Followers With Motivation to Lead Claim Leadership Through Voice but Hesitate to Engage in Leadership Behaviors

Nadine Planken (13088009)

Master Psychology: Consultancy & Organizational Development (Track)

Department of Psychology, University of Amsterdam

MT2324W&O: Master Thesis W&O

Supervisor: Dr. Amelie Güntner

Second Assessor: Dr. Yujie Cheng

Date: 31.05.2024

Abstract

Individuals in a follower role comprise the majority of the workforce and are essential to consider as active contributors in organizational processes, including leadership. In fact, the leadership identity construction theory states that leadership emerges through the process of claiming and granting leadership identities. This dynamic and relational view on leadership opens the possibility that leader identities develop independently of formal roles. Accordingly, the present study investigates a leadership emergence process with a focus on the role of the follower. I propose that followers‘ affective motivation to lead is associated with followers‘ leadership claiming through voice and subsequently followers‘ leadership behaviors, whereby this sequence is expected to be moderated by leaders‘ granting behavior. Adopting a multi-method approach, these expectations are examined by combining followers‘ self-rated questionnaires with behavioral interaction coding of $N = 43$ dyadic conversations between assigned followers and leaders (4262 behavioral units in total). Results showed that followers‘ affective motivation to lead was related to follower voice. However, neither followers‘ affective motivation to lead, followers‘ voice, nor the interaction of followers‘ voice and leaders‘ granting were related to followers‘ leadership behaviors. Accordingly, followers with high affective motivation to lead may claim leadership through voice but may be hesitant to engage in subsequent leadership behaviors. I discuss several theoretical implications based on theories of followership, leadership emergence, and leadership identity construction and provide practical implications for the active role of the follower in the workplace.

Keywords: motivation to lead, voice, leadership behaviors, claiming, granting, leadership identity construction, leadership emergence

Followers With Motivation to Lead Claim Leadership Through Voice but Hesitate to Engage in Leadership Behaviors

Individuals in a follower role comprise around 80% of the workforce (Ekundayo, 2010) and are therefore vital to consider as active contributors to team- and organizational successes in current work environments. Followers can support such successes by actively sharing ideas or by taking the lead within their team (Ralon et al., 2021). The role of followers in leadership processes has also been increasingly acknowledged in literature (Sims & Weinberg, 2022; Uhl-Bien et al., 2014). In fact, scholars argued that organizational members influence each other reciprocally and simultaneously (Güntner et al., 2020), such that leadership emerges through the process of claiming (for oneself) and granting (to others) leader identities (DeRue & Ashford, 2010; Marchiondo et al., 2015). Through this process of claiming and granting, leader and follower identities get co-constructed (DeRue & Ashford, 2010), independently of ones' formal role (Güntner & Kauffeld, 2021). However, there is still limited advancement in examining and understanding the active role of followers in leadership processes (Leung et al., 2018; Uhl-Bien & Carsten, 2018; Uhl-Bien et al., 2014). Considering that followers are essential organizational members, it is therefore crucial to investigate whether and how individuals in a formal follower role enact leadership as well (i.e., informal leadership; Luria & Berson, 2013).

An example of informal leadership claiming by followers is *voice* (DeRue & Ashford, 2010; McClean et al., 2018), referring to the discretionary expression of opinions about work-related issues (Detert & Burris, 2007; Detert et al., 2013; Morrison, 2014, 2023). Followers' voice has been related to improved individual-, group-, and organizational performance (Chamberlin et al., 2018; Guzman & Espejo, 2019; Morrison, 2011, 2014; Ng & Feldman, 2012; Shin et al., 2022; Song et al, 2017; Thomas et al., 2010), shedding light on the active and positive

contribution of followers in the workplace. Moreover, previous studies showed that voice can be predicted by leader behaviors (Chen et al., 2023; Duan et al., 2017; Lee et al., 2021; Meinecke et al., 2016), job autonomy (Kao et al., 2021), and organizational support (Bergeron & Thompson, 2020). Besides external predictors, voice is also predicted by internal dispositions, such as proactive motivation (Zhang & Inness, 2019) and personality traits (e.g., conscientiousness, Nikolaou et al., 2008; Zare & Flinchbaugh, 2019). However, it may be particularly relevant to examine follower characteristics related to leadership when investigating followers' voice as a leadership claim.

In light of followers' leadership-related constructs, one possibility is that follower voice is predicted by their *affective motivation to lead* (i.e., affective MTL), referring to individuals' natural desire to take on leadership (Chan & Drasgow, 2001). To date, scholars neglected to include affective MTL when meta-analytically investigating internal predictors of voice behavior (see Chamberlin et al., 2017). Furthermore, other studies linked affective MTL merely to perceptions of overall leadership emergence (e.g., Acton et al., 2019; Badura et al., 2020, 2022; Hong et al., 2011), ignoring the consideration of verbal voice behaviors that are central to the leadership claiming process. Further emphasizing this gap in research, scholars called for an investigation into what happens after a follower shows voice (Meinecke et al., 2016) to understand the temporal dynamics of the voice process (Morrison, 2023). As such, there is limited advancement in understanding both predictors and consequences of follower voice in the leadership emergence process. Following the perspective of leadership as a co-constructed phenomenon (DeRue & Ashford, 2010), it is possible that *leaders' granting* behavior (i.e., acceptance of an initial leadership claim; DeRue & Ashford, 2010) influences whether follower voice unfolds into further enactment of *leadership behaviors* (i.e., behaviors that facilitate efforts

to accomplish shared objectives; Yukl, 2012). Based on this relational view on leadership, it is essential to consider the claiming-granting process between followers and leaders (Acton et al., 2019). However, the limited number of studies assessing the consequences of the claiming-granting process largely relied on perception ratings of leadership effectiveness (e.g., Marchiondo et al., 2015). Yet, perception ratings resemble a biased way of measuring actual follower and leader behaviors (Banks et al., 2018, 2023; Behrendt et al., 2017; Güntner et al., 2023; Hansbrough et al., 2015; Hemshorn de Sanchez et al., 2022; Lee et al., 2015). Instead of individuals' perceptions, it is behavior that lies at the core of leadership (Güntner et al., 2023) and directly contributes to the leadership process (Sims & Weinberg, 2022).

In the present study, I therefore adopt a multi-method approach by combining self-rated questionnaires with behavioral interaction coding to investigate a leadership emergence process by individuals in a follower role. Behavioral interaction coding refers to a systematic and quantitative research technique through which naturally occurring interaction behaviors are unitized and coded for further analysis (Güntner et al., 2023; Keyton, 2018). Adopting this methodology, I examine whether followers' affective MTL influences followers' voice behavior (i.e., leadership claim) and subsequently followers' leadership behaviors. Furthermore, I consider leaders' granting behaviors as a moderator that influences the relation between followers' voice behavior and followers' further enactment in leadership behaviors. That is, the extent to which followers enact upon further leadership behaviors after expressing voice may depend on whether leaders show behavior by which they accept followers' initial leadership claim.

This study contributes to research in multiple ways. First, by integrating literature on followership (Uhl-Bien et al., 2014), leadership identity construction (DeRue & Ashford, 2010), and leadership emergence (e.g., Acton et al., 2019; Badura et al., 2022), I investigate a full

sequence of followers' leadership emergence. More specifically, I assume that the leadership process does not stop with the first leadership claim but continues to influence subsequent leadership behaviors (i.e., positive spirals; DeRue & Ashford, 2010). In doing so, I contribute to a better understanding of the active role of followers and of the interaction between follower and leader in the process of followers' leadership emergence. Second, this is the first study to adopt behavior interaction coding (Keyton, 2018) to investigate how the followers' leadership emergence process unfolds over time (Fairhurst & Antonakis, 2012; Güntner et al., 2023; Meinecke et al., 2016). With that, I connect actual observed behaviors (Hemshorn de Sanchez et al., 2022) to follower's self-ratings of their affective MTL, thus acknowledging the importance of triangulation (i.e., using multiple methods of measurement; Banks et al., 2023). And third, since informal leadership is becoming increasingly relevant in organizations, the present study provides practical recommendations on how leadership can be co-constructed effectively through specific follower and leader behaviors. This knowledge can support practitioners and organizational members in the implementation of complex organizational structures, such as shared leadership and self-managed teams (e.g., Elloy, 2008; Grant & Ashford, 2008; Hoch & Kozlowski, 2014; Klasmeier & Rowold, 2020; Morgeson et al., 2010; Zhu et al., 2018).

Theoretical Background

Leadership Identity Construction

Traditionally, leadership has been theorized as a one-way, formal, and hierarchical process whereby leaders exert their influence on followers from top-down (Alimo-Metcalfe, 2013; Lichtenstein & Plowman, 2009; Uhl-Bien et al., 2014). However, this leader-centric perspective to leadership has increasingly received criticism due to its failure to account for the active role of the follower within the leadership process (DeRue & Ashford, 2010;

Thoroughgood et al., 2018). Following this criticism, a second stream of research adopted the follower-centric perspective (Bligh & Kohles, 2012), arguing that leadership "cannot be fully understood without considering the role of followers within the leadership process" (Uhl-Bien et al., 2014, p. 89). Based on the contradiction between the leader- and the follower-centric perspective, researchers have called for a balanced approach that views leaders and followers as co-producers of leadership (Güntner & Kauffeld, 2021; Shamir, 2011).

The theory of leadership identity construction by DeRue and Ashford (2010) bridges the leader-centric and follower-centric perspective (Güntner & Kauffeld, 2021) by shifting the unit of analysis of leadership from the individual to the interaction between individuals (Sims & Weinberg, 2022). Following this perspective, leadership is based on the participation of all group members (DeRue & Ashford, 2010) who influence each other reciprocally and dynamically over time (Acton et al., 2019; Beckley, 2020; Fairhurst & Grant, 2010; Güntner & Kauffeld, 2021; Shamir et al., 2011). More specifically, leadership gets co-constructed through the interaction of leadership claiming (i.e., asserting a leader identity) and leadership granting behaviors (i.e., agreeing to the leadership claim) between interaction partners (DeRue & Ashford, 2010). For instance, one interaction partner may claim leadership through verbal expressions such as "I suggest that" and the other interaction partner may grant this leadership claim by stating "You are right".

By operationalizing leadership as a co-constructed phenomenon, scholars are moving towards a more dynamic, social, and relational conceptualization of the leadership process (DeRue & Ashford, 2010), thus providing a more realistic view of leadership in current work environments (e.g., Morgeson et al., 2010). Moreover, viewing leadership from a constructionist perspective opens the possibility that leader and follower identities shift between group

members, depending on social interactions and contextual factors (DeRue & Ashford, 2010). Accordingly, members within an organization move away from their classic role division and can engage in both following and leading behaviors (DeRue, 2011; Güntner & Kauffeld, 2021).

Followers Affective Motivation to Lead and Leadership Behaviors

A largely recognized way of defining leadership behaviors is based on the hierarchical behavior taxonomy by Yukl (2012), which classifies leadership behaviors into four categories. First, task-oriented leadership behaviors contribute to goal-achievement through planning, organizing, clarifying, and monitoring activities in an efficient way. Second, leadership can be expressed through relations-oriented behaviors, referring to behaviors that support, recognize, and encourage other individuals at work. Third, change-oriented leadership behaviors aim to enhance innovation and learning through, for example, taking risks and proposing a new vision. And fourth, leaders can show external leadership behaviors including behaviors like representing or networking (Yukl, 2012; Yukl et al., 2002). The present study relies on this taxonomy by Yukl (2012) to investigate leadership behaviors by individuals in a follower role (i.e., informal leadership emergence; Luria & Berson, 2013).

Whether individuals actually engage in leadership behaviors or not may depend on their internal motivation to take the lead and to actively contribute within the organization (Scott et al., 2018). Indeed, there has been a growing interest in MTL as an antecedent to individuals' leadership emergence (Acton et al., 2019; Badura et al., 2020, 2022; Hong et al., 2011). MTL has been defined as an individual eagerness to pursue leadership positions (Chan & Drasgow, 2001; Tanaka et al., 2023) by directing behavior linked to developing and maintaining leadership roles (Santos & Porto, 2023). The construct of MTL can be categorized into three dimensions: (1) affective MTL, described as the natural desire to lead others; (2) social-normative MTL,

referring to the felt responsibility to take the lead; and (3) non-calculative MTL, through which individuals overlook the costs associated with leading (Chan & Drasgow, 2001; Waldman et al., 2013). Whereas social-normative and non-calculative MTL include feelings of necessity or selflessness, affective MTL is based on ones' intrinsic enjoyment and may therefore be a stronger motivator to lead others (Badura et al., 2020; Oh, 2012). Therefore, the present study focuses on followers' affective MTL as a relevant predictor to followers' leadership behaviors.

Previous research supports the assumption that individuals in a follower role can have an affective MTL (Epitropaki et al., 2017; Lord et al., 2020; Schyns et al., 2020) and engage in leader-like behaviors, including demonstrating responsibility (Kalshoven et al., 2013), taking charge (Kim & Beehr, 2021), and personal initiative (Bakker et al., 2023). Additionally, the meta-analysis by Badura et al. (2020) demonstrated positive medium-sized effects when relating affective MTL to transformational leadership, leadership effectiveness, and leadership emergence. Based on these findings, it can be argued that followers' affective MTL positively relates to their observable leadership behaviors. For instance, followers with high affective MTL may naturally enjoy leading and thus show leadership behaviors such as planning action and assigning responsibilities to their interaction partner (i.e., task-oriented leadership; Yukl, 2012). Thus, I hypothesize a positive relation between followers' affective MTL and the observed frequency of their leadership behaviors during an interaction between a follower and a leader.

