subordinate resistances. We first discuss how leaders may (unwittingly) set the conditions for subordinate resistance and that situational characteristics as well as subordinate characteristics can also affect the occurrence of subordinate resistance.

Next, we turn to the potential consequences of subordinate resistance by considering that subordinate resistance can lead to both constructive and destructive outcomes for subordinates, leaders, or third parties, respectively. We conclude by consolidating the antecedents and consequences mentioned in the discussion section into an overarching model that we introduce as a nomological net of subordinate resistance to guide future research endeavors.

Antecedents of subordinate resistance

Based on the findings of Study 2, we next discuss the leader-related and situational correlates of subordinate resistance. We then draw on the person–situation debate to discuss how subordinate characteristics may set the stage for their resistance (Judge & Zapata, 2015).

Leader-Related Antecedents. Our findings indicate that five leader-related characteristics were associated with the leaders' self-reporting of the occurrence of subordinate resistance: Honesty-Humility (negative coefficient), Extraversion (negative coefficient), Agreeableness (negative coefficient), Openness (positive coefficient), and cognitive ability (negative coefficient).

First, the data indicate that leaders scoring high in Honesty-Humility reported fewer instances of subordinate resistance. Individuals who score high in Honesty-Humility are associated with beneficial leadership qualities, such as being sincere in relationships with others, unwilling to manipulate others, avoiding fraud and corruption, and not taking advantage of others (Breevaart & Vries, 2017; K. Lee & Ashton, 2004). In contrast, research has associated leaders who score low in Honesty-Humility with more counter-normative behaviors and more abusive leadership (Bendahan et al., 2015; Vries & van Gelder, 2015). Thus, we consider it theoretically plausible that leader who score low in Honesty-Humility experience more subordinate resistance because subordinates intend to counteract and protect themselves from the exploitation of the leader. Relatedly, being sincere in the relationship with subordinates and presenting an authentic self makes the leader more predictable for subordinates and increases the subordinates' trust in the leader (Peus et al., 2012). This increased trust in the leader, in turn, can positively contribute to the leader effectiveness (i.e., subordinates are more likely to follow the leaders' goal; Breevaart & Zacher, 2019), thus reducing the likelihood of subordinate

Second, the data indicated that leaders who score high in Extraversion reported fewer incidents of subordinate resistance than leaders who score low in Extraversion. It is theoretically plausible that extraverted leaders have more convincing communicational skills, and therefore experience less subordinate resistance compared to leaders who score low in Extraversion (T. Mitchell et al., 2021). In contrast, more introverted behavior and a tendency to not talk much on the part of leaders may encourage subordinates to question the requests of and ultimately resist leaders. Furthermore, although subordinate resistance can be experienced as unpleasant, conceptual work such as the mood congruence judgment model (Bower, 1981) suggests that extraverted leaders are more likely to recall positive subordinate interactions because such interactions are in line with their positive selfevaluations. In summary, both explanations could account for why leaders with high Extraversion scores recall less subordinate resistance than do leaders low in Extraversion.

Third, we found that leaders who score high in *Agreeableness* reported encountering subordinate resistance less frequently than leaders who scored low in Agreeableness. More generally, research has established that highly agreeable leaders attempt to establish harmonious relations with their subordinates and adopt subordinates' perspectives when interacting with them (Ashton & Lee, 2009). Such perspective-taking might increase leaders' knowledge of subordinates' needs, which in turn enables leaders to formulate requests in such a manner that subordinates are likely to agree to act upon them (i.e., to provide a better path-goal orientation). In contrast, subordinates perceive leaders who score low in agreeableness as more abusive over-

all (Breevaart & Vries, 2017). Speculatively, through their behavior, leaders who score low in agreeableness may thus trigger a vicious cycle in which they engage in more abusive leader behaviors, leading to more subordinate resistance, with leader–subordinate interactions subsequently spiraling into resisting dynamics (e.g., Güntner et al., 2020).

Fourth, leaders scoring low in Openness indicated perceiving less subordinate resistance compared to leaders scoring high in Openness. Research on the relationship between abusive or destructive leadership and Openness showed no association of Openness and hostile behavior (Breevaart & Vries, 2017). However, research indicates that high scores of Openness are associated with more willingness to argue with others (Caprara et al., 1996). That is, leaders with high scores in Openness may debate more with their subordinates, thereby encouraging a culture of open idea exchange and critical thinking through their own role modeling. Such a role modeling effect makes it plausible that subordinates emulate the leaders' example and engage in more argumentation and resistance towards their leader. This reasoning can also be connected with the social cognitive theory (Bandura, 2001), which suggests that the leaders' behaviors (unwittingly) encourage subordinates social learning and increase the likelihood that subordinates show comparable behaviors (Ng et al., 2021).

Fifth, the findings indicate that the cognitive ability of a leader is negatively related to the frequency of perceived subordinate resistance. This finding can be interpreted in light of the path-goal theory that states that effective leaders provide their subordinates with the correct path-goal clarification (House, 1971, 1996) – which evidently requires sufficient cognitive abilities to do so. According to this theory, effective leaders increase the subordinate's satisfaction by outlining a clear goal and concrete steps of how to achieve this goal, thereby increasing the motivation of their employees and decreasing the likelihood of subordinate resistance. In line with the notion that such a path-goal clarification requires sufficient cognitive capabilities of the leader, empirical studies suggest that subordinates react to incompetent leaders by engaging in resistance such as attempting to neutralize the leaders' detrimental impact on the subordinates through workarounds (Milosevic et al., 2019). As a caveat, low cognitive ability and incompetence as a leader are not the same, which entails that future research is needed to pinpoint why leaders with higher cognitive ability are less likely to report subordinate resistance.

Situational Characteristics as Antecedents. Subordinate resistance does not happen in a vacuum but instead is influenced by situational characteristics (M. S. Mitchell & Ambrose, 2012) that can strongly influence how subordinates react to their leaders' requests. A subordinate's work situation is largely shaped by work design factors and the social work context. In terms of work design, research has for example established that working in autonomy restricting environments - such as manufacturing or gastronomy - requires self-control from subordinates to avoid impulsive reactions (Rivkin et al., 2015). Such self-control demands can result in self-regulation depletion and, as a result, higher subordinates negative affect (Halbesleben et al., 2014; Hobfoll et al., 2018). For example, time pressure (Mühlenmeier et al., 2022), emotional labor and surface acting (Bechtoldt et al., 2007), as well as perceived unfairness (Kong et al., 2020) have been linked to higher levels of negative affect in subordinates, which in turn is associated with more resistant behaviors (Marcus & Schuler, 2004; Yang & Diefendorff, 2009). This is not necessarily because employees are "vicious individuals" but instead because they want to protect their remaining energetic resources. Although some work design characteristics may increase subordinate resistance, research also points to work design factors that make subordinates more likely to accept leader demands even when they perceive those demands as unethical (Padilla et al., 2007). More specifically, subordinates who experience high levels of instability and immanent threat at work are more prone to agree with their leader and avoid voicing their concerns to not risk negative outcomes for

themselves (Padilla et al., 2007). To conclude, the existing evidence indicates that depending on the type of work design, the likelihood of subordinate resistance to the leaders' requests can be increased or decreased.