Hypothesis 1: The affective MTL by followers is positively related to their leadership behaviors.

Followers Affective Motivation to Lead and Voice Behavior

Although enacting upon leadership behaviors is inherent to the leadership emergence process (e.g., Badura et al., 2020, 2022), it should be considered that leadership behaviors are not

part of followers' formal role description or in-role performance (Mehmood et al., 2016). Yet, highly motivated followers may still perceive themselves as active organizational members who can make valuable contributions in leadership processes. These followers may have a strong internal drive to speak up and to actively share their opinions with relevant interaction partners. Accordingly, followers with high affective MTL may express their motivation to lead first by claiming leadership through initial voice behavior.

Overall, scholars have reasoned that individuals‘ MTL results in an active engagement in voice and the willingness to take on additional responsibilities (Scott et al., 2018), whereby this leadership claiming can be expressed by all organizational members (Gierke et al., 2023). Further evidence for the assumption that intrinsic feelings drive voice is provided by Kirrane et al. (2017), showing that discrete emotions predict employee's voice behavior. Additionally, it has been shown that intrinsic motivational orientation (e.g., intrinsic goals) positively relates to speaking up behavior (Kadous et al., 2019) and that intrinsic engagement is predictive of voice (Chamberlin et al., 2017). Taken together, these studies support the assumption that followers' affective MTL as an internal motivation positively relates to their voicing behavior. Hence, I hypothesize that followers' affective MTL predicts follower voice, with voice resembling a verbal and direct way of leadership claiming (DeRue & Ashford, 2010).

Hypothesis 2: The affective MTL by followers is positively related to their voicing behavior.

Followers' Voice and Subsequent Leadership Behaviors

In recent decades, it has been acknowledged that leadership is an emergent process through which an individual becomes increasingly influential towards others (i.e., leadership emergence; Badura et al., 2022; Galvin et al., 2024). Based on this view that leadership is not a

one-time target but develops over time (Gierke et al., 2023; Lehmann-Willenbrock et al., 2017; Tubin, 2017), it is crucial to incorporate temporal dimensions when investigating how the leadership process unfolds (Acton et al., 2019). This temporal, moment-to-moment assessment of behavioral changes across multiple time points (Gierke et al., 2023) leads to getting a dynamic perspective on the leadership emergence process (McClean et al., 2019). In light of this dynamic perspective, the current study examines what happens after a follower claims leadership through voice.

Central to theorizing on leadership emergence is the claim that individuals‘ engagement in proactive behaviors determines whether they emerge as leaders (Acton et al., 2019; Badura et al., 2022). Accordingly, individuals can get recognized as leader-like through the enactment of proximal behaviors underlying the leadership emergence process, including their participation in discussions, or showing task-oriented behaviors (Badura et al., 2022; Weiss & Morrison, 2019). By doing so, proactive and engaged individuals express their willingness to take an active role in organizations and to contribute to group- and organizational outcomes. Since follower voice can be considered a proactive behavior (Park et al., 2022; Thomas et al., 2010), it is possible that followers‘ voice expression as a verbal leadership claim results in further leadership behaviors. For example, after expressing voice, followers might be motivated to take the lead and provide further suggestions on how to deal with these issues, thus moving the exchange with their interaction partner further.

In support of the assumption that voice influences the subsequent leadership process, Gerpott et al. (2019) showed that team members’ task-oriented communication predicted their emergent leadership ratings. Similarly, leadership emergence ratings were positively influenced by individuals’ active contribution during discussions (Lee & Farh, 2019) and their speaking

time (MacLaren et al., 2020). Lastly, McClean et al. (2018) demonstrated that voice indirectly related to ratings of leadership emergence via increased status (McClean et al., 2018). Taken together, these studies indicate that followers' expression of voice as a verbal, task-oriented, and proactive leadership claim may be followed by their further enactment of leadership behaviors. Based on these studies and leadership emergence theory (Badura et al., 2022), I hypothesize:

Hypothesis 3: Followers' voice is positively related to their leadership behaviors.

The Interaction of Follower Claiming and Leader Granting Behaviors

Following the leadership identity construction theory by DeRue and Ashford (2010), the interaction between claiming and granting behaviors reinforce each other reciprocally to co-construct a leadership identity (DeRue & Ashford, 2010). This claiming-granting process results in positive spirals (Halbesleben & Wheeler, 2015; Mañas Rodríguez et al., 2020), through which the granting behavior of one individual reinforces and enhances the leadership claiming behavior of the other individual (DeRue & Ashford, 2010). In fact, it has been argued that followers' claiming behaviors are not sufficient to develop a leadership identity (Marchiondo et al., 2015). Instead, this claim also needs to be granted by others so that leadership develops further. Therefore, followers' may feel particularly reassured and supported after their initial leadership claim got accepted by their leader, increasing their motivation to engage in further leadership behaviors. For instance, leaders' agreement with followers' opinion about a work-related issue may strengthen followers' drive to take the initiative to solve this issue.

Based on this reasoning, it is assumed that the positive relationship between followers' voice and followers' leadership behaviors is influenced by leaders' granting behaviors (DeRue & Ashford, 2010). Through this claiming-granting interaction between followers and leaders, the leadership process moves from individual internalization by followers towards the relational

recognition by interaction partners (Acton et al., 2019; DeRue & Ashford, 2010). Although empirical findings on the leadership identity construction theory remain limited, Marchiondo et al. (2015) demonstrated that an individual received higher leadership ratings after their initial leadership claim got granted (i.e., accepted) rather than rejected by their interaction partner. Based on this finding, as well as the theorizing on leadership identity construction (DeRue & Ashford, 2010), I hypothesize:

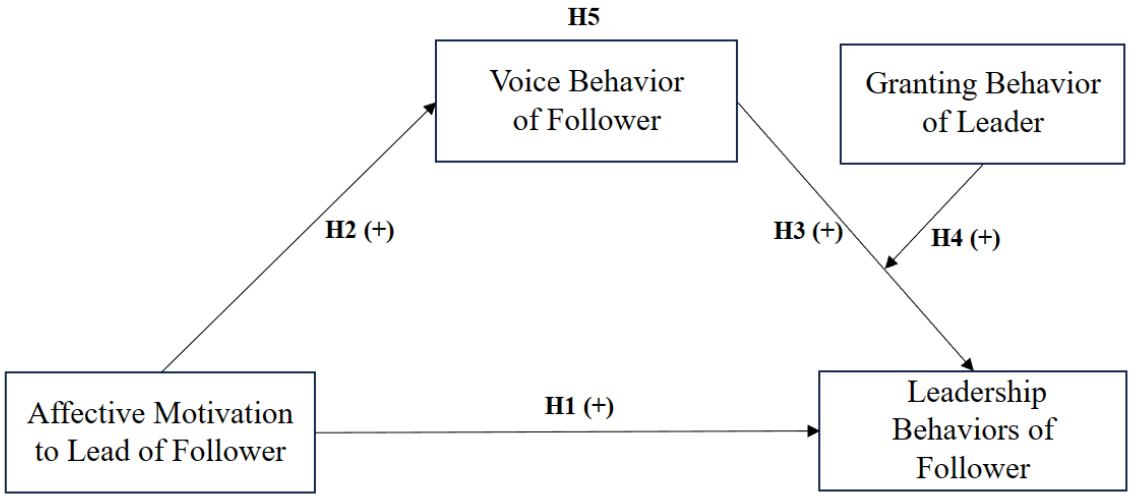
> *Hypothesis 4:* The positive relation between follower's voice behavior and followers' further enactment in leadership behaviors is moderated by leaders' granting behavior, such that this relation is stronger for high frequency of granting behavior by leaders and weaker for low frequency of granting behavior by leaders.

Lastly, I aim to test a complete moderated mediation, thus considering the full sequence of the leadership emergence process by individuals in a follower role. More specifically, followers' affective MTL is proposed to positively affect followers' voicing behavior which subsequently leads to more enacted leadership behaviors by followers. However, this mediation pathway is assumed to be moderated by leaders' granting behavior, such that more granting strengthens the relation between followers' voice behavior and followers' leadership behaviors (i.e., positive spirals; DeRue & Ashford, 2010). The conceptual framework of the complete moderated mediation model is illustrated in Figure 1.

> *Hypothesis 5:* Followers' affective MTL is positively related to followers' leadership behaviors through the mediating effect of followers' voice behavior, whereby leaders' granting behavior positively moderates the strength of the relation between followers' voice and followers' leadership behavior.

Figure 1

Conceptual Framework and Hypothesized Pathways



Method

Design

This study adopted a multi-method approach by combining behavioral interaction coding (Keyton, 2018) with questionnaires rated by leaders and followers. Video-recordings of dyadic conversations between individuals assigned to the follower and leader role were assessed through behavioral interaction coding to examine follower-leader interactions over time. Adopting such a micro-level of analysis (Hemshorn de Sanchez et al., 2022; Meyer et al., 2016) enabled a fine-grained investigation of specific behavioral patterns between interaction partners. The behavioral interaction coding was then set in relation to individuals' self-rated questionnaires, thus following the use of different methods of measurement to increase confidence in results (i.e., triangulation; Banks et al., 2023).

Procedure

Data was collected from a student sample and was done in collaboration among five Master students at the University of Amsterdam (UvA). We primarily recruited students through our personal network (e.g., contacts, social media), adopting the approach of convenience sampling (Emerson, 2015). In addition to convenience sampling, informative flyers were spread to students at the UvA, containing details about the study and a QR-Code to sign up. Lastly, Psychology and Communication Science students at UvA were recruited through the Behavioral Science Lab subject pool, offering 1.0 research credits as a compensation for participation.

Overall, the data collection consisted of three components: (1) pre-questionnaire at T1 (i.e., when signing up for the study); (2) dyadic online conversation; and (3) post-questionnaire at T2 (i.e., right after the conversation). First, during the sign-up, participants were asked to fill out a pre-questionnaire. This early distribution of initial questionnaires ensured a time delay between individuals' self-ratings and engaging in the subsequent dyadic conversation, thus reducing the likelihood of priming participants for the interaction (e.g., reducing availability bias; Hanson & Pearson, 2023). When signing up, participants also indicated their preferred timeslot for the dyadic online conversation. We then matched each participant with another person who signed up for the same timeslot, such that the allocation of interaction partners can be considered randomized.

Second, participants were invited to join a 30-minute meeting with one interaction partner via Zoom. Before the conversation, the corresponding researcher randomly assigned one of the interaction partners to the role of the leader and the other to the role of the follower. Interaction partners were then welcomed by the researcher who provided instructions for the subsequent 15-minute online conversation about a survival simulation game (see Appendix A).

Following this, the researcher shared an instruction sheet for the survival simulation game with participants, using the private message function in Zoom. Importantly, each interaction partner received the version of the survival-task that corresponded to their pre-assigned role. Both versions of the instruction sheet for the survival simulation game can be found in Appendix B. The subsequent interaction of dyads was videotaped by the researcher, enabling the coding of observed behavior in retrospect. Third, immediately after the discussion ended, participants were asked to fill out the post-questionnaire. With these three components, participants needed approximately 45 minutes to complete the entire study.

Sample

We gathered data from $N = 100$ students, leading to a total of $N = 50$ dyadic interactions between followers and leaders. However, we excluded seven (3.5%) follower-leader dyads from further analysis due to a failed attention check of one interaction partner in the pre- or post-questionnaire[1]. Accordingly, the present analysis was based on a sample of $N = 43$ dyadic conversations between followers and leaders. This sample size aligns with the desired 85 total participants to achieve a power of .80 ($f^2 = .15$, $\alpha = .05$; Faul et al., 2009)[2]. Moreover, recent studies adopting behavioral interaction coding used similar sample sizes when investigating dynamics between interaction partners (e.g., 30 teams, Lehmann-Willenbrock et al., 2015; 48 dyadic interactions, Meinecke & Kauffeld 2019; Meinecke et al., 2017).

The age of students in the follower role ranged from 19 to 29 years with an average of 23.35 years ($SD = 2.28$). Also, 60.5% of assigned followers identified as being female ($n = 26$),

[1] Participants failed the attention check if they did not select strongly agree for the item: "I strongly agree that currently I am completing a questionnaire. Please select strongly agree.".

[2] The effect size of $f^2 = .15$ was chosen based on previous research demonstrating medium-sized effects when relating affective MTL to leadership emergence ($\bar{\rho} = .25$), transformational leadership behaviors ($\bar{\rho} = .35$), and leadership effectiveness ($\bar{\rho} = .31$; Badura et al., 2020).

37.2% as being male (*n* = 16), and 2.3% as non-binary or third gender (*n* = 1). The majority of them were German (*n* = 20) or Dutch (*n* = 13), whereas the remaining participants were Hungarian (*n* = 2), American (*n* = 2), or indicated a British, French, Slovak, Swedish, Swiss, or Turkish nationality (each *n* = 1). Most students were enrolled in a master's program (*n* = 26), whereas others were enrolled in a bachelor's (*n* = 14) or different educational program (*n* = 3). The current university of participants included the UvA (*n* = 17), Erasmus University Rotterdam (*n* = 12), and Leiden University (*n* = 3), among other universities. Additionally, most students studied within the faculty of social and behavioral sciences (*n* = 26), followed by economics and business (*n* = 5), medicine (*n* = 4), and science (*n* = 4). Lastly, the leadership experience of students in a follower role ranged from zero to 11 years (*M* = 1.01, *SD* = 1.84) and their work experience ranged from zero to 11 years (*M* = 2.98, *SD* = 2.19).

Students in a leader role were between 18 and 33 years (*M* = 23.42, *SD* = 2.80). Out of those, 58.1% identified as being female (*n* = 25), 39.5% as male (*n* = 17), and 2.3% as non-binary or third gender (*n* = 1). The most frequent nationalities were Dutch (*n* = 13) or German (*n* = 12), whereas the remaining participants had a Chinese (*n* = 2), Argentinian, Colombian, Czech, Georgian, Hungarian, Indonesian, Iranian, Japanese, Kurdish or Turkish, Turkish, Mexican, Norwegian, Pakistani, South African, Swiss, or Vietnamese nationality (each *n* = 1). Most students were enrolled in a master's program (*n* = 27) whereas the other participants studied a bachelor's program (*n* = 15) or A-levels (*n* = 1). Similar to the follower sample, frequent universities of students in a leader role included the UvA (*n* = 14), Erasmus University Rotterdam (*n* = 10), and Leiden University (*n* = 3). Frequent faculties included social and behavioral sciences (*n* = 24), followed by economics and business (*n* = 11) and law (*n* = 2).

Students in a leader role had a leadership experience between zero and seven years (M = 1.02, SD = 1.63) and a work experience between 0.40 and 10 years (M = 3.64, SD = 3.08).

Measures

Survey Measures

Manipulation. To check for participants' perception of their assigned formal role during the dyadic conversation, a manipulation check was conducted at T2 using the two-dimensional Leader-Follower Identity Grid by Nieberle et al. (2023). Accordingly, participants were asked to respond to the question "Today, I considered myself a …" (1 = *not at all*; 10 = *very much so*) with a single click on the dimension of "leader" (x-Axis) and "follower" (y-Axis; Nieberle et al., 2023).

Looking at within-person differences, individuals in a follower role considered themselves significantly more as a follower (M = 6.45, SD = 1.81) than a leader (M = 5.30, SD = 1.85), $t(42) = 2.42$, $p = .020$, 95%CI [0.18, 2.11], $d = 0.37$, and individuals in a leader role more as a leader (M = 7.40, SD = 1.95) than a follower (M = 4.66, SD = 1.69), $t(42) = 7.03$, $p < .001$, 95%CI [1.95, 3.52], $d = 1.07$. Furthermore, when checking for between-person differences, individuals in a follower role considered themselves significantly more as a follower than individuals in a leader role did, $t(84) = 4.74$, $p < .001$, 95%CI [1.04, 2.54], $d = 1.02$, whereas individuals in a leader role considered themselves significantly more as a leader than individuals in a follower role did, $t(84) = 5.11$, $p < .001$, 95%CI [1.28, 2.91], $d = 1.10$. Taken together, these findings provide support for the intended manipulation.

Followers' Affective Motivation to Lead. To assess followers' affective MTL, participants rated the nine items from the Affective-Identity Motivation to Lead scale (Chan & Drasgow, 2001) at T1. A sample item was "Most of the time, I prefer being a leader rather than a

follower when working in a group". Items were rated on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*; α = .88). The complete list of items can be found in Appendix C.

Observational Measures

Followers' Voice Behavior. The frequency of voice behavior by individuals in a follower role was coded using the Act4teams coding scheme by Kauffeld et al. (2018), specifically using the code for problem-focused statements. This decision of analyzing problem-focused statements as an indicator of voice behavior was based on the reasoning by Meinecke et al. (2016) that "problem-solving behaviors can be classified as a form of proactive voice behavior [since] bringing up problems and solutions is a frequent theme in most conceptualizations of voice." (Meinecke et al., 2016, p. 202).

According to Kauffeld et al. (2018), problem-focused statements are based on understanding and analyzing a given problem and can be divided into eleven behavioral categories. Coders distinguished these behavioral categories into voice problem (i.e., problem, describing a problem, connections with problems) and voice solution (i.e., defining the objective, solution, describing a solution, problem with a solution, arguing for a solution, organizational knowledge, knowing who; Kauffeld et al., 2018).

Leaders' Granting Behavior. The Time-by-Event-by-Member Pattern Observation (i.e., TEMPO) coding scheme (Kelly et al., 2018) was used to assess the frequency of granting behavior by individuals in a leader role. More specifically, observers rated leaders' granting behaviors by coding the frequency of leaders' verbally expressed acceptance of followers' proposed content or process. Aligning with the category "evaluate" of TEMPO, coders distinguished between leader agree with or accept followers' suggestions, leader clarify or modify followers' suggestions, and leader disagree or reject followers' suggestions (Kelly et al.,

2018). Focusing on the "evaluate" dimension of TEMPO aligns with the definition of granting as "agreeing to a claimer's assertion" (DeRue & Ashford, 2010, p. 631). For further analysis, I used the counted frequency of leader accept to assess leaders' granting behavior.

Followers' Leadership Behaviors. We coded leadership behaviors by individuals in a follower role using the coding scheme by Güntner (2023). This coding scheme is based on the leadership behavior taxonomy by Yukl (2012) and classifies leadership behaviors into three metacategories: (1) task-oriented leadership (e.g., clarifying), (2) relations-oriented leadership (e.g., supporting), and (3) change-oriented leadership (e.g., advocating change; Yukl, 2012; Yukl et al., 2002).[3] The frequencies of these three metacategories were aggregated into the overall construct of followers' leadership behaviors for further analysis.

Control

Previous research has shown that men were more likely to emerge as leaders than women (e.g., Badura et al., 2018; Paustian-Underdahl et al., 2014). Furthermore, both age (e.g., Bell et al., 2015) and leadership experience (e.g., Ensari et al., 2011) showed positive relationships with leadership effectiveness and leadership emergence, respectively. Therefore, the present study included follower age, follower gender, and follower leadership experience as control variables.

Behavioral Interaction Coding Process

In total, we coded $N = 43$ dyadic interactions that had a duration between 9.14 and 19.41 minutes ($M = 15.04$, $SD = 1.90$) and had between 46 and 140 behavioral units ($M = 99.12$, $SD = 22.02$). As such, 4262 behavioral units with a total sample duration of 10.78h were included for

[3] It should be noted that the coding scheme by Güntner (2023) does not include Yukl (2012)'s fourth category of external leadership behaviors (i.e., networking, external monitoring, representing). However, the procedure of the present study excludes possibilities for external leadership behaviors since we only analyzed the immediate dyadic conversation between interaction partners without any externals involved.

further analysis. In accordance with previous studies (e.g., Güntner et al., 2020), we standardized the recorded interactions into 15-minute intervals to adjust for the time difference between conversations.

The behavioral interaction coding was conducted using the Mangold INTERACT Software (Mangold, 2014). Four independent raters were trained for the coding throughout three weeks. This training included (1) three rounds of individual trial-coding, whereby each round was followed by a discussion among raters and the supervisory professor, and (2) one collaborative coding session among raters and one subsequent discussion with the supervisory professor to resolve further inconsistencies in coding. After this training procedure, videos were randomly distributed among raters for independent coding. Each video-taped dyadic interaction between follower and leader was sliced into behavioral sense units, adopting an event-based coding approach (see further in Girard & Cohn, 2016; Güntner et al., 2023; Hatfield & Weider-Hatfield, 1978; Keyton, 2018; Yoder & Symons, 2010). We then matched each unitized event to a corresponding behavior code from our predefined coding scheme (see Appendix D).

To calculate Cohen's Kappa (Cohen, 1960) for assessing inter-rater reliability (i.e., consistency in matching behavior codes to sense units; Güntner et al., 2020), we followed the recommendation by Bakeman et al. (2005) to double-code 15-20% of the total video recordings. Four independent raters double-coded a random sample of eight (18.6%) dyadic conversations. Here, the first rater fully sliced and coded the video before a second rater independently assigned codes to the corresponding pre-sliced units. Following the guidelines by Light (1971), the single index kappa for follower and leader class was calculated as the computed average across all double coding (see Appendix E). The kappa value for the follower class was $\kappa = 0.65$ and for the leader class $\kappa = 0.68$, which can be classified as good (Cicchetti, 1994).

Although the specified behaviors were coded throughout the conversation, I only used the numeric frequencies (i.e., frequency analysis for group interaction; Rack et al., 2018) from a certain interval for further analysis. The decision to divide the videotaped discussion into smaller interaction episodes was based on the present examination of a process model, such that behavioral patterns were expected to develop as a sequence. Accordingly, I divided all dyadic interactions into three 5-minute intervals (i.e., interval sequences; Escudero et al., 2018) and standardized each by the corresponding interval duration. First, Interval 1 (I1) was used for assessing the frequency of voicing behavior by individuals in a follower role. Second, Interval 2 (I2) was used for analyzing the frequency coding of granting behavior by individuals in a leader role. And third, Interval 3 (I3) was used for assessing the frequency coding of subsequent leadership behaviors by individuals in a follower role. By using these three temporal intervals, I accounted for the hypothesized sequential pattern of input, process, and output variables. Similar sequencing has been done in previous studies (e.g., Meinecke & Kauffeld, 2019).

Results

Descriptive Analyses

The means, standard deviations, and correlations among the study variables are given in Table 1. The age of individuals in a follower role was significantly and positively related to followers' leadership experience. Furthermore, there was a positive relation between follower voice behavior and leader granting behavior. Lastly, the gender of individuals in a follower role showed a significantly positive relation to followers' affective MTL, indicating that males were higher on affective MTL ($M = 3.54$, $SD = 0.52$) than females ($M = 3.06$, $SD = 0.68$), $r\,(40) = .35$, $p = .021$. Therefore, the gender of individuals in a follower role was included as a control in subsequent analyses.

Table 1

Means, Standard Deviation, and Correlations Between Study Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. [F]Age	23.35	2.28	-						
2. [F]Gender	0.38	0.49	.09	-					
3. [F]Leadership Experience	1.01	1.84	.42**	-.08	-				
4. [F]Affective MTL	3.25	0.66	.18	.35*	-.05	-			
5. [L]Granting Behavior	2.04	1.55	-.18	.14	-.01	.08	-		
6. [F]Voice Behavior	5.55	3.26	.03	-.13	.15	.23	.31*	-	
7. [F]Leadership Behavior	5.03	2.90	.03	.05	.03	.09	.14	.19	-

Note. Results are based on the standardized interval frequencies for leader granting behavior (I2), follower voice behavior (I1), and follower leadership behavior (I3). $N = 43$ follower-leader dyads. Gender 1 = male, 0 = female. MTL = motivation to lead. F = follower, L = leader.

* $p < .05$, ** $p < .01$

Testing the Hypotheses

Before testing the hypotheses, I conducted several analyses to check whether the present data aligned with assumptions of linearity, normality, homoscedasticity, sensitivity, and multicollinearity. Furthermore, I conducted independent *t*-tests to examine whether participants differed in the investigated variables if (1) they had known their interaction partner before the dyadic conversation, (2) the follower indicated that they knew the study goal, or (3) the leader

indicated that knew the study goal.[4] The results of these independent *t*-tests can be found in Appendix F. Since all assumptions were met by data and there were no differences between groups for standardized interval frequencies, I included the complete sample for further hypothesis testing.

Hypothesis 1 predicted a positive relation between followers' affective MTL on followers' leadership behaviors. A multiple regression analysis was conducted in SPSS IBM 29 with followers' affective MTL (i.e., self-rated) and leaders' granting behavior (i.e., coded frequency in I2) as independent variables and followers' leadership behaviors (i.e., coded frequency in I3) as the dependent variable. Although the effect was in the hypothesized positive direction, results of the regression analysis showed that followers' affective MTL was not significantly related to their leadership behavior, $B = 0.39$, $SE = 0.74$, $t(38) = 0.53$, $p = .603$, 95%CI [-1.11, 1.89]. Therefore, hypothesis 1 was not supported.

All other hypothesized pathways were analyzed using Model 14 in the PROCESS macro for SPSS (Hayes, 2012) with 5000 bootstrapped samples and a confidence interval set at 95% (i.e., $\alpha = .05$). This analysis was conducted using followers' affective MTL (i.e., self-rated) as the independent variable, followers' leadership behaviors (i.e., coded frequency in I3) as the dependent variable, followers' voice behavior (i.e., coded frequency in I1) as the mediator, and leaders' granting behavior (i.e., coded frequency in I2) as the moderator variable.