In terms of social work contexts, we explored the industries in which the leaders and their subordinates work. Our findings suggest that leaders in some industries (i.e., mining, quarrying, and oil and gas industries; accommodation and food services; and the health care and social assistance) report more subordinate resistance than leaders in other industries (e.g., agriculture, forestry, fishing and hunting). One possible explanation for the different base rates in different industries is provided by the social learning theory (Bandura, 2001), which suggests that subordinate resistance can be considered as an adaptation to a specific social context and an outcome of a social learning process. According to this theory, individuals change their behavior to adapt to their social environment and mimic the behavior of relevant others. Accordingly, it is plausible that industries in which many instances of resistance occur further encourage resistance among subordinates. Empirical research on subordinate voice and unethical behavior supports this reasoning by indicating that subordinates often mimic behaviors that are predominant in their social environment (Ng et al., 2021; O'Fallon & Butterfield, 2012). Notably, building on social information processing (Salancik & Pfeffer, 1978), it is not only the behavior of stakeholders and colleagues at work (as expected, e.g., in the mining, quarrying, and oil and gas industries) that may be subject to mimicry processes; costumer behavior (e.g., resistance from customers as commonly experienced in the accommodation and food services and the health care and social assistance) could also represent a source of social learning (Chi et al., 2018).

Another explanation is based on the concept of finding meaningfulness in work (Aguinis & Glavas, 2019; Grant, 2012; Rosso et al., 2010). Research in the hospitality literature indicates that subordinates' perceptions of their respective organizations' contributions to a greater good influence the likelihood that subordinates will engage in extrarole behavior and voice (Afridi et al., 2020; Liu et al., 2021). That is, the perceived corporate social responsibility of organizations positively influences how subordinates engage, both professionally and critically, with work tasks, identify problems and suggest improvements (Liu et al., 2021). This potential relationship indicates that when subordinates perceive their organization as serving a greater good, they will be more conscious and critical with leadership and therefore will be more likely to resist their leaders when they do not agree with their leader.

Once a Resisting Person, Always a Resisting Person? The Person-Situation Debate. Thus far, we have emphasized that subordinate resistance is not a trait but can instead manifest to different degrees in different situations. However, one could argue that there is also a trait-like component to subordinate resistance. For example, it would be plausible that less agreeable leaders (e.g., those who prioritize their own needs over those of others) not only perceive more subordinate resistance but, when taking on the role of a subordinate, also show more resistance across situations than people who score high in Agreeableness. The longstanding person-situation debate concerns exactly this question, namely the discussion over the degree to which personal and situational characteristics determine a specific behavior (Judge & Zapata, 2015; van Knippenberg & Hirst, 2020). In that regard, it is interesting to note that most organizational members, including leaders, spend most of their time as subordinates (Rost, 1993; Uhl-Bien et al., 2014). Acknowledging that leaders are often also subordinates raises the question of whether resistance is at least partly inherent to a person, meaning that an individual may be more likely to exhibit such behaviors across situations (i.e., do people who frequently exhibit effort minimization also frequently exhibit laissez-faire leadership/non-leadership?). Research on behavioral consistency between the work and family domains suggests that the same behavioral tendencies can indeed be found in both domains (Carlson et al.,

2019; B. Cheng et al., 2019; Grzywacz & Marks, 2000). Thus far, the leadership literature lacks insights into how consistent leaders/subordinates' behavior is across different roles at work (i.e., when a leader switches to the role of a subordinate and vice versa; cf. Michel et al., 2014). In the case of subordinate resistance, specific personality traits could explain why some people perceive situations in a certain way and/or show more resistances (and also do so consistently across situations). To conclude, future researchers would be well advised to consider both personality and the situational context when studying the antecedents of subordinate resistance.

Outcomes of subordinate resistance

In Study 2, we provide large-scale empirical evidence for the frequency of the five identified categories of subordinate resistance, which clearly shows that the prevalence rates and perceived destructiveness vary across the five categories. One reason for the varying prevalence rates between the categories of subordinate resistance may be the relation with their perceived destructiveness. Those categories that are perceived as more destructive by the leaders (i.e., undermining team cohesion) may also trigger the harshest responses from the leaders (e.g., abusive leadership). In contrast, frequently experienced categories (e.g., entitlement) may be associated with less harsh responses from the leaders. Resultingly, subordinates expect different consequences for engaging in activities associated with each category. It is plausible that subordinates are more likely to engage in types of resistance that fall in categories with more desirable outcomes (e.g., subordinates' workload is reduced), whereas they will be less likely to engage in activities associated with high costs (e.g., leader punishes them in front of the team). However, these costs/benefits may occur at different levels (i.e., those of the subordinate, the leader, and third parties), which makes assessing the potential outcomes of subordinate resistance more complicated. That is, although the leaders in Study 2 rated undermining team cohesion as the most destructive subordinate resistance (M = 3.06), this finding should not be considered as indicating that resistance belonging to the category of undermining team cohesion also leads to the most destructive outcomes for subordinates. In the next sections, we therefore discuss (1) consequences that subordinates might face when engaging in specific resistance, (2) reactions of leaders when experiencing specific subordinate resistance, and (3) secondary spillover effects of specific subordinate resistance on third parties.

Outcomes for Subordinates. When engaging in subordinate resistance, subordinates may anticipate the (constructive or destructive) consequences of such behavior for themselves and compare those anticipated outcomes with the actual consequences of their behavior. Both aspects impact whether a specific behavior is initially shown, remains a transient case, or turns into a chronic case. Specifically, it can be expected that subordinates who experience punishment for their resistance likely decrease their level of resistance towards their leaders (Güntner et al., 2021). Conversely, subordinates who experience positive consequences from their resistance (e.g., protecting themselves against a toxic leader; Frieder et al., 2015) likely engage in more resistance in the future until they may even chronically resist their leaders. In short, this process of social reinforcement influences the likelihood of the reoccurrence of subordinate resistance (DeRue & Ashford, 2010). Of note, the consequences for subordinates can be differentiated based on their immediacy into first-order consequences (which occur immediately after the subordinate resistance) and second-order consequences (which unfold over a longer period of time).

In terms of destructive outcomes, subordinates who engage in resistance challenge their leaders' control and position of power. This might prompt leaders to feel that their identities are being attacked (i.e., that they are facing identity threats; Tepper et al., 2017). The resulting loss of status and anticipated adverse emotions can cause leaders to take direct countermeasures against their subordinates

(first-order cost). For example, a leader may reduce rewards or refuse to acknowledge subordinates' ideas (Burris, 2012), prevent subordinates from interacting with them (Güntner et al., 2021), or denigrate subordinates' performance (Tepper et al., 2006). Furthermore, leaders may react to subordinate resistance with destructive leader behaviors, which can in the long term result in low performance and reduced well-being on the part of subordinates (second-order cost; Mackey et al., 2017). In summary, engaging in subordinate resistance can prove very costly for subordinates in terms of their careers and health.

Concerning constructive outcomes, as a first-order benefit, subordinates may have more positive feelings toward themselves or feel more competent if they show resistance to regain some autonomy at work (Lawrence & Robinson, 2007). Moreover, third parties (such as colleagues or other leaders) may perceive subordinate resistance as evidence of leadership qualities and as an upward influence attempt (Tur et al., 2021). To illustrate, when a subordinate resists an innovation-blocking leader or refuses to follow overly complicated process steps, other people may perceive this as a reasonable upward influence attempt that may have constructive consequences for the subordinate in question by improving that subordinate's social standing in the team (first-order benefit). Moreover, such actions may also lead to beneficial career consequences, such as receiving positive leadership potential evaluations in the long term (second-order benefit). As another example, refusing to follow unethical leaders (as many have done when, e.g., facing megalomaniac presidents) can have a beneficial impact beyond generating support from peers by also increasing the likelihood of future career support (e.g., obtaining a position in the workers' council).