Hypothesis 2 stated that followers' affective MTL is positively related to followers' voice behavior. Even though results failed to reach significance, the analysis showed a tendency towards the expected positive relation between followers' affective MTL and followers' voice

[4] Participants were asked whether they had known their interaction partner and whether they knew the study goal in the post-questionnaire at T2.

behavior, $B = 1.56$, $SE = 0.81$, $t(39) = 1.93$, $p = .062$, 95%CI [-0.08, 3.19]. Still, hypothesis 2 was not supported.

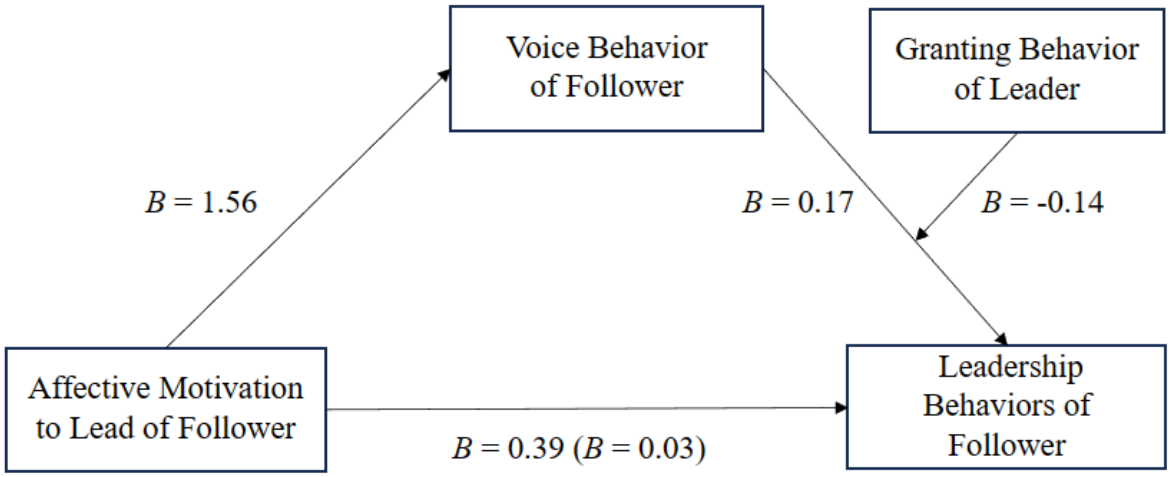
Furthermore, hypothesis 3 predicted that followers' voice behavior has a positive relation with followers' leadership behaviors. The positive direction of the effect from followers' voice to followers' leadership behaviors was as expected but could not reach significance, $B = 0.18$, $SE = 0.16$, $t(36) = 1.11$, $p = .275$, 95%CI [-1.15, 0.50]. Thus, hypothesis 3 was not supported.

In addition, hypothesis 4 argued for an interaction between followers' voice behavior and leaders' granting behavior on followers' leadership behaviors, such that leaders' granting behavior positively moderates the positive relationship between followers' voice behavior and followers' leadership behaviors. First, when adding followers' voice to the model which included followers' affective MTL as the independent variable and followers' leadership behaviors as the dependent variable, the association between followers' affective MTL and followers' leadership behaviors remained nonsignificant, $B = 0.03$, $SE = 0.77$, $t(36) = 0.04$, $p = .972$, 95%CI [-1.54, 1.60]. The interactive effect between followers' voice behavior and leaders' granting behavior on followers' leadership behavior was also found to be nonsignificant, $B = -0.14$, $SE = 0.08$, $t(36) = -1.72$, $p = .095$, 95%CI [-0.31, 0.03]. Accordingly, hypothesis 4 was not supported.

Lastly, hypothesis 5 predicted a significant complete moderated mediation model. However, results provided no support for this hypothesis since the 95% confidence interval of the bootstrapping analysis included zero, $B_{indirect} = -0.22$, 95%CI [-0.68, 0.05]. Results of the moderated mediation analysis are illustrated in Figure 2.

Figure 2

Results of the Moderated Mediation Analysis



Note. Unstandardized regression coefficients for hypothesized relationships. The regression coefficient for the relation between followers' affective MTL and followers' leadership behavior while controlling for voice and leader's granting behavior, is in parentheses. Results are based on the standardized interval frequencies for follower voice behavior (I1), leader granting behavior (I2), and follower leadership behavior (I3).

Explorative Analyses

The initial hypothesis testing was conducted using interval sequencing to account for the hypothesized sequential pattern. However, since each interval was set to five minutes, followers and leaders might have had limited possibilities to engage in specific behaviors. Therefore, I conducted an explorative analysis for the hypothesized moderated mediation model using the standardized frequencies of followers' voice behavior, leaders' granting behavior, and followers' leadership behaviors during the complete dyadic conversation (i.e., standardized total

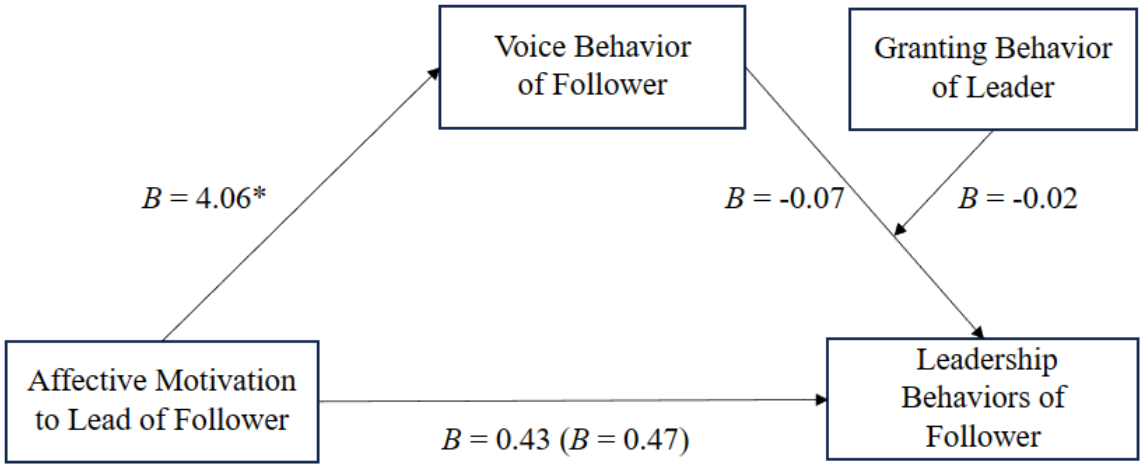
frequencies). The descriptive statistics of standardized total frequencies are given in Appendix G. Further analyses were conducted using the same procedure as for the initial hypothesis testing.

Results showed that followers' affective MTL was not significantly related to followers' leadership behaviors, $B = 0.43$, $SE = 1.38$, $t(38) = .31$, $p = .756$, 95%CI [-2.36, 3.22]. However, in contrast to analyses based on intervals, followers' affective MTL showed a significantly positive relation to followers' voice behavior, $B = 4.06$, $SE = 1.64$, $t(39) = 2.45$, $p = .018$, 95%CI [0.75, 7.37]. Accordingly, hypothesis 1 could be confirmed if follower's voice was examined as standardized total frequencies instead of standardized interval frequencies.

All other analyses did not provide support for the tested hypotheses. First, followers' total voice was not significantly related to followers' total leadership behaviors, $B = -0.07$, $SE = 0.15$, $t(36) = -0.46$, $p = .651$, 95%CI [-0.38, 0.24]. Second, when adding followers' voice to the model, the relation between follower's affective MTL and follower's leadership behavior remained non-significant, $B = 0.47$, $SE = 1.52$, $t(36) = 0.31$, $p = .759$, 95%CI [-2.62, 3.57]. Third, the interactive effect between followers' total voice behavior and leaders' total granting behavior on followers' total leadership behavior was also found to be nonsignificant, $B = -0.02$, $SE = 0.03$, $t(36) = -0.62$, $p = .538$, 95%CI [-0.08, 0.04]. Lastly, the moderated mediation model was nonsignificant since the bootstrapping analysis included zero, $B_{indirect} = -0.08$, 95%CI [-0.43, 0.33]. The results of the moderated mediation analysis using standardized total frequencies are given in Figure 3.

Figure 3

Results of the Moderated Mediation Analysis Using Standardized Total Frequencies of Coded Behaviors



Note. Unstandardized regression coefficients for hypothesized relationships. The regression coefficient for the relation between followers' affective MTL and followers' leadership behavior, while controlling for voice and leaders' granting behavior, is in parentheses. Results are based on the standardized total frequencies for follower voice behavior (I1), leader granting behavior (I2), and follower leadership behavior (I3) during the complete dyadic conversation.

*$p < .05$

Interestingly, next to these exploratory analysis with regards to the research model, results of an independent samples *t*-test showed that followers engaged in more total leadership behaviors when leaders indicated that they did not know the goal of the study ($M = 13.99$, $SD = 6.10$) compared to when leaders indicated that they knew the goal of the study ($M = 10.03$, $SD = 4.50$), $t(41) = 2.44$, $p = .019$, 95%CI [0.68, 7.24] (see Appendix F, Table 3F). However, when adding leaders' knowledge on the study goal as a control to the regression analysis and the

moderated mediation analysis based on standardized total frequencies, the significance of results did not change.

Additionally, recent literature largely criticized the misalignment between observed behavior and perception ratings (e.g., Banks et al., 2018, 2023; Behrendt et al., 2017; Güntner et al., 2023; Hansbrough et al., 2015; Hemshorn de Sanchez et al., 2022; Lee et al., 2015). Thus, I conducted an additional explorative analysis to assess the correlation between coded follower voice, self-, and other ratings of follower voice.[5] Both followers and leaders rated three items of a self-perceived voice scale (adapted from Fast et al., 2014) in T2, whereby the wording was adjusted to the self-rating by followers ($\alpha = .65$) and the other rating by leaders ($\alpha = .64$; see items in Appendix C). A sample item for followers was "I gave my interaction partner suggestions about how to perform better in the problem-solving task, even if he or she disagreed.". A sample item for leaders was "My interaction partner gave me suggestions about how to perform better in the problem-solving task, even if I disagreed.". Interestingly, behavioral coding of the standardized total frequencies of follower voice was neither significantly correlated to followers' self-ratings of follower voice, $r\,(41) = -.02$, $p = .886$, nor to leaders' other ratings of follower voice, $r\,(41) = .20$, $p = .191$.

Discussion

In recent decades, scholars have increasingly emphasized the active role of the follower in the leadership process (e.g., Sims & Weinberg, 2022; Uhl-Bien et al., 2014). In fact, followers may claim leadership from their interaction partners, thus reflecting leadership as a dynamic, relational, and co-constructed phenomenon (DeRue & Ashford, 2010; Marchiondo et al., 2015).

[5] This additional analysis was possible since perception ratings of follower voice were assessed as part of the collaborative data collection.

A verbal and direct form of follower leadership claiming is voice (DeRue & Ashford, 2010; McClean et al., 2018) which has been linked to several individual antecedents in previous studies (e.g., conscientiousness; Nikolaou et al., 2008; Zare & Flinchbaugh, 2019). However, research investigating follower characteristics related to leadership remained limited in the prediction of follower voice. Hence, the present study focused on affective MTL as a personality characteristic related to leadership that may influence followers‘ leadership claiming process. Additionally, there was limited understanding of whether followers enact upon further leadership behaviors after their initial leadership claim (e.g., Acton et al., 2019; Meinecke et al., 2019; Morrison, 2023) and whether the claiming-granting interaction between followers and leaders influences this process (Hemshorn de Sanchez et al., 2022).

To fill this gap, the current study adopted a multi-method approach to investigate a sequence from followers‘ affective MTL to followers‘ leadership behaviors via follower voice, whereby leaders‘ granting behavior was expected to affect the strength of this sequence. Findings provided support for a positive relation between follower affective MTL and follower voice, but only when using the standardized total frequencies of follower voice instead of standardized interval frequencies. However, neither follower affective MTL nor follower voice related to followers’ subsequent leadership behaviors. Similarly, the interactive effect between follower voice and leader granting on followers’ leadership behaviors was also not supported. Still, current findings provide several theoretical implications for theories on followership (Uhl-Bien et al., 2014), leadership identity construction (DeRue & Ashford, 2010), and leadership emergence (Badura et al., 2022) and practical implications for the active role of followers in leadership interactions.

Before elaborating on the implications of the findings, it should be considered that this study adopted behavior interaction coding (Keyton, 2018) to assess observable behavioral patterns between individuals in a follower role and individuals in a leader role. As shown in the explorative analysis, behavioral codings of follower voice were unrelated to both followers' and leaders' perception ratings of follower voice. This finding reflects the previously argued misalignment between behavior and behavior perception in leadership research (Behrendt et al., 2017; Güntner et al., 2023). Hence, the comparison of current findings to previous research using self-reports should be considered with caution.

Theoretical Implications

First, the present study extended on theories of followership (Uhl-Bien et al., 2014) to investigate specific behavioral patterns of individuals put into a follower role. Aligning with the view that followers are active contributor in the work environment (Sims et al., 2022; Van de Mieroop et al., 2020), followers‘ affective MTL was found to predict voice when assessed throughout the total dyadic conversation. Accordingly, followers with high affective MTL may feel a strong internal drive to voice their opinions towards their interaction partner and take action to do so. This finding complements previous research based on self-reports (e.g., Chamberlin et al., 2017; Kadous et al., 2019; Kirrane et al., 2017) and shows that followers' affective MTL relates to actual voice behaviors as well (i.e., instead of mere perception ratings). With that, followers voice can indeed be seen as a verbal and direct way of claiming leadership from the interaction partner (DeRue & Ashford, 2010).

However, it should be considered that the relation between followers‘ affective MTL and their voicing behavior became only significant when using the standardized total frequencies of voice (i.e., instead of standardized interval frequencies). As such, the initial interval-sequencing

might have provided followers with limited possibilities to engage in voice, such that the leadership claiming process unfolded only throughout a longer time scope. Alternatively, individuals with an assigned follower role might have needed some time to build up feelings of psychological safety and relatedness with their interaction partner, especially as participants of the current study were randomly allocated to each other. Indeed, previous research showed that feelings of psychological safety (Chamberlin et al., 2017; Starzyk & Sonnentag, 2019) as well as leader-member exchange (Carnevale et al., 2017; Tarkang et al., 2020) positively contributed to employees‘ voicing efforts. Hence, individuals in a follower role might have dedicated time to creating a positive relation with the assigned leader first, such that the relation between affective MTL and voice became only apparent in a longer time.

Second, I aimed to investigate what happens after a follower shows voice behavior, recognizing leadership emergence as a dynamic process that unfolds over time (e.g., Acton et al., 2019; Badura et al., 2020; 2022). The present study was the first to empirically examine whether followers with high MTL enact upon further leadership behaviors after their initial voice expression. However, followers' leadership behaviors were neither related to followers' affective MTL nor to followers' voicing behavior. As such, it seems that followers were generally hesitant to engage in the investigated leadership behaviors (Yukl, 2012), regardless of their own affective MTL and their preceding leadership claim through voice. This hesitation may reflect a general reluctance to lead among assigned followers (Aycan et al., 2024) who might have preferred to stay in their role as the follower. Moreover, followers might have respected the role division between follower and leader (i.e., hierarchical leadership-structure schema; DeRue & Ashford, 2010), limiting their further enactment upon leadership behaviors (Wellman et al., 2022).

Accordingly, followers' affective MTL and their leadership claiming process does not necessarily translate into followers' further leadership emergence through leadership behaviors (Epitropaki, 2018; Galvin et al., 2024). These findings contrast previous arguments from self-reported studies that prospective leader motivation (e.g., MTL) and behaviors (e.g., task-orientation) predict whether individuals emerge as a leader (e.g., Badura et al., 2020, 2022). As such, motivated followers might have perceived a tension between taking the lead and adhering to their assigned role, restricting followers' further leadership emergence. Additionally, the present focus on observable leadership behaviors (Yukl, 2012; Yukl et al., 2002) could have measured a different construct than previous perception ratings on leadership emergence and leadership effectiveness (e.g., Badura et al., 2020). This misalignment highlights the importance of disentangling and connecting perceived and actual behavioral patterns (Hemshorn de Sanchez et al., 2022) to fully understand whether and how followers emerge as leaders.

Third, the present study adopted interaction coding to test whether followers' claiming and leaders' granting interact to influence the subsequent leadership emergence process (DeRue & Ashford, 2010). By taking followers' interaction partner into account, this study therefore complemented the "lack of research insights into the back and forth between leaders and followers" (Hemshorn de Sanchez et al., 2022, p. 359). Yet, also the interactive effect between followers' claiming and leaders' granting on followers' further leadership behaviors was not supported by the current study. As such, the proposition of the leadership identity construction theory that claiming and granting may lead to the co-construction of ones' leader identity (DeRue & Ashford, 2010) could not be confirmed by means of behavior interaction coding.

Accordingly, although previous studies found that the claiming-granting interaction positively impacts individuals' leadership perception ratings (Marchiondo et al., 2015), the mere

granting response by leaders may not be sufficient to encourage followers‘ verbal leadership behaviors. Possibly, leaders’ verbal granting (e.g., “I agree”) might have been too ambiguous for followers to ignore the formal role division and take the lead further. In fact, DeRue and Ashford (2010) proposed that the positive spirals of the claiming-granting process depend on the clarity, visibility, and credibility of the reciprocal claims and grants. As such, clearly visible grants (e.g., “I allow you to take the lead”) might have been required to encourage followers’ further leadership behaviors after their initial leadership claim. Alternatively, the interactive effect of follower claiming and leader granting on follower leadership behaviors could have occurred on a different behavioral level than solely verbal behaviors (Hemshorn de Sanchez et al., 2022). For example, Cheng et al. (2022) argued that nonverbal behaviors like eye gazing influences the functioning between interaction partners. Possibly, followers and leaders might have engaged in other fine-grained (non)verbal behaviors to signal the leadership co-construction process.

Practical Implications

Overall, the methodology of the present study enables practical implications that are based on tangible behavioral patterns of followers and leaders (Güntner et al., 2023). First, followers should realize that they are part of a co-constructed work environment in which they may verbally claim leadership from their interaction partner. Since different types of voice expression by followers can lead to different reactions of the leader (Burris, 2012; Maynes & Podsakoff, 2014), followers may need to consider the context in which their voicing efforts take place (Bashshur & Oc, 2015). Accordingly, followers with high affective MTL should be aware how to communicate their leadership claim through voice effectively to their interaction partner. Extending on followers’ voice, it may be necessary to support followers’ further enactment of leadership behaviors by offering leadership development trainings on effective leadership skills

(e.g., Collins & Holton, 2004; Lacerenza et al., 2017). With such interventions, motivated followers may build up positive confidence in their own leadership skills (Aycan et al., 2024), thus overcoming their hesitation to engage in effective leadership behaviors.

Second, leaders can support followers‘ leadership claiming process by dedicating sufficient time to the follower-leader interaction. As indicated by results, motivated followers may need several minutes until they translate their MTL into actual verbal voicing behaviors. Leaders could therefore plan for longer interactions with followers to stimulate follower voice, while also providing a safe environment for speaking up (Starzyk & Sonnentag, 2019). However, if leaders aim for shared leadership structures (e.g., Van de Mieroop et al., 2020), leaders may need to make their leadership grants explicit and clearly visible to encourage followers in taking the lead after their initial leadership claim. Moreover, leader behaviors besides verbal granting may be required to stimulate followers' leadership behaviors, including empowerment (e.g., Bakker et al., 2023; Yun et al., 2006) and initiating structure (e.g., Briker et al., 2021). Yet, as some individuals may prefer to stay in their role of the follower (Aycan et al., 2024), leaders may still have to demonstrate own leadership behaviors to direct the accomplishment of organizational objectives.

Third, practitioners should foster an organizational climate that recognizes all organizational members as a part of the leadership process (Aycan et al., 2022). Accordingly, organizations could implement leadership development programs that are accessible for every organizational member (e.g. Griffith et al., 2019), thus moving away from a formalized role division between follower and leaders (Aycan et al., 2024). With such a supportive culture around leadership, organizations can create enhanced openness towards different approaches to leadership (Güntner & Kauffeld, 2021), including shared leadership (Van de Mieroop et al.,

2020; Zhu et al., 2018) and self-managed teams (Morgeson et al., 2010). This openness may encourage followers to translate their MTL into verbal leadership claiming behaviors while developing positive expectations around leadership practices (Aycan et al., 2024).

Strengths, Limitations and Future Directions

The present study has several strengths, including the use of behavioral interaction coding as a fine-grained analysis approach (Keyton, 2018) to provide a more accurate assessment of behavioral patterns between interaction partners (e.g., Güntner et al, 2023). With that, the current study is the first to provide an empirical test of the leadership identity construction theory by DeRue and Ashford (2010) using behavioral interaction coding. Aligning with the best-practice recommendations by Güntner et al. (2023), the behavioral interaction coding was conducted using (1) recordings to control for contextual information and (2) pre-existing, validated, and theoretically derived coding schemes. By setting the behavioral coding in relation to participants' self-reports, this study followed a multi-method approach and thus accounted for the importance of triangulation (Banks et al., 2023). Yet, despite these strengths, the present study has several limitations that need to be considered as well.

First, the use of a dyadic student sample may have limited the external validity of findings (i.e., generalizability; Campbell, 1957; McDermott, 2011). More specifically, individuals in the current study were randomly assigned to the role of the follower or the leader, which may not generalize to actual follower-leader constellations in the field. In the field, several confounding factors may influence investigated relations (Güntner et al., 2023), including the relationship history between interaction partners (DeRue & Ashford, 2010), density of network ties (DeRue et al., 2015; Serban et al., 2015), team size (Lee & Farh, 2019), and interaction mode (face-to-face vs virtual; Serban et al., 2015; Wilson et al., 2021). Indeed, several meta-analyses

within the leadership research reported weaker relationships for field compared to laboratory settings (e.g., Avolio et al., 2009; Badura et al., 2018). Accordingly, future research should examine whether and how followers' leadership claiming process generalizes to actual organizational environments as well. Aligning with the reasoning by Güntner et al. (2020), such an examination into follower-leader interactions should ideally be conducted through field experiments to increase the balance between internal and external validity of results (Aguinis & Edwards, 2014; Eden, 2021; Güntner et al., 2020, 2023; Podsakoff & Podsakoff; 2019; Sieweke & Santoni; 2020). For instance, after manipulating followers' voice through instruction, video recordings of the subsequent interaction between actual followers and leaders could be analyzed to understand followers' leadership emergence process in the actual work environment.

Second, although the computed average of the inter-rater reliability was classified as good, the individual kappa's across the double codings ranged from 0.14 to 1.00 and from 0.38 to 1.00 for the follower and leader class, respectively (see Appendix E). This variability in inter-rater agreement reflects the inherent challenge of subjective judgment in interaction coding (Güntner et al., 2023), such that the social and relational nature of leadership constructs required coders to interpret meaning behind unitized events (i.e., coder inference; Sillars & Overall, 2016). Despite coder training, it is therefore likely that different coders adopted different interpretations of the same event (see further details in Güntner et al., 2023). These subjective interpretations might have been even more influenced by raters' present knowledge of study goals as well as by their level of observer drift (i.e., variation in observer measurement due to time and rater experience; Girard & Cohn, 2016; Güntner et al., 2023). To minimize these sources of bias and error, scholars are encouraged to further refine and specify the presently adopted coding scheme (i.e., Güntner, 2023) to have a clear understanding of investigated

leadership constructs. Moreover, whenever possible, (expert) raters should also be blind to hypotheses and to the goal of the study (e.g., Meinecke et al., 2017) to increase reliability of the coding approach (Güntner et al., 2023).

Third, the present study was conducted at the micro-level of analysis, referring to behavioral patterns that develop over the course of seconds, minutes, or an hour (Hemshorn de Sanchez et al., 2022; Klonek et al., 2019). However, this focus might have limited the understanding of interaction patterns between followers and leaders at different temporal scopes (i.e., nano-, meso-, macro-, and giga-time; Hemshorn de Sanchez et al., 2022). Indeed, the present study showed that the association between affective MTL and follower voice was only significant if follower voice was assessed throughout the complete conversation. Thus, followers‘ further enactment in leadership behaviors might have exceeded the investigated conversation and might have become apparent in a longer time scope only. Supporting this argument, previous studies have shown that the length of interaction time (Badura et al., 2018) and a teams' project continuance (Gerpott et al., 2019) influenced how relevant predictors related to leadership emergence. To fully understand these temporal dynamics in followers' leadership process, future research is therefore encouraged to conduct leadership research at all five temporal levels to support a temporal integration of analysis (Hemshorn de Sanchez et al., 2022).

Fourth, the present behavioral interaction coding focused merely on verbal patterns of the leadership claiming-granting process, whereby behavioral units without a matching code were assigned to the code "other". Yet, these other-codes may have included non- or paraverbal information of followers and leaders that may have been essential to the leadership claiming-granting process between interaction partners (Hemshorn de Sanchez et al., 2022). As shown in previous research, the leadership process can be influenced by non- and paraverbal behavioral

patterns such as eye gaze (Cheng et al., 2022; Maran et al., 2019), gestures (Gerpott et al., 2018), or vocal delivery (e.g., tone of voice; Truninger et al., 2021). I therefore encourage future research to complement the assessment of verbal behaviors with a fine-grained analysis of nonverbal (e.g., smiling, nodding) or paraverbal behaviors (e.g., volume, intonation) to fully capture the leadership claiming-granting process between interaction partners.

Conclusion

This study integrated literature on followership, leadership identity construction, and leadership emergence to examine the active role of the follower in the leadership process. I demonstrated that followers' affective MTL related to followers' verbal voice behaviors throughout a conversation with an assigned leader. These voice behaviors may resemble a verbal and direct way of followers' leadership claiming, highlighting that followers are indeed active contributors in leadership interactions. Yet, followers might be hesitant to enact upon further leadership behaviors after their initial leadership claim, regardless of the granting response by leaders. These findings inspire scholars and practitioners to investigate whether and how followers' leadership emergence process can be encouraged further after their initial leadership claim. By doing so, research should account for the importance of adopting interaction coding, enabling more objective conclusions drawn from actual behavioral patterns between followers and leaders.