Outcomes for Leaders. Many leaders may feel attacked and experience destructive consequences (e.g., in the form of ineffective processes, energy-draining experiences, loss of control/power or identity threats) due to subordinate resistance (Güntner et al., 2020; Güntner et al., 2021; Tepper et al., 2006). Such destructive experiences often fuel a vicious circle of resistance in the leader-subordinate dyad (Thoroughgood et al., 2012). In addition to negatively affecting this dyadic relationship, subordinate resistance may negatively affect third parties' evaluations of leaders. Research on workplace incivility shows that supervisors and co-workers often punish mistreated employees, with the result that the punished employees also engage in incivility, which causes additional stress for and devaluation of the victims (Skarlicki & Turner, 2014). Such devaluation can occur, for example, by ascribing a lower degree of competence to the victim or expressing biased judgments (e.g., evaluating victims of rudeness as rude themselves; Kluemper et al., 2019). Such a spillover of behavior from one person to a wider group of individuals may also happen to leaders who are the victims of subordinate resistance, with the result that these leaders may be devalued by their peers, superiors, or other subordinates.

Regarding constructive outcomes, it is worth noting that our findings indicate that leaders rate some behaviors (e.g., subordinate resistance related to undermining team cohesion) as much more destructive than others (e.g., subordinate resistance related to contact-seeking/avoiding). On average, the leaders involved in Study 2 rated the destructiveness of subordinate resistance as 2.70 on a scale ranging from 1 = not at all to 5 = extremely (with 3 = somewhatdestructive). Accordingly, subordinate resistance may not be solely extremely destructive but rather may under some circumstances also have constructive consequences. This double-sided nature, however, is largely overlooked due to a negativity bias toward subordinate resistance (i.e., focusing on negative/destructive outcomes of subordinate resistance). To explain why there could also be beneficial side-effects for leaders, consider that leaders may occasionally interpret follower resistance as a challenge to develop themselves to become better leaders. For example, they may interpret subordinate resistance as a job demand that requires a coping response to regulate the increased stress levels that leaders may experience (Yiwen Zhang et al., 2019). Leaders

may then choose a coping response based on whether they perceive the subordinate resistance as uncontrollable (i.e., a hindrance) or manageable (i.e., a challenge; Skinner & Brewer, 2002). Relatedly, the data from Study 2 indicate that leaders who are older and have higher cognitive ability scores perceive subordinate resistance as less destructive because such leaders may feel they have sufficient life experience or cognitive capacity to manage subordinate resistance. In contrast, leaders who score high in Conscientiousness (i.e., leaders who value disciplined and organized surroundings) rate subordinate resistance as more destructive because they might feel hindered in their otherwise highly structured work processes. Likewise, the higher destructiveness ratings of subordinate resistance from leaders who score high in Emotionality (i.e., who feel scared and attacked when their need of social support and attachment is not met) may be rooted in a higher sense of rejection as a person and higher senses of fear. If a stressor is perceived as a hindrance, leaders will be more likely engage in an avoidance reaction, which implies directing attention and energy away from a demand or attempting to rid themselves of subordinates who engage in resistance. In contrast, manageable stressors more likely provoke an approach reaction, in which the focus of attention and energy is directed either at the triggered emotions and thoughts (e.g., anger and rumination) or at the source of stress (e.g., the resisting subordinate; Tepper et al., 2007; Xu et al., 2015). To illustrate some approach reactions, leaders may cope with the affective and cognitive consequences of subordinate resistance by attending a leadership training, attempting to strengthen their own self-esteem through selfpromotion (Vogel & Mitchell, 2017), engaging in moral cleansing (i.e., compensating for the negative behavior of others with overly constructive/moral behavior on one's own part; Ahmad et al., 2020; Mullen & Monin, 2016), or actively speaking out against the resisting subordinate and motivating others to do so (Frieder et al., 2015). Whereas it is difficult to determine whether a person has truly became a better leader due to the resisting subordinates they have had to deal with, it is at least theoretically plausible that a leader may grow through such an experience when they receive helpful feedback during this process (Oc et al., 2015; Sparr et al., 2017).

Outcomes for Third Parties. Last but not least, subordinate resistance can also impact a team or organization as a whole (i.e., third parties). In terms of destructive outcomes, subordinate resistance could also negatively affect leaders outside of the subordinate-leader dyad. That is, based on social learning processes (Bandura, 2001), other subordinates may see and imitate a focal subordinate's resistance (firstorder consequences), leading in the long-term to a corporate culture of destructive resistance in which leaders encounter difficulties in effectively engaging in influence attempts and subordinates are more likely to leave their jobs (second-order consequences). In terms of outcomes that could be interpreted as helpful, it is possible that organizations may perceive some subordinate resistance (e.g., protecting the status quo when changes may be unethical, delegating upwards when subordinates refuse to fulfill unethical requests, or isolating a leader from their team to reduce the leader's social influence) as a warning sign against ethically questionable behaviors on the part of leaders or as a hint that certain leaders are simply not effective in designing suitable "path-goals" for their subordinates. Similarly, teams could profit from a subordinate who resists an unethical or abusive leader because this subordinate may demonstrate alternative behavioral options to other team members that the latter could employ instead of becoming depressed or suffering personally (Schyns & Schilling,

Introducing a nomological net of subordinate resistance

To summarize our discussion and introduce a holistic concept of subordinate resistance that is distinct from its related antecedents and outcomes, we sketch a nomological net that consolidates the proposed antecedents and outcomes in the form of an overarching model (see Fig. 3). Reflecting the person–situation debate outlined above, the

model indicates that the five different types of subordinate resistance can be triggered by subordinates' social environment – which includes (1) their leader and thus leader-related antecedents (leader traits and behaviors), (2) situational characteristics (e.g., those of a particular industry), and (3) subordinate-related antecedents (traits). We further propose not only that these factors separately shape subordinate resistance but also that leader-related antecedents can interact with situational characteristics and subordinate-related antecedents in a reinforcing or attenuating way. In terms of the consequences of subordinate resistance, the model suggests that these instances of resistance are not destructive per se; instead, a nuanced perspective that considers who experiences the destructive or constructive outcomes of subordinate resistance leads is warranted.

The model is also intended to guide future research endeavors. First, our research offers initial insights into leader characteristics that influence the perceived occurrence of subordinate resistance (i.e., leader cognitive ability, and personality). In addition to exploring other leader-related trait-like antecedents, it may also be worth exploring concrete leader behaviors (e.g., the use of punishment, incentives, or specific leadership styles, such as charisma; Meslec et al., 2020) as correlates of specific subordinate resistance. For example, charismatic leaders may provide a clearer path-goal orientation by utilizing charismatic communication that increases their subordinates' motivation to achieve the leaders' goals (Meslec et al., 2020) and therefore experience less subordinate resistance compared to non-charismatic leaders. Second, we also explored industry as a situational factor that can influence the degree to which different types of subordinate resistance occur. Future research may consider investigating other theoretically plausible situational factors, such as a hierarchical organizational culture, which may reduce subordinate resistance (Tepper et al., 1998), or an insecure economic environment in which subordinates fear losing their jobs and could therefore show more resistance (Reisel et al., 2010). Third, we have already broached the topic of subordinaterelated factors (e.g., disagreeable subordinates may show more resistance than agreeable subordinates; Tepper et al., 2001). Thus, future research could investigate the degree to which the Big Five personality traits relate to subordinate resistance (Abdullah & Marican, 2016). Alternatively, future researchers may also seek inspiration from destructive leadership research and study the impact of dark triad personality traits among subordinates to explore why certain subordinates tend to be more likely to engage in particular forms of subordinate resistance than others employees. The dark triad personality types might make specific behavioral repertoires more accessible such that subordinates who rate high in Machiavellianism and Psychopathy engage in hard forms of resistance (e.g., openly displaying exaggerated self-evaluation, challenging leaders' decisions, or engaging in emotional outbursts), whereas subordinates who rate high in Machiavellianism and Narcissism engage in softer forms (e.g., constantly distancing themselves from the leader, intentionally underperforming, or delegating sidewards; Jonason et al., 2012; Schyns et al., 2019).

It should be noted that scholars should consider the base rate of the studied phenomenon when investigating the outcomes of subordinate resistance. For example, although it may be the case that in a hypothetical study, low levels of resistance have a small positive relationship with constructive or destructive outcomes, it would not be appropriate to extrapolate a similar impact of high levels of subordinate resistance on constructive or destructive outcomes; instead, the relationship might be non-linear (Fischer et al., 2017). For example, the possibility of resource loss spirals (Hobfoll et al., 2018) would speak against a linear relationship between subordinate resistance and destructive outcomes for a leader. This non-linear relationship could be because a decrease in a leader's performance due to subordinate resistance may spiral into disproportionally higher future losses because the leader may feel drained and show insecurity when further interacting with subordinates. The leader's insecurity may then trigger even higher levels of subordinate resistance because the subordinates may

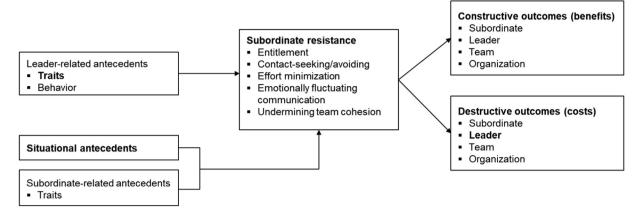


Fig. 3. Nomological net of subordinate resistance. Note. Constructs that are printed in bold were empirically captured in the present research.

not perceive the leader as capable of leading (Milosevic et al., 2019). With this possibility in mind, we encourage future researchers to develop a nuanced picture of the outcomes of subordinate resistance at different levels by including frequency measures of subordinate resistance.

Limitations

Although the topic modeling approach that we used in Study 1 constitutes a promising approach to analyzing qualitative data more objectively and providing reproducible results, this technique is not free from limitations. For example, topic modeling ignores the order of words and analyses commonly co-occurring words. Nuances in data, such as sarcasm or idioms, are therefore not considered in the analysis. Hence, although topic modeling offers statistical metrics that support the selection of topics, human coding is still needed to label and interpret the topic content. Without supplementary human coding, the data cannot be explored in depth, and researchers may be at risk of using topic modeling as a "quick fix for identifying themes" (Doldor et al.,

Furthermore, although we implemented several means to avoid biases and enhance the accuracy of recall in the interviews reported in Study 1 (e.g., not only asking leaders about the focal construct of interest - their perceptions of subordinate resistance - but also about supportive behaviors, McDermott, 2023; applying a critical incident technique that elicits "episodic memory to foster accuracy [of recall] at the behavioral level," Hansbrough et al., 2015, p. 231) the interview data still reflect subjective insights from leaders as "knowledgeable agents" (Gioia et al., 2013, p. 17). Such retroactive recalls of subordinate resistance may still be conflated with memory bias and other individual factors (e.g., participants' self-interest, mood, personality traits, and societal norms; Bernard et al., 1984; Charles et al., 2003; Hansbrough et al., 2015; Krasikova et al., 2013; Skarlicki & Turner, 2014). More specifically, one individual factor that might influence the accuracy of the data is the tendency of individuals to present themselves in a better light (e.g., in accordance with social desirability, selfserving biases, and impression management; Davis et al., 2010; Jacoby et al., 2001; Sanna & Chang, 2003). This bias is also relevant for Study 2, in which we collected leader-related characteristics such as personality traits from the leaders and also asked them to report how often they have been experiencing subordinate resistance (i.e., same source data). In this setting, self-serving bias could be one explanation for why the leaders' self-rated frequencies of experiencing subordinate resistance are lower than the frequency ratings concerning how often leaders in general experience subordinate resistance (incentivized other; Sassenrath, 2020). More specifically, the accuracy of the recall could be biased toward lower self-reported values for leaders who

report higher Honesty-Humility, Extraversion, and Agreeableness because these leaders may be subject to higher social desirability or self-serving biases and therefore tend to report lower levels of selfexperienced subordinate resistance in the non-incentivized measure than they do in the incentivized measure. This is because such leaders might perceive subordinate resistance as indicating their own failure in filling the leader role, which may motivate (some) leaders to (subconsciously) report lower frequencies of subordinate resistance than actually experienced. To understand the role of such biases in more depth and to overcome the limitation of same source data, future research should leverage innovative methods and technical advancements to collect objective subordinate behavior (for ideas, see Banks et al., 2021; Hemshorn de Sanchez et al., 2022). For example, behavioral coding of subordinate-leader interactions in real workplace settings or high-stake simulations such as simulations for medical teams (Kolbe et al., 2014; Mona Weiss et al., 2018) could be used to validate whether the subordinate resistance categories identified in the present leader-focused research can equally be found in these settings. Furthermore, to collect field data on subordinate resistance, scholars could also consider utilizing archival data from e-mail or chat communication, either through a corporate collaboration or by utilizing data from instances in which companies are forced to make such data publicly available (e.g., due to jurisdictional order; Reyt & Wiesenfeld, 2015; Toubiana & Zietsma, 2017). With the recent developments in machine learning technology and virtual reality (VR), researchers could also combine the internal validity of laboratory experiments with more realistic representations of subordinate resistance (for an overview of recent developments, see Hubbard & Aguinis, 2023). For example, researchers could more realistically investigate how leaders react to resisting subordinates by presenting participants via virtual reality goggles with video vignettes of subordinate resistance (Aguinis & Bradley, 2014) and then consider their verbal (Güntner et al., 2020) or nonverbal reactions (e.g., visual attention, Cheng et al., 2022). In such a VR context, scholars could also explore which leader-related antecedents particularly drive a biased perception of subordinate resistance (i.e., perceiving subordinate resistance to a higher degree than actually enacted), thereby potentially also being able to collect large sample sizes that allow to identify which patterns of leader characteristics predict how strongly they react toward subordinate resistance (A. Lee et al., 2020).

Last but not least, in Study 2, we explored the frequency with which leaders experience subordinate resistance using a cumulative measure (i.e., asking leaders, "In an average year, how often did you experience that one or more of your employees showed [insert here one of the five categories of subordinate resistance]?"). However, this measure can be biased in three ways: First, the response anchors (e.g., 3 = sometimes) leave room for subjective interpretation. To address

this bias, future research should apply clear frequency measures that are specific and bound in times (e.g., 3 = once per week). Second, the measure we applied is sensitive to the number of subordinates a leader supervises (e.g., if a leader has more subordinates, there are also more opportunities to experience subordinate resistance). In that regard, the measure also does not provide information about how many of a leader's subordinates engage in specific subordinate resistance or how often different subordinates show particular types of subordinate resistance. Accordingly, we encourage future researchers to employ a more nuanced measure that captures how many subordinates engage in the range of identified resistance and to what degree. This could be accomplished, for example, by using experience sampling methods (Matthias Weiss et al., 2018) in which a leader evaluates each subordinate separately over a specified period of time (e.g., a week) in terms of each of the five categories of resistances and determines how frequently the subordinate has shown the behavior in question. Such studies could also take into account the frequency of interaction with subordinates because it is possible that leaders who engage in more interactions with their subordinates also experience more subordinate resistance (simply because there are more opportunities for such resistance to occur).