References

Acton, B. P., Foti, R. J., Lord, R. G., & Gladfelter, J. A. (2019). Putting emergence back in leadership emergence: A dynamic, multilevel, process-oriented framework. *Leadership Quarterly*, *30*(1), 145–164. https://doi.org/10.1016/j.leaqua.2018.07.002

Aguinis, H., & Edwards, J. R. (2014). Methodological wishes for the next decade and how to make wishes come true. *Journal of Management Studies*, *51*(1), 143-174. https://doi.org/10.1111/joms.12058

Alimo-Metcalfe, B. (2013). A critical review of leadership theory. In S. Leonard, R. Lewis., A. M. Freedman & J. Passmore (Eds.), *The Wiley-Blackwell handbook of the psychology of leadership, change, and organizational development* (pp. 13-47). John Wiley & Sons. https://doi.org/10.1002/9781118326404.ch2

Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The Leadership Quarterly*, *20*(5), 764-784. https://doi.org/10.1016/j.leaqua.2009.06.006

Aycan, Z., Özbilgin, M., Moraligil, B., & Epitropaki, O. (2024). Reluctance to lead: Conceptualization and contextualization. *European Management Journal*. https://doi.org/10.1016/j.emj.2024.02.005

Badura, K. L., Galvin, B. M., & Lee, M. Y. (2022). Supplemental material for leadership emergence: An integrative review. *Journal of Applied Psychology, 107*(11), 2069–2100. https://doi.org/10.1037/apl0000997.supp

Badura, K. L., Grijalva, E., Galvin, B. M., Owens, B. P., & Joseph, D. L. (2020). Motivation to lead: A meta-analysis and distal-proximal model of motivation and leadership. *Journal of Applied Psychology*, *105*(4), 331–354. https://doi.org/10.1037/apl0000439

Badura, K. L., Grijalva, E., Newman, D. A., Yan, T. T., & Jeon, G. (2018). Gender and leadership emergence: A meta-analysis and explanatory model. *Personnel Psychology*, *71*(3), 335–367. https://doi.org/10.1111/peps.12266

Bakeman, R., Deckner, D. F., & Quera, V. (2005). Analysis of behavioral streams. *Handbook of Research Methods in Developmental Science*, 394-420.

Bakker, A. B., Hetland, J., Kjellevold Olsen, O., & Espevik, R. (2023). Daily transformational leadership: A source of inspiration for follower performance? *European Management Journal*, *41*(5), 700–708. https://doi.org/10.1016/j.emj.2022.04.004

Banks, G. C., Gooty, J., Ross, R. L., Williams, C. E., & Harrington, N. T. (2018). Construct redundancy in leader behaviors: A review and agenda for the future. *Leadership Quarterly*, *29*(1), 236–251. https://doi.org/10.1016/j.leaqua.2017.12.005

Banks, G. C., Woznyj, H. M., & Mansfield, C. A. (2023). Where is "behavior" in organizational behavior? A call for a revolution in leadership research and beyond. *Leadership Quarterly*, *34*(6). https://doi.org/10.1016/j.leaqua.2021.101581

Bashshur, M. R., & Oc, B. (2015). When voice matters: A multilevel review of the impact of voice in organizations. *Journal of Management*, *41*(5), 1530-1554. https://doi.org/10.1177/0149206314558302

Beckley, J. M. (2020). Leading and following: The co-construction of leadership. *New Directions for Community Colleges*, *2020*(191), 57–66. https://doi.org/10.1002/cc.20406

Behrendt, P., Matz, S., & Göritz, A. S. (2017). An integrative model of leadership behavior. *The Leadership Quarterly, 28*(1), 229–244. https://doi.org/10.1016/j.leaqua.2016.08.002

Bell, C., Rvanniekerk, R., & Nel, P. (2015). The relationship between some demographic variables and leadership effectiveness among local government managers in South Africa. *African Journal of Business Management*, *9*(2), 50–58. https://doi.org/10.5897/ajbm2013.7299

Bergeron, D. M., & Thompson, P. S. (2020). Speaking up at work: The role of perceived organizational support in explaining the relationship between perceptions of organizational politics and voice behavior. *The Journal of Applied Behavioral Science*, *56*(2), 195-215. https://doi.org/10.1177/0021886319900332

Bligh, M. C., & Kohles, J. C. (2012). Approaching leadership with a follower focus. *Zeitschrift fur Psychologie/Journal of Psychology, 220*(4), 201-204. https://doi.org/10.1027/2151-2604/a000114

Briker, R., Hohmann, S., Walter, F., Lam, C. K., & Zhang, Y. (2021). Formal supervisors' role in stimulating team members' informal leader emergence: Supervisor and member status as critical moderators. *Journal of Organizational Behavior*, *42*(7), 913–932. https://doi.org/10.1002/job.2539

Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal*, *55*(4), 851–875. https://doi.org/10.5465/amj.2010.0562

Campbell, D. T. (1957). Factors relevant to validity of experiments in social settings. *Psychological Bulletin, 54*(4), 297–312.

Carnevale, J. B., Huang, L., Crede, M., Harms, P., & Uhl-Bien, M. (2017). Leading to stimulate employees' ideas: A quantitative review of leader–member exchange, employee voice, creativity, and innovative behavior. *Applied Psychology*, *66*(4), 517-552. https://doi.org/10.1111/apps.12102

Chamberlin, M., Newton, D. W., & Lepine, J. A. (2017). A meta-analysis of voice and its promotive and prohibitive forms: Identification of key associations, distinctions, and future research directions. *Personnel Psychology*, *70*(1), 11-71. https://doi.org/10.1111/peps.12185

Chamberlin, M., Newton, D. W., & Lepine, J. A. (2018). A meta-analysis of empowerment and voice as transmitters of high-performance managerial practices to job performance. *Journal of Organizational Behavior*, *39*(10), 1296-1313. https://doi.org/10.1002/job.2295

Chan, K.-Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, *86*(3), 481–498. https://doi.org/https://doi.org/10.1037/0021-9010.86.3.481

Chen, H., Liang, Q., Feng, C., & Zhang, Y. (2023). Leadership and follower voice: The role of inclusive leadership and group faultlines in promoting collective voice behavior. *Journal of Applied Behavioral Science*, *59*(1), 61–87. https://doi.org/10.1177/00218863211035243

Cheng, J. T., Gerpott, F. H., Benson, A. J., Bucker, B., Foulsham, T., Lansu, T. A., Schuelke, O. & Tsuchiya, K. (2022). Eye gaze and visual attention as a window into leadership and followership: A review of empirical insights and future directions. *The Leadership Quarterly*, 101654. https://doi.org/10.1016/j.leaqua.2022.101654

Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, *6*(4), 284.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*(1), 37-46. https://doi.org/10.1177/001316446002000104

Collins, D. B., & Holton III, E. F. (2004). The effectiveness of managerial leadership development programs: A meta-analysis of studies from 1982 to 2001. *Human Resource Development Quarterly*, *15*(2), 217-248. https://doi.org/10.1002/hrdq.1099

DeRue, D. S. (2011). Adaptive leadership theory: Leading and following as a complex adaptive process. *Research in Organizational Behavior*, *31*, 125-150. https://doi.org/10.1016/j.riob.2011.09.007

DeRue, D. S., & Ashford, S. J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, *35*(4), 627-647. https://doi.org/10.5465/amr.35.4.zok627

DeRue, D. S., Nahrgang, J. D., & Ashford, S. J. (2015). Interpersonal perceptions and the emergence of leadership structures in groups: A network perspective. *Organization Science*, *26*(4), 1192-1209. https://doi.org/10.1287/orsc.2014.0963

Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *The Academy of Management Journal, 50*(4), 869 – 884. https://doi.org/10.5465/amj.2007.26279183

Detert, J. R., Burris, E. R., Harrison, D. A., & Martin, S. R. (2013). Voice flows to and around leaders: Understanding when units are helped or hurt by employee voice. *Administrative Science Quarterly*, *58*(4), 624–668. https://doi.org/10.1177/0001839213510151

Duan, J., Li, C., Xu, Y., & Wu, C. H. (2017). Transformational leadership and employee voice behavior: A Pygmalion mechanism. *Journal of Organizational Behavior*, *38*(5), 650–670. https://doi.org/10.1002/job.2157

Eden, D. (2021). The science of leadership: A journey from survey research to field experimentation. *The Leadership Quarterly*, *32*(3), 101472. https://doi.org/10.1016/j.leaqua.2020.101472

Ekundayo, J. (2010). Time to focus on Followers: Looking at the other side of the leadership 'coin'. *Academic Leadership: The Online Journal*, *8*(4), 78. https://doi.org.10.58809/GWIG9219

Elloy, D. F. (2008). The relationship between self-leadership behaviors and organization variables in a self-managed work team environment. *Management Research News*, *31*(11), 801-810. https://doi.org/10.1108/01409170810913015

Emerson, R. W. (2015). Convenience sampling, random sampling, and snowball sampling: How does sampling affect the validity of research? *Journal of Visual Impairment & Blindness*, *109*(2), 164-168. https://doi.org/10.1177/0145482X1510900215

Ensari, N., Riggio, R. E., Christian, J., & Carslaw, G. (2011). Who emerges as a leader? Meta-analyses of individual differences as predictors of leadership emergence. *Personality and Individual Differences*, *51*(4), 532-536. https://doi.org/10.1016/j.paid.2011.05.017

Epitropaki, O. (2018). Self-selection bias in leadership. Understanding reluctant leaders. In R. E. Riggio (Ed.), *What's wrong with leadership? Improving leadership research and practice (pp. 89–104)*. Routledge.

Epitropaki, O., Kark, R., Mainemelis, C., & Lord, R. G. (2017). Leadership and followership identity processes: A multilevel review. *Leadership Quarterly*, 28(1), 104-129. https://doi.org/10.1016/j.leaqua.2016.10.003

Escudero, V., Lee, M., & Friedlander, M. L. (2018). Dyadic interaction analysis. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of interaction analysis (pp. 45-67).* Cambridge University Press. https://doi.org/10.1017/9781316286302

Fairhurst, G., & Antonakis, J. (2012). Dialogue: A research agenda for relational leadership. In M. Uhl-Bien, & S. Ospina (Eds.), *Advancing relational leadership research (pp. 433–459)*. Charlotte, NC: Information Age Publishers.

Fairhurst, G. T., & Grant, D. (2010). The social construction of leadership: A sailing guide. *Management Communication Quarterly*, *24*(2), 171–210. https://doi.org/10.1177/0893318909359697

Fast, N. J., Burris, E. R., & Bartel, C. A. (2014). Managing to stay in the dark: Managerial self-efficacy, ego defensiveness, and the aversion to employee voice. *Academy of management journal*, *57*(4), 1013-1034. https://doi.org/10.5465/amj.2012.0393

Galvin, B. M., Badura, K., LePine, J., & LePine, M. (2024). A theoretical integration of leader emergence and leadership effectiveness: Over, under, and congruent emergence. *Journal of Organizational Behavior*, *45*(2), 295-312. https://doi.org/10.1002/job.2724

Gerpott, F. H., Lehmann-Willenbrock, N., Silvis, J. D., & Van Vugt, M. (2018). In the eye of the beholder? An eye-tracking experiment on emergent leadership in team interactions. *The Leadership Quarterly*, *29*(4), 523-532. https://doi.org/10.1016/j.leaqua.2017.11.003

Gerpott, F. H., Lehmann-Willenbrock, N., Voelpel, S. C., & Van Vugt, M. (2019). It's not just what is said, but when it's said: A temporal account of verbal behaviors and emergent

leadership in self-managed teams. *Academy of Management Journal*, *62*(3), 717-738. https://doi.org/10.5465/amj.2017.0149

Gierke, L., Gerpott, F. H., Klonek, F. E., & Van Quaquebeke, N. (2023). Entrainment in meetings: Patterns of manager and employee leadership claiming and granting over time. *Academy of Management Proceedings*, *2023*(1). https://doi.org/10.5465/amproc.2023.73bp

Girard, J. M., & Cohn, J. F. (2016). A primer on observational measurement. *Assessment*, *23*(4), 404-413. https://doi.org/10.1177/1073191116635807

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3-34. https://doi.org/10.1016/j.riob.2008.04.002

Griffith, J. A., Baur, J. E., & Buckley, M. R. (2019). Creating comprehensive leadership pipelines: Applying the real options approach to organizational leadership development. *Human Resource Management Review, 29*(3), 305-315. https://doi.org/10.1016/j.hrmr.2018.07.001

Güntner, A. V. (2023). *Leadership-followership coding scheme*. Unpublished manual.