Practical implications

Based on our findings, we derive several practical implications for both leaders, who can be made aware of the existence of different types of subordinate resistance, the varying degrees of destructiveness thereof, and possible coping strategies, and for subordinates, who can be made aware of the power they wield through the behaviors they enact in their subordinate role. As a third addressee, HR departments could be sensitized to be aware of subordinate resistance in certain industries and in response to certain leaders in order to be able to intervene. Interventions could prevent the establishment of destructive corporate cultures and allow for constructive outcomes of subordinate resistance, such as the identification of leaders who behave unethically and thus trigger subordinate resistance. Next, we will outline in more detail how leaders, subordinates, and HR departments may derive practical implications from our findings.

First, leaders reported less subordinate resistance when being asked about their own experience compared to judging other leaders' general experience of subordinate resistance. This could indicate that leaders generally underestimate the frequency and relatedly also the influence that subordinate resistance has on them as leaders. Raising the leaders' awareness of subordinate resistance (i.e., train leaders in terms of how to identify subordinate resistance and related antecedents and outcomes) could improve leaders' reactions to subordinate resistance. Specifically, leaders could benefit from knowing about how they might (unwittingly) prompt different types of subordinate resistance and learning how to constructively cope with such subordinate resistance in their daily working life. More concretely, leaders could be made aware that abusive supervision behaviors often trigger subordinate resistance (Tepper et al., 2001), whereas clear path-goal communication may be one way to reduce subordinate resistance. Implementing regular, anonymous 360° feedback can provide leaders with valuable advice about how their behaviors are perceived by others and help them to identify constructive behaviors for which they are rewarded with subordinate endorsement (Itzkovich et al., 2020). Furthermore, it is plausible that to avoid vicious cycles, leaders could profit from coping constructively with subordinate resistance by appraising such subordinate behaviors as a developmental area that can be mastered (i.e., challenge instead of hindrance appraisal). In that regard, knowing that undermining team cohesion is rated as the most destructive subordinate resistance can sensitize leaders to not being "blindsided" by such behavior and mitigate impulsive reactions (such as abusive leadership). For example, leaders could be confronted with roleplaying exercises in which a subordinate shows undermining team cohesion,

with the leaders' task being to practice respectful inquiry (van Quaquebeke & Felps, 2018) as one strategy by which to explore the reasons why subordinates engage in undermining team cohesion (e.g., low self-esteem on the part of subordinates [Peng & Zeng, 2017] or an overly competitive team culture [Gläser et al., 2022]). Leaders' awareness of subordinate resistance as potential trigger points is likely to become more important as business hierarchies become increasingly flat, which may exacerbate the detrimental impact of subordinate resistance on leaders due to immediacy effects (i.e., a stronger effect of social influence due to proximity in space or time and the absence of intervening barriers or filters; Oc & Bashshur, 2013). In sum, we conclude that incorporating information on subordinate resistance in leader training programs could help leaders to appraise such subordinate resistance as a manageable challenge and not as a hindrance (which is related to higher negative affect on the part of leaders and increases the likelihood of abusive leadership).

Second, subordinates profit from positive evaluations by their leaders (e.g., in the form of increased trust from their leaders, greater financial bonuses, and more development opportunities; (Bolino & Hsiung, 2014). For subordinates who want to receive these benefits, monitoring their own behavior and enhancing their impression management are crucial. People tend to overrate individual events, which entails that a single occurrence of subordinate resistance that a leader evaluates as destructive can counteract generally constructive subordinate behavior and therefore undermine a leader's positive evaluation of a subordinate (Dasborough, 2006). Accordingly, raising awareness of the fact that subordinate resistance can be perceived as detrimental is key given that subordinates often engage in resistance without consciously intending to harm. Indeed, according to implicit personality theory, the intent to harm often occurs far from conscious awareness, and subordinates may even rationalize such an impulse to preserve positive self-perception (James & LeBreton, 2012). To make expectations between leaders and subordinates more explicit and to guide subordinates as to how to constructively resist, leader-subordinate dyads could audio- or videotape their meetings and analyze the occurring interaction dynamics using a fine-grained coding approach that allows them to identify episodes of subordinate resistance that they perceive as constructive compared to episodes that they perceive as destructive (e.g., Meinecke et al., 2017).

Lastly, HR departments that are alert to subordinate resistance during the recruiting and onboarding process could benefit organizations. For example, HR departments could specifically focus on how potential employees exhibit resistance when recruiting personnel in the mining, quarrying, and oil and gas industries; accommodation and food services; and health care and social assistance sectors. Applying a critical incident technique in structured interviews (Schmidt et al., 2016) or in innovative gamification-based assessments (Georgiou et al., 2019) can help to identify high levels of (destructive) subordinate resistance and avoid recruiting even more resisting employees into organizations with already high levels of subordinate resistance. In addition, identifying a tendency toward subordinate resistance may be particularly important when recruiting employees for a career track with leadership potential. Against the backdrop of the person-situation debate discussed above, it is plausible that subordinates who exhibit high levels of entitlement (e.g., always being right) might also show high levels of entitlement in a leader role (e.g., authoritarian leadership).

Conclusion

The time is ripe for complementing the followership literature with a realistic perspective on subordinates that includes acts of resistance. By doing so, followership scholars may be able to avoid a situation in which they are compelled to work with an excessively positive representation of the construct, an issue that leadership scholars are all too familiar with (Alvesson, 2020). The present study promotes a less pos-

itively biased view by outlining categories of perceived subordinate resistance, its prevalence in the daily working experiences of leaders, and how leaders may (unwittingly) set the conditions for subordinate resistance. We hope that our study inspires future integrative research that considers subordinates and leaders as mutually shaping both leader- and followership.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A

A.1. Detailed description pre-processing the data (Step 3)

The third step in topic modeling comprises the pre-processing of the data to ensure that only meaningful text is analyzed. In line with our research question, we focused our analysis on subordinate resistance, which entailed that we removed invalid statements from the data (i.e., those concerning the interviewees' backgrounds, the definitions of the subordinate and leader roles, positive subordinate behavior, the consequences of subordinate resistance, and ideal subordinate types). The remaining data corpus consisted of N=19,779 words (words per interview: 42-1,654, M=494.40). Banks, Woznyj, et al. (2018) recommend removing documents with fewer than 200 characters. Given that the characters per interview in our data set ranged from 236 to 7,815 (M=2,349), we did not remove any documents from the analysis (for the complete R code see Appendix A).

The topic model processes the text as individual tokens (i.e., it reduces the text into separate word units) and builds further analysis on terms (i.e., the vocabulary derived from the data). We therefore cleaned the data by removing punctuation, numbers, and symbols and converting all capital letters to lowercase. To eliminate random noise from the data, we removed frequently used English words (e.g., "the," "and," "or"; a function included in the R package quanteda), and additional stopwords before further analyzing the data because these words occur so frequently that they do not add value in terms of identifying topics (Banks, Woznyj, et al., 2018); see Appendix B). Furthermore, we reduced the words to their stems (e.g., "communication," and "communicating," were reduced to "communic"),

which is recommended for analyzing small data sets because it compensates for data sparseness (Manning et al., 2018). Subsequently, we organized the data into a document-term matrix that quantifies the occurrence of each term (columns) by each document (rows (Banks, Woznyj, et al., 2018). This document-term matrix serves as the input for the structural topic modeling.

As recommended in best practices for topic modeling, we additionally removed words that carry little information from the data to reduce the vocabulary size and thereby the complexity of the subsequent computational processing (Banks, Woznyj, et al., 2018; Grimmer & Stewart, 2013; Piepenbrink & Gaur, 2017). Using the STM package in R (Roberts et al., 2019), we removed infrequent terms following the suggested threshold of 0.5–1% (i.e., the minimum number of documents a word needs to appear in to be kept retained for further analysis; (Banks, Woznyj, et al., 2018; Grimmer & Stewart, 2013). At the end of the data pre-processing, the data corpus that served as the foundation for our analysis contained 40 documents, 413 terms, and 2,693 tokens (i.e., words).

A.2. Explorative analysis of stopwords

See Figs. A1-A4 and Tables A1-A5.

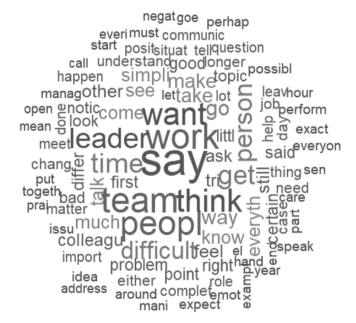


Fig. A1. Word cloud of frequently occurring word stems.

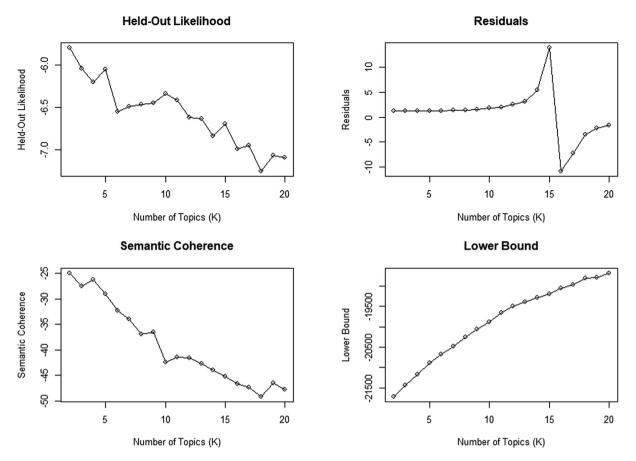


Fig. A2. Diagnostic values by number of topics.

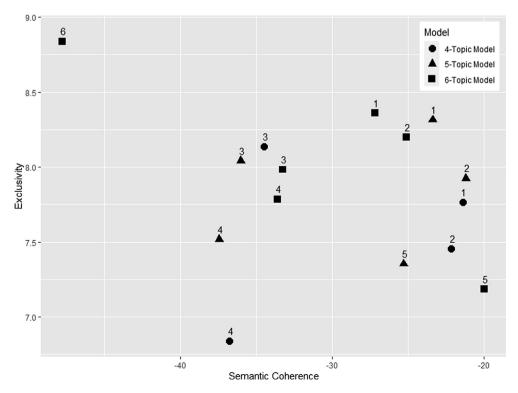
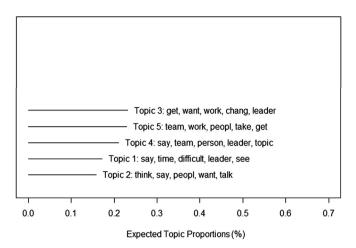


Fig. A3. Comparing semantic coherence and exclusivity of four-, five-, and six-topic model. *Note*. Computational comparison included in the STM package of the four-, five-, and six-topic solution based on the semantic coherence and exclusivity of the topics. Higher values of these metrics indicate a higher fit of the model.



 $\textbf{Fig. A4.} \ \ \textbf{Topic proportions (i.e., percentage of data coverage) of the five-topic model.}$

Table A1Top features document-term matrix and frequency over all documents before removing stopwords.

Word	also	say	one	can	alway	just	work	team	employe	peopl
N	199	117	107	95	94	86	85	84	81	81
Word	yes	think	now	want	someth	thing	leader	time	get	person
N	79	73	73	70	67	64	62	58	56	55
Word	like	realli	somehow	someon	difficult	actual	find	go	sometim	way
N	55	54	53	51	50	48	47	40	40	37
Word	take	well	even	cours	make	alreadi	come	simpli	know	see
N	36	36	36	35	35	35	31	31	31	31
Word	bit	talk	much	everyth	other	feel	still	colleagu	ask	differ
N	31	31	30	30	29	28	28	26	26	25

List of individual stopwords: "always", "now", "sometimes", "often", "also", "yes", "no", "one", "just", "something", "somehow", "really", "someone", "actually", "already", "bit", "quite", "rather", "maybe", "find", "can", "things", "employee", "two", "whether", "oh", "laughs", "laugh", "name", "anyway", "like", "course", "even", "well", "super", "unfortunately", "i.e."

Table A2Top features document-term matrix and frequency over all documents after removing stopwords.

Word	say	work	team	peopl	think	want	leader	time	get	person
N	117	85	84	81	73	70	62	58	56	55
Word	difficult	go	way	take	make	come	simpli	know	see	talk
N	50	40	37	36	35	31	31	31	31	31
Word	much	everyth	other	feel	still	colleagu	ask	differ	tri	first
N	30	30	29	28	28	26	26	25	25	24
Word	good	littl	problem	point	certain	right	said	notic	topic	look
N	24	24	23	23	23	23	22	21	21	20
Word	bad	need	day	understand	longer	thing	chang	either	complet	job
N	20	19	19	19	19	19	19	19	19	18

Table A3Topic-correlation-matrix displaying intercorrelations between the five identified topics.

Topic	1	2	3	4	5
1	1	26	22	31	29
2	26	1	25	23	17
3	22	25	1	21	24
4	31	23	21	1	31
5	29	17	24	31	1

Table A4Document-topic loadings (theta).

Interview	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
1	.14				.80
2			.99		
3	.99				
4					.94
5		.98			
6		.97			
7	.46	.05		.22	.26
8				.97	
9				.98	
10	.56	.10			.32
11				.98	
12	.95				
13			.95		
14			.98		
15		.98			
16		.06			.85
17	.33				.64
18	.96				
19		.96			
20	.33				.62
21	.23	.11		.25	.38
22	.04	.40		.52	
23				.96	
24	.08		.15	.21	.52
25	.35		.14	.27	.22
26					.97
27			.98		
28			.97		
29			.91		
30			.92		
31	.24	.33			.37
32				.97	
33					.95
34				.94	
35					.94
36			.95		
37	.11	.19	.28	.38	
38			.58	.33	
39	.84				.07
40		.81	.11		

Note. Theta values lower than .05 are not reported; Top-five documents per topic marked in bold.

Table A5 Subcategories (N = 23) of the five categories of subordinate resistance.