Güntner, A. V., & Kauffeld, S. (2021). The co-construction of leadership in change-related interactions between leaders and followers. *Gruppe. Interaktion. Organisation. Zeitschrift Fur Angewandte Organisationspsychologie (GIO)*, *52*(3), 551–562. https://doi.org/10.1007/s11612-021-00591-9

Güntner, A. V., Klonek, F. E., Lehmann-Willenbrock, N., & Kauffeld, S. (2020). Follower behavior renders leader behavior endogenous: The simultaneity problem, estimation challenges, and solutions. *Leadership Quarterly*, *31*(6). https://doi.org/10.1016/j.leaqua.2020.101441

Güntner, A. V, Meinecke, A. L., & Lüders, Z. E. K. (2023). Interaction coding in leadership research: A critical review and best-practice recommendations to measure behavior. *The Leadership Quarterly*, *34*(6), 1048–9843. https://doi.org/10.1016/j.leaqua.2023.101751

Guzman, F. A., & Espejo, A. (2019). Introducing changes at work: How voice behavior relates to management innovation. *Journal of Organizational Behavior*, *40*(1), 73-90. https://doi.org/10.1002/job.2319

Halbesleben, J. R. B., & Wheeler, A. R. (2015). To invest or not? The role of coworker support and trust in daily reciprocal gain spirals of helping behavior. *Journal of Management*, *41*(6), 1628–1650. https://doi.org/10.1177/0149206312455246

Hansbrough, T. K., Lord, R. G., & Schyns, B. (2015). Reconsidering the accuracy of follower leadership ratings. *The Leadership Quarterly*, *26*(2), 220-237. https://doi.org/10.1016/j.leaqua.2014.11.006

Hanson, S., & Pearson, B. (2023). Availability bias: Retrievability, narrow range of experience, and client behavior. *Journal of Financial Planning*, *36*(1), 49-53.

Hatfield, J. D., & Weider-Hatfield, D. (1978). The comparative utility of three types of behavioral units for interaction analysis. *Communications Monographs*, *45*(1), 44-50. https://doi.org/10.1080/03637757809375950

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from: http://www.afhayes.com/public/process2012.pdf

Hemshorn de Sanchez, C. S., Gerpott, F. H., & Lehmann-Willenbrock, N. (2022). A review and future agenda for behavioral research on leader–follower interactions at different

temporal scopes. *Journal of Organizational Behavior*, *43*(2), 342–368. https://doi.org/10.1002/job.2583

Hoch, J. E., & Kozlowski, S. W. J. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), 390–403. https://doi.org/https://doi.org/10.1037/a0030264

Hong, Y., Catano, V. M., & Liao, H. (2011). Leader emergence: The role of emotional intelligence and motivation to lead. *Leadership & Organization Development Journal*, *32*(4), 320–343. https://doi.org/10.1108/01437731111134625

Kadous, K., Proell, C. A., Rich, J., & Zhou, Y. (2019). It goes without saying: The effects of intrinsic motivational orientation, leadership emphasis of intrinsic goals, and audit issue ambiguity on speaking up. *Contemporary Accounting Research, 36*(4), 2113-2141. https://doi.org/10.1111/1911-3846.12500

Kalshoven, K., Den Hartog, D. N., & de Hoogh, A. H. B. (2013). Ethical leadership and followers' helping and initiative: The role of demonstrated responsibility and job autonomy. *European Journal of Work and Organizational Psychology, 22*(2), 165–181. https://doi.org/10.1080/1359432X.2011.640773

Kauffeld, S., Lehmann-Willenbrock, N., & Meinecke, A. L. (2018). The advanced interaction analysis for teams (act4teams) coding scheme. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of interaction analysis (pp. 422-431).* Cambridge University Press. https://doi.org/10.1017/9781316286302

Kao, K. Y., Hsu, H. H., Thomas, C. L., Cheng, Y. C., Lin, M. T., & Li, H. F. (2022). Motivating employees to speak up: Linking job autonomy, PO fit, and employee voice behaviors

through work engagement. *Curr Psychol, 41*, 7762–7776. https://doi.org/10.1007/s12144-020-01222-0

Kelly, J. R., Dvir, M., Parsons, D. M. (2018). TEMPO – A time-based system for analysis of group interaction process. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of group interaction analysis.* Cambridge University Press.

Keyton, J. (2018). Interaction analysis: An introduction. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of interaction analysis (pp. 3-19).* Cambridge University Press. https://doi.org/10.1017/9781316286302

Kim, M., & Beehr, T. A. (2021). The power of empowering leadership: Allowing and encouraging followers to take charge of their own jobs. *International Journal of Human Resource Management, 32*(9), 1865–1898. https://doi.org/10.1080/09585192.2019.1657166

Kirrane, M., O'Shea, D., Buckley, F., Grazi, A., & Prout, J. (2017). Investigating the role of discrete emotions in silence versus speaking up. *Journal of Occupational and Organizational Psychology, 90*(3), 354-378. https://doi.org/10.1111/joop.12175

Klasmeier, K. N., & Rowold, J. (2020). A multilevel investigation of predictors and outcomes of shared leadership. *Journal of Organizational Behavior, 41*(9), 915-930. https://doi.org/10.1002/job.2477

Klonek, F., Gerpott, F. H., Lehmann-Willenbrock, N., & Parker, S. K. (2019). Time to go wild: How to conceptualize and measure process dynamics in real teams with high-resolution. *Organizational Psychology Review, 9*(4), 245-275. https://doi.org/10.1177/2041386619886674

Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Joseph, D. L., & Salas, E. (2017). Leadership training design, delivery, and implementation: A meta-analysis. *Journal of Applied Psychology, 102*(12), 1686–1718. https://doi.org/10.1037/apl0000241

Lee, A., Martin, R., Thomas, G., Guillaume, Y., & Maio, G. R. (2015). Conceptualizing leadership perceptions as attitudes: Using attitude theory to further understand the leadership process. *The Leadership Quarterly, 26*(6), 910-934. https://doi.org/10.1016/j.leaqua.2015.10.003

Lee, S. M., & Farh, C. I. (2019). Dynamic leadership emergence: Differential impact of members' and peers' contributions in the idea generation and idea enactment phases of innovation project teams. *Journal of Applied Psychology, 104*(3), 411-432. https://doi.org/10.1037/apl0000384

Lee, W. R., Choi, S. B., & Kang, S. W. (2021). How leaders' positive feedback influences employees' innovative behavior: The mediating role of voice behavior and job autonomy. *Sustainability Switzerland, 13*(4), 1–13. https://doi.org/10.3390/su13041901

Lehmann-Willenbrock, N., Hung, H., & Keyton, J. (2017). New frontiers in analyzing dynamic group interactions: Bridging social and computer science. *Small Group Research, 48*(5), 519-531. https://doi.org/10.1177/1046496417718941

Lehmann-Willenbrock, N., Meinecke, A. L., Rowold, J., & Kauffeld, S. (2015). How transformational leadership works during team interactions: A behavioral process analysis. *Leadership Quarterly, 26*(6), 1017–1033. https://doi.org/10.1016/j.leaqua.2015.07.003

Leung, C., Lucas, A., Brindley, P., Anderson, S., Park, J., Vergis, A., & Gillman, L. M. (2018). Followership: A review of the literature in healthcare and beyond. *Journal of Critical Care, 46*, 99-104. https://doi.org/10.1016/j.jcrc.2018.05.001

Lichtenstein, B. B., & Plowman, D. A. (2009). The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels. *The Leadership Quarterly, 20*(4), 617-630. https://doi.org/10.1016/j.leaqua.2009.04.006

Light, R. J. (1971). Measures of response agreement for qualitative data: Some generalizations and alternatives. *Psychological Bulletin*, *76*(5), 365.

Lord, R. G., Epitropaki, O., Foti, R. J., & Hansbrough, T. K. (2020). Implicit leadership theories, implicit followership theories, and dynamic processing of leadership information. *Annual Review of Organizational Psychology and Organizational Behavior, 7*, 49-74. https://doi.org/10.1146/annurev-orgpsych-012119

Luria, G., & Berson, Y. (2013). How do leadership motives affect informal and formal leadership emergence? *Journal of Organizational Behavior, 34*(7), 995-1015. https://doi.org/10.1002/job.1836

MacLaren, N. G., Yammarino, F. J., Dionne, S. D., Sayama, H., Mumford, M. D., Connelly, S., Martin, R. W., Mulhearn, T. J., Todd, E. M., Kulkarni, A., Cao, Y. & Ruark, G. A. (2020). Testing the babble hypothesis: Speaking time predicts leader emergence in small groups. *The Leadership Quarterly, 31*(5), 101409. https://doi.org/10.1016/j.leaqua.2020.101409

Mañas Rodríguez, M. Á., Estreder, Y., Martinez-Tur, V., Díaz-Fúnez, P. A., & Pecino-Medina, V. (2020). A positive spiral of self-efficacy among public employees. *Personnel Review, 49*(8), 1607–1617. https://doi.org/10.1108/PR-09-2018-0364

Mangold (2014). *INTERACT quick start manual*. Arnstorf: Mangold International GmbH. http://www.mangold-international.com.

Maran, T., Moder, S., Furtner, M., Ravet-Brown, T., & Liegl, S. (2020). From self-report to behavior: Mapping charisma onto naturalistic gaze patterns. *Personality and Individual Differences*, *152*, 109562. https://doi.org/10.1016/j.paid.2019.109562

Marchiondo, L. A., Myers, C. G., & Kopelman, S. (2015). The relational nature of leadership identity construction: How and when it influences perceived leadership and decision-making. *Leadership Quarterly, 26*(5), 892–908. https://doi.org/10.1016/j.leaqua.2015.06.006

Maynes, T. D., & Podsakoff, P. M. (2014). Speaking more broadly: An examination of the nature, antecedents, and consequences of an expanded set of employee voice behaviors. *Journal of Applied Psychology, 99*(1), 87-112. https://doi.org/10.1037/a0034284

McClean, S. T., Barnes, C. M., Courtright, S. H., & Johnson, R. E. (2019). Resetting the clock on dynamic leader behaviors: A conceptual integration and agenda for future research. *Academy of Management Annals, 13*(2), 479-508. https://doi.org/10.5465/annals.2017.0081

McClean, E. J., Martin, S. R., Emich, K. J., & Woodruff, C. O. L. T. (2018). The social consequences of voice: An examination of voice type and gender on status and subsequent leader emergence. *Academy of Management Journal, 61*(5), 1869–1891. https://doi.org/10.5465/amj.2016.0148

McDermott, R. (2011). Internal and external validity. In J. N. Druckman, D. P. Greene, J. H. Kuklinski, & A. Lupia (Eds.), *Cambridge handbook of experimental political science (pp. 27–40).* Cambridge University Press. https://doi.org/10.1017/CBO9780511921452.003

Mehmood, Q., Hamstra, M. R., Nawab, S., & Vriend, T. (2016). Authentic leadership and followers' in-role and extra-role performance: The mediating role of followers' learning goal orientation. *Journal of Occupational and Organizational Psychology, 89*(4), 877-883. https://doi.org/10.1111/joop.12153

Meinecke, A. L., & Kauffeld, S. (2019). Engaging the hearts and minds of followers: Leader empathy and language style matching during appraisal interviews. *Journal of Business and Psychology, 34*, 485-501. https://doi.org/10.1007/s10869-018-9554-9

Meinecke, A. L., Klonek, F. E., & Kauffeld, S. (2016). Using observational research methods to study voice and silence in organizations. *German Journal of Human Resource Management, 30*(3–4), 195–224. https://doi.org/10.1177/2397002216649862

Meinecke, A. L. , Lehmann-Willenbrock, N. & Kauffeld, S. (2017). What happens during annual appraisal interviews? How leader–follower interactions unfold and impact interview outcomes. *Journal of Applied Psychology, 102*(7), 1054-1074. https://doi.org/10.1037/apl0000219.

Meyer, B., Burtscher, M. J., Jonas, K., Feese, S., Arnrich, B., Tröster, G., & Schermuly, C. C. (2016). What good leaders actually do: Micro-level leadership behaviour, leader evaluations, and team decision quality. *European Journal of Work and Organizational Psychology, 25*(6), 773–789. https://doi.org/10.1080/1359432X.2016.1189903

Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management, 36*(1), 5–39. https://doi.org/10.1177/0149206309347376

Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *Academy of Management Annals, 5*(1), 373-412. https://doi.org/10.5465/19416520.2011.574506

Morrison, E. W. (2014). Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 173–197. https://doi.org/10.1146/annurev-orgpsych-031413-091328

Morrison, E. W. (2023). Employee voice and silence: Taking stock a decade later. *Annual Review of Organizational Psychology and Organizational Behavior, 10*, 79–107. https://doi.org/10.1146/annurev-orgpsych-120920

Ng, T. W., & Feldman, D. C. (2012). Employee voice behavior: A meta-analytic test of the conservation of resources framework. *Journal of Organizational Behavior, 33*(2), 216-234. https://doi.org/10.1002/job.754

Nieberle, K. W., Acton, B. P., Braun, S., Lord, R. G., & Fu, Y. (2023). Leader identity on the fly: Intra-personal leader identity dynamics in response to strong events. *Journal of Business and Psychology,* 1-24. https://doi.org/10.1007/s10869-023-09906-7

Nikolaou, I., Vakola, M., & Bourantas, D. (2008). Who speaks up at work? Dispositional influences on employees' voice behavior. *Personnel Review, 37*(6), 666-679. https://doi.org/10.1108/00483480810906892

Oh, S. H. D. (2012). Leadership emergence in autonomous work teams: Who is more willing to lead? *Social Behavior and Personality: An International Journal, 40*(9), 1451-1464. https://doi.org/10.2224/sbp.2012.40.9.1451

Park, H., Tangirala, S., Hussain, I., & Ekkirala, S. (2022). How and when managers reward employees' voice: The role of proactivity attributions. *Journal of Applied Psychology, 107*(12), 2269-2284. https://doi.org/10.1037/APL0001008