Topic	Label	Subcategories	Quotes
1	Entitlement	Being always-right	"And what you yourself think is right" (Interview 3)"They think it would be a great suggestion, or they think it would work great"
			(Interview 18)"[H]e thought he has to solve absolutely every problem, [also those] which does not belong into his field of activity"
1	Partial and and	Disabasias as assessment 1 - 16	(Interview 18)
1	Entitlement	Displaying an exaggerated self- evaluation	"They always build on experience. And say "Yes, I am quite experienced". Yes, perhaps, but the experience is based on techniques that are no longer in use." (Interview 18) "No I did a great job".
			Great, I washed a clean car a second time. Nobody spends money on that."
			(Interview 18)"[] who saw himself as a mega team player, who is the only one who works at all."
			(Interview 39)
1	Entitlement	ent Challenging leaders' decisions	"Sometimes there are other decisions or strategies that the employee doesn't understand right away.
			Then they test sometimes provocatively" (Interview 12)"[] not following instructions, always the classic: 'Yes but we could"
			(Interview 18)"The enemy, because I [the leader] allocate the resources
			() the wrong way" (Interview 3)
1	Entitlement	Overemphasizing own problems	"[] now you're so to say burdening an entire system with your problem. Which objectively doesn't even exist [] I find this self-centered" (Interview 3)"Make the problem a huge problem, so that it sounds really bad."
			(Interview 18)
1	Entitlement	Denigrating others to support own image	"There are good ideas, but that the idea of the other is also good, that to see and recognize, that is difficult." (Interview 18)
1	Entitlement	Protecting one's positive self-image	"They puff up the work so much, they actually lie to themselves." (Interview 18) "And then there are the stragglers who [] after two years suddenly say it [the change they had been arguing against] wasn't bad but no longer admit it [that they were against it]" (Interview 18)

Table A5 (continued)

Topic	Label	Subcategories	Quotes
2	Contact-seeking/ avoiding	Constantly searching proximity and interactions with the leader	"What sometimes happens is that people are not independent enough. In other words, they constantly ask how I should do it." (Interview 15) "They frequently come back to me and ask how they should proceed" (Interview 15) ."[] not be dependent on someone else who tells me [the subordinate] what to do, because then I'm
			actually so dependent or dependent on criticism."
2	Contact-seeking/	Constantly distancing themselves	(Interview 5) "So according to the motto I employee, I somehow recipients, you leader, you must first do a lot and
	avoiding	from the leader	know a lot, before I even begin to think about the question." (Interview 6)"[] you would have to at least coordinate and say: "So look, I have an appointment here now, is it somehow feasible and so on". But not debating that and just going, I find uncomfortable." (Interview 5)
2	Contact-seeking/ avoiding	Maintaining an ambiguous relationship	"Where the relationship is not clear, where it is not clear, does he really want to participate" (Interview 15)"[] of course, you also want to be met with the necessary transparency."
3	Effort Minimization	Protecting status quo	(Interview 40) "But then you don't get away from it and it's very difficult to move them, so everything is set in stone and they're not willing to change." (Interview 13)"For example, by insisting even more strongly on the fact that one should embrace traditional ways "we have always done it this way", "why should we change everything now, it has worked well so far.""
3	Effort Minimization	Intentionally underperforming	(Interview 27) "I get work output or work results then only half finished." (Interview 28)"Deadlines are no longer met and just the work they get from you only slip to priority 2." (Interview 14)"And when someone tries to muddle through with dishonesty."
			(Interview 13)
3	Effort Minimization	Taking the leader for a fool	"So, something like dragging out expenses and trying to cover it up because you can't get along. Throwing smoke candles, generally trying to take me for a fool." (Interview 27)"[] who just didn't want to do the job, where I really tried to motivate them and get them to perform, but then they always tried to play funny games, be dishonest or do things behind my back or something, there have been cases."
3	Effort Minimization	Delegating sidewards	(Interview 30) "There is never a hand up when it comes to an additional order. Ideally, you wait until the best in the class raises his hand. There are always those in the systems." (Interview 2)"[] knowing that the others will have to work all the harder."
			(Interview 2)"[] individuals or a single person optimizes the workload for themselves, in terms of taking on orders."
3	Effort Minimization	Delegating upwards	(Interview 2) "[] if it gets exhausting, the leader has to take care of it. Very often, I didn't have the feeling that the
3	Entert Minimization	belegating upwards	employee could or wanted to be as self-reliant as possible. Instead, they wanted a solution from me." (Interview 2) "If I have the feeling that this doesn't happen, but that they then say so now it's Friday 5:00 p.m. I now
4	Emotionally fluctuating communication	Outbursting emotionally	have an appointment; the work is not yet finished but that's not my problem." (Interview 14) "[] my employee reacted very emotionally after a conversation where I asked her why various things were not being implemented and it then led to an emotional outburst even to a real crying fit." (Interview 32)"[] who also became somewhat abusive"
			(Interview 34)"[] and she was really very vociferous about it in front of everyone else" (Interview 34)"[] then communicate in the emotionality then also quite hard." (Interview 11)
4	Emotionally fluctuating communication	Communicating oversensitive	"When employee carry 15,000 sensitivities in front of them." (Interview 9)"In other words, personal topics that are not related to the subject matter are shifted above the actual subject matter." (Interview 9)"Yes we had a colleague, the 'good mood man', when he was in a good mood. He was really the 'shitty mood man' when he had a bad day."
			(Interview 23)"There are people who are so time-dependent. [] Then you have to know in the morning time that nothing works" (Interview 11)
4	Emotionally fluctuating communication	Communicating with reluctance	"On the communication behavior, which is difficult once, if one communicates so very little, is very closed." (Interview 11)"[] has saved that until then, I had already asked him several times what was going on and. I offered to talk to him, but he didn't open up at that moment."
5	Undermining team	Communicating an anti-attitude	(Interview 11) "But to make the attempt, if I have that then for the third time in the team meeting, that then always
3	cohesion	communicating an unit attitude	these "yes, but" and so on, that also 2 min before end." (Interview 4)"People who have a very negative attitude."
			(Interview 16)"I also once had the attitude that an employee was also here, but actually found everything so stupid here that he actually always worked against everything." (Interview 1)
5	Undermining team cohesion	Isolating from team members	"[] the fact that this person is excluded either from the team or opposes itself to the team so a disengagement." (Interview 35)"I don't talk to other team members. Exactly or "But I don't want to work with that one, I kind of just want to work with that one." (Interview 16)"So, I find it difficult for the team when I really have employee who are very self-centered
_	The domestic to a st	Tooleaning the Lee Joy Co	and who actually ignore the team." (Interview 1)
5	Undermining team cohesion	Isolating the leader from the team	"And I didn't get them [meeting invitations] and then I called the colleagues and said, 'Yes I know you have the team meetings you have to invite me to them." (Interview 26)
5	Undermining team cohesion	Blaming others	"[] when people start trying to figure out who's got the buck now and then pass the buck to each other." (Interview 26)
			(continued on post page

(continued on next page)

Table A5 (continued)

Topic	Label	Subcategories	Quotes
5	Undermining team cohesion	Not adhering to team agreements	"Also, in the team toward other coworkers, quasi no reliability the people do not appear punctually and so small stuff." (Interview 35)"[] when you leave colleagues hanging, so this issue of commitment, when I tell someone is going on vacation or I'm going on vacation and I say I'll take care of your business, then in order for that to work well in a team or at work, I have to be able to rely on it." (Interview 33)
5	Undermining team cohesion	Refusing to solve peer conflicts	"If they did not want to do it [solve the conflict] then they call for the leader. [] Employees did not talk to each other [] but then make the leader the referee." (Interview 4) "I was constantly forced to do this, somewhat like teachers who somehow have a few chaotic students in the class, you then take care of the chaotic students, but leave the others behind." (Interview 4)

Appendix B

B.1. English comprehension used in the prolific study

*correct items are coded as 1

For this research, it is very important for us that participants have sufficient proficiency of the English language. Unfortunately, we had participants in the past who reported that they were proficient in English but their answers in the main study indicated low-quality. Therefore, we kindly ask you to do the following.

Read the passage below, then select the word in the drop-down menu below that fills the blank ("----") in both meaning and grammar.

You have 4 min to complete this exercise.

 ${\it Cloze_1}$ The postal service is the government agency ---- handles the mail.

- o the fact that (0)
- o whether (0)
- o of which (0)
- o that (1)
- o in that (0)

Cloze_2 Its job is ---- letters and packages to people and businesses all over the world.

- o being delivered (0)
- o to be delivered (0)
- o to have delivered (0)
- o having delivered (0)

o to deliver (1)

Cloze_3 Its goal is to see that your mail gets to its destination ----possible.

- o less quickly (0)
- o too quickly (0)
- o so quickly that (0)
- o as quickly as (1)
- o the most quickly (0)

Cloze_4 People --(1) -- the postal service to deliver important letters and even valuables, --(2)-- time and to the right person.

- □ (1) back out (0)
- □ (1) check out (0)
- □ (1) come in (0)
- □ (1) figure out (0)
- □ (1) rely on (1)
- □ (2) to (0)
- □ (2) for (0)
- □ (2) at (0)
- □ (2) on (1)
- □ (2) over (0)

 $\begin{tabular}{ll} \textbf{Source:} & https://www.testyourenglish.net/english-online/cloze-reading/clozetest-3.html. \end{tabular}$

See Fig. B1 and Tables B1-B3.

Observed Effect and Marginal Effect by Industry

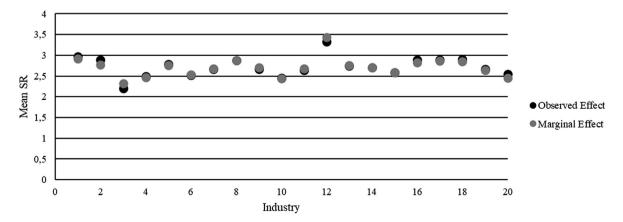


Fig. B1. Observed Effect and Marginal Effect by Industry. Note. SR = Subordinate Resistance.

Table B1Detailed list of exclusion criteria for Study 2.

Step	Procedure	Reason	Sample Size
1	Pre-screening procedures implemented in the online recruiting platform:	Alignment with target sample	Available participant pool: 2,482 (28.05.2021)
	Prolific pre-screening criteria		, ,,
	Nationality: UK and US		Participated:
	Supervisor: yes		2,294
	Employment status: full-time		
	First language: English		No consent:
	COVID-19 employment status: I was working full-time, and am now still		95
	working or being paid for full-time hours., Other - I am self-employed		
	Number of subordinates: >1		Submissions:
			2,199
2	Pre-screening procedure implemented in survey	Securing the platform recruiting	Excluded:
			(1) 1
	Inclusion criteria:		(2) 9
	(1) Where do you currently live? [UK or US]		(3) 101
	(2) What is your native language? [English]		(4) 295
	(3) On average, how many hours do you work per week? [< 35 h]		(5) 7
	(4) Are you currently working in a leader role (i.e., are you responsible for managing one or more employees)? [Yes]		(6) 73
	(5) For how many years have you been in a leader role? (please round up		0 1 .
	to a full number) [\leq 1 year]		Sample size:
	(6) How many people do you lead? (please write down the number of your direct employees) [< 1]		1,713
3	English Test	Securing understanding of	Excluded:
		English Grammar and Vocabulary	(7) 166
	Excluded if:		
	(7) English language comprehension test was not passed		Sample size:
			1,547
4	Missing data:	Securing of high data quality	Excluded: 39
	Excluded if:		Sample size:
	Not finished HEXACO or ICAR		1,508
5	Attention checks	Securing of high data quality	Excluded:
			(8) 27
	Excluded if:		(9) 252
	(8) Attention check was answered incorrectly		
	(9) Please indicate which of the following statements is TRUE.		
	(10) "Some questions referred to my employees." [Was not selected]		Sample size:
	(11) Bogus items were answered incorrectly		1,229
	(12) "I have never used a computer or electronic device." [Was not marked		
	with strongly disagree]		

Table B2 SUEST Analysis for over- and under-rater (N = 1,229).

	Est	Robust std. err.	Z	P > z	[95% conf interval]	
Underrater ($N = 531$)						
Constant	2.74	.15	17.78	.00	2.44	3.04
Age	.00	.00	-2.51	.01	01	.00
Working Hours	.00	.00	2.37	.02	.00	.01
Experience in the leader role	.00	.00	1.51	.13	.00	.01
Honesty-Humility	.00	.02	.16	.88	04	.04
Emotionality	.01	.02	.44	.66	03	.04
Extraversion	.01	.02	.40	.69	03	.04
Agreeableness	01	.02	29	.77	04	.03
Conscientiousness	.02	.02	.70	.48	03	.06
Openness	.01	.02	.30	.76	03	.04
ICAR	.00	.00	.10	.92	01	.01
Fixed-effects of industries	included					
Overrater (N = 698)						
Constant	3.44	.17	2.69	.00	3.12	3.77
Age	.00	.00	82	.41	.00	.00
Working Hours	.00	.00	.72	.47	.00	.00
Experience in the leader role	.00	.00	09	.93	.00	.00
Honesty-Humility	.00	.02	.25	.80	03	.04
Emotionality	02	.02	-1.01	.31	05	.02
Extraversion	04	.02	-1.69	.09	08	.01
Agreeableness	.00	.02	.18	.86	03	.04

(continued on next page)

Table B2 (continued)

	Est	Robust std. err.	Z	P > z	[95% conf inte	erval]
Underrater ($N = 531$)						
Conscientiousness	.03	.02	1.20	.23	02	.08
Openness	.03	.02	1.88	.06	.00	.06
ICAR	01	.00	-2.97	.00	02	.00
Fixed-effects of industries	included					

Note. Targeted Wald between the under and overrater model indicated that the estimates for ICAR are not the same $\chi^2(1) = 4.58$, p < 0.05.

Table B3Error-in-variables regression model for the five subcategories of subordinate resistance.

	Entitlement	Contact Seeking/Avoiding	Effort Minimization	Emotionally fluctuating Communication	Undermining Team Cohesion
Constant	4.14***	3.46***	3.76***	3.33***	3.28***
	(12.43)	(8.62)	(11.00)	(9.56)	(9.00)
Fixed-effects of industries	included	included	included	included	included
Age	.00	.00	01	01*	.00
	(70)	(.55)	(-1.95)	(-2.45)	(28)
Working hours	.00	.00	.00	.00	.00
	(.79)	(.74)	(1.36)	(29)	(1.16)
Experience in the leader role	.00	01	.00	.01	.00
	(81)	(-1.15)	(87)	(1.48)	(82)
Honesty-Humility	07	14*	09	.01	01
-	(-1.32)	(-2.21)	(-1.55)	(.13)	(25)
Emotionality	.03	05	04	.05	.05
•	(.65)	(-1.03)	(87)	(1.23)	(1.03)
Extraversion	05	14*	17***	.02	06
	(-1.07)	(-2.48)	(-3.35)	(.53)	(-1.18)
Agreeableness	08	.01	04	06	12*
	(-1.65)	(.18)	(76)	(-1.29)	(-2.29)
Conscientiousness	01	.09	.09	01	.09
	(19)	(1.40)	(1.43)	(16)	(1.42)
Openness	.01	.10*	.09*	.04	.02
•	(.22)	(2.27)	(2.31)	(1.08)	(.44)
ICAR	03***	02	01	03**	05
	(-3.59)	(-1.87)	(-1.10)	(-3.08)	(-5.27)***
R^2	.07	.04	.07	.05	.08

Note. N = 1,229, *p < 05, **p < 01, ***p < 001 (two-sided); T-value in parenthesis.

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