Paustian-Underdahl, S. C., Walker, L. S., & Woehr, D. J. (2014). Gender and perceptions of leadership effectiveness: A meta-analysis of contextual moderators. *Journal of Applied Psychology, 99*(6), 1129–1145. https://doi.org/10.1037/a0036751

Podsakoff, P. M., & Podsakoff, N. P. (2019). Experimental designs in management and leadership research: Strengths, limitations, and recommendations for improving publishability. *The Leadership Quarterly, 30*(1), 11–33. https://doi.org/10.1016/j.leaqua.2018.11.002

Rack, O., Zahn, C., & Mateescu, M. (2018). Coding and counting: Frequency analysis for group interaction. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of interaction analysis (pp. 277-294)*. Cambridge University Press. https://doi.org/10.1017/9781316286302

Ralon, A., Rothenberg, J., Odeh, G., Turney, M., & Wu, Y. (2021). How followers contribute to team success, leadership transformation and organizational excellence. *Journal of International Business and Management, 4*(12), 1-7. https://doi.org/10.37227/JIBM-2021-11-1476

Santos, M. M., & Porto, J. B. (2023). Motivation to lead: A novel theorical approach. *Trends in Psychology*. https://doi.org/10.1007/s43076-023-00323-6

Schyns, B., Kiefer, T., & Foti, R. J. (2020). Does thinking of myself as leader make me want to lead? The role of congruence in self-theories and implicit leadership theories in motivation to lead. *Journal of Vocational Behavior, 122*. https://doi.org/10.1016/j.jvb.2020.103477

Scott, C. P. R., Jiang, H., Wildman, J. L., & Griffith, R. (2018). The impact of implicit collective leadership theories on the emergence and effectiveness of leadership networks in teams. *Human Resource Management Review, 28*(4), 464–481. https://doi.org/10.1016/j.hrmr.2017.03.005

Serban, A., Yammarino, F. J., Dionne, S. D., Kahai, S. S., Hao, C., McHugh, K. A., McHugh, K. A., Sotak, K. L., Mushore, B. R. A., Friedrich, L. T. & Peterson, D. R. (2015). Leadership emergence in face-to-face and virtual teams: A multi-level model with agent-based simulations, quasi-experimental and experimental tests. *The Leadership Quarterly, 26*(3), 402-418. https://doi.org/10.1016/j.leaqua.2015.02.006

Shamir, B. (2011). Leadership takes time: Some implications of (not) taking time seriously in leadership research. *Leadership Quarterly, 22*(2), 307–315. https://doi.org/10.1016/j.leaqua.2011.02.006

Shin, D., Woodwark, M. J., Konrad, A. M., & Jung, Y. (2022). Innovation strategy, voice practices, employee voice participation, and organizational innovation. *Journal of Business Research, 147,* 392-402. https://doi.org/10.1016/j.jbusres.2022.04.015

Sieweke, J., & Santoni, S. (2020). Natural experiments in leadership research: An introduction, review, and guidelines. *The Leadership Quarterly, 31*(1), 101338. https://doi.org/10.1016/j.leaqua.2019.101338

Sillars, A., & Overall, N. C. (2016). Coding observed interaction. In D. Canary & A. VanLear (Eds.), *Researching Interactive Communication Behavior: A Sourcebook of Methods and Measures (pp. 199-215).* Thousand Oaks, CA: Sage.

Sims, R., & Weinberg, F. J. (2022). More than follow the leader: Expectations, behaviors, stability, and change in a co-created leadership process. *Group and Organization Management*. https://doi.org/10.1177/10596011221093456

Song, J., Wu, J., & Gu, J. (2017). Voice behavior and creative performance moderated by stressors. *Journal of Managerial Psychology, 32*(2), 177-192. https://doi.org/10.1108/JMP-03-2016-0078

Starzyk, A., & Sonnentag, S. (2019). When do low-initiative employees feel responsible for change and speak up to managers? *Journal of Vocational Behavior, 115,* 103342. https://doi.org/10.1016/j.jvb.2019.103342

Tanaka, S., Hatano, K., Ikeda, M., & Nakahara, J. (2023). Motivation to lead in Japan: Validation of a Japanese version of the motivation to lead scale. *Frontiers in Psychology,* 14. https://doi.org/10.3389/fpsyg.2023.1328593

Tarkang, M. E., Nange, R. Y., & Ozturen, A. (2022). Inspiring employee voice through leader–member exchange. *Journal of Public Affairs, 22*(1), e2317. https://doi.org/10.1002/pa.2317

Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology, 83*(2), 275-300. https://doi.org/10.1348/096317910X502359

Thoroughgood, C. N., Sawyer, K. B., Padilla, A., & Lunsford, L. (2018). Destructive leadership: A critique of leader-centric perspectives and toward a more holistic definition. *Journal of Business Ethics, 151*(3), 627–649. https://doi.org/10.1007/s10551-016-3257-9

Truninger, M., Ruderman, M. N., Clerkin, C., Fernandez, K. C., & Cancro, D. (2021). Sounds like a leader: An ascription–actuality approach to examining leader emergence and effectiveness. *The Leadership Quarterly, 32*(5), 101420. https://doi.org/10.1016/j.leaqua.2020.101420

Tubin, D. (2017). Leadership identity construction practices: The case of successful Israeli school principals. *Educational Management Administration and Leadership, 45*(5), 790–805. https://doi.org/10.1177/1741143216682503

Uhl-Bien, M., & Carsten, M. (2018). Reversing the lens in leadership: Positioning followership in the leadership construct. In I. Katz, G. Eilam-Shamir, R. Kark, & Y. Berson (Eds.). *Leadership now: Reflections on the legacy of Boas Shamir (pp. 195-222)*. Emerald Publishing Limited. https://doi.org/10.1108/S1479-357120180000009005

Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *Leadership Quarterly, 25*(1), 83-104. https://doi.org/10.1016/j.leaqua.2013.11.007

Van De Mieroop, D., Clifton, J., & Verhelst, A. (2020). Investigating the interplay between formal and informal leaders in a shared leadership configuration: A multimodal conversation analytical study. *Human Relations, 73*(4), 490–515. https://doi.org/10.1177/0018726719895077

Waldman, D. A., Galvin, B. M., & Walumbwa, F. O. (2013). The development of motivation to lead and leader role identity. *Journal of Leadership and Organizational Studies, 20*(2), 156–168. https://doi.org/10.1177/1548051812457416

Weiss, M., & Morrison, E. W. (2019). Speaking up and moving up: How voice can enhance employees' social status. *Journal of Organizational Behavior, 40*(1), 5-19. https://doi.org/10.1002/job.2262

Wellman, N., Ashford, S. J., Sanchez-Burks, J., & DeRue, D. S. (2022). Leading when the boss is present: How leadership structure schemas affect leadership behavior. *Journal of Leadership & Organizational Studies, 29*(3), 249-269. https://doi.org/10.1177/15480518221076767

Wilson, J. M., Fletcher, T. D., Pescosolido, T., & Major, D. A. (2021). Extraversion and leadership emergence: Differences in virtual and face-to-face teams. *Small Group Research, 52*(5), 535-564. https://doi.org/10.1177/1046496420986620

Yoder, P., & Symons, F. (2010). *Observational measurement of behavior.* Springer.

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives, 26*(4), 66-85. https://doi.org/10.5465/amp.2012.0088

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies, 9*(1), 15-32. https://doi.org/10.1177/107179190200900102

Yun, S., Cox, J., & Sims Jr, H. P. (2006). The forgotten follower: a contingency model of leadership and follower self-leadership. *Journal of Managerial Psychology*, *21*(4), 374-388. https://doi.org/10.1108/02683940610663141

Zare, M., & Flinchbaugh, C. (2019). Voice, creativity, and big five personality traits: A meta-analysis. *Human Performance, 32*(1), 30-51. https://doi.org/10.1080/08959285.2018.1550782

Zhang, G., & Inness, M. (2019). Transformational leadership and employee voice: A model of proactive motivation. *Leadership & Organization Development Journal, 40*(7), 777-790. https://doi.org/10.1108/LODJ-01-2019-0017

Zhu, J., Liao, Z., Yam, K. C., & Johnson, R. E. (2018). Shared leadership: A state-of-the-art review and future research agenda. *Journal of Organizational Behavior, 39*(7), 834-852. https://doi.org/10.1002/job.2296

Appendix A

Researcher Script for Dyadic Conversations

Hello and welcome!

Thank you for joining us today. My name is [Researcher's Name], and I will briefly guide you through the upcoming study on online decision-making.

Please let me remind you of the information that was provided when you signed up for this study: Your participation in this study is voluntary, meaning you are not obligated to participate. You may decide to stop your participation at any point in time without providing a reason for stopping and your data will be deleted in that case. However, you will only receive the reward of research credits if you finish the entire study.

As a reminder, here is the procedure of the next around 30 minutes:

First, you will engage in a brief online conversation (15 min) here via Zoom that will be recorded and afterwards, we will ask you to fill out a brief survey with questions about your experience of the conversation.

Let me give you some instructions on the conversation that you are about to engage in together. The goal of this study is to explore online decision-making between two people. For this purpose, you will take part in a decision-making task, where you will need to rank items from most to least important. As part of this task, you will be asked to put yourself in a hypothetical situation in which both of you have just survived the crash of a small plane. More information will follow in the document that I will share with you now.

I will share the link to the explanation of the decision-making task in the chat box. You can click on this link, read the explanation of the task and familiarize yourself with the limited

resources you have. You have about two minutes to read the instructions and then I'll ask you to start the discussion.

I want to remind you that this interaction will be recorded . When you've reached an agreement on the prioritization of items, one of you can fill in the ranking in the chat box. 1 will be the most important item and 12 the least important item. You'll have a total of 15 minutes for this task, so make the most of your time.

Once you start with your discussion, I will turn off my camera and my speaker sound, so I don't interrupt or distract you. When there is only one minute left I'll let you know so you can start filling in the ranking in the chat box.

You can now click the link and read the explanation of the task. You have two minutes to read the instructions and familiarize yourself with the 12 items

[RECORD]

[CONVERSATION]

[ONE MINUTE LEFT]

You have only one minute left to rank the items in the chat box. Remember, rank the items from most to least important.

Thank you for engaging in this 15-minute conversation. I would like to ask you to now fill the remaining part of the questionnaire, which will take 10 minutes. Please find the link to the questionnaire in the Zoom-chat. Once you're done with filling out the questionnaire, you can leave. Please do not speak about the content of the study with any other student, doing that may affect the study results. It is very important that other students do not know about the content of the study.

Appendix B

Instruction Sheets for Interaction Partners

Instruction Sheet Leader

Thank you for taking the time to participate in this study. In the following, you will be taking part in a decision-making task that asks you to figure out how to deal most effectively with limited resources. For this purpose, you will be paired with another person.

You have been assigned the role of the leader for the upcoming decision-making task. The other person, your conversation partner, has been assigned the role of the follower. As the leader, your responsibility is to guide the decision-making process. Ultimately, you bear the accountability for the results.

Scenario

Please put yourself in the following situations: You and your interaction partner are the only ones who survived the crash of a small plane. It is mid-January, and you are in northern Finland. The daily temperature Is 25 degrees Celsius below zero, and the night-time temperature is 40 degrees Celsius below zero. There is snow on the ground, and the countryside is wooded with several creeks criss-crossing the area. The nearest town is 35 kilometers away. Both of you are dressed in city clothes.

Your task

You and your interaction partner managed to salvage the following 12 items. Your primary goal is to list these items in order of importance for your survival. Engage in a discussion with your interaction partner to reach an agreement on the priority of each item.

You will have 15 minutes to complete this task. When there's just one minute remaining, the researcher will tell you to begin ranking the items in the Zoom chat box from most to least important for survival.

Items for Survival:

1. Cigarette lighter (without fluid)
2. Ball of steel wool
3. Extra shirt and pants for each survivor
4. Jar of coconut oil
5. 20 x 20 ft. piece of heavy-duty canvas
6. Small ax
7. Family-size chocolate bars (one per person)
8. Newspapers (one per person)
9. Loaded .45-caliber pistol
10. Quart of 100-proof whiskey
11. Compass
12. Sectional air map made of plastic

Your leadership decisions will directly impact the chances of survival. Work collaboratively, listen to your interaction partner and work together towards a successful outcome.

Instruction Sheet Follower

Thank you for taking the time to participate in this study. In the following, you will be taking part in a decision-making task that asks you to figure out how to deal most effectively with limited resources. For this purpose, you will be paired with another person.

You have been assigned the role of the follower for the upcoming decision-making task. The other person, your conversation partner, has been assigned the role of the leader. As a follower, it is expected that you will actively contribute to the decision-making process, support the leader, and provide valuable insights toward the common goal.

Scenario

Please put yourself in the following situations: You and your interaction partner are the only ones who survived the crash of a small plane. It is mid-January, and you are in northern Finland. The daily temperature Is 25 degrees Celsius below zero, and the night-time temperature is 40 degrees Celsius below zero. There is snow on the ground, and the countryside is wooded with several creeks criss-crossing the area. The nearest town is 35 kilometers away. Both of you are dressed in city clothes.

Your Task

You and your interaction partner managed to salvage the following 12 items. Your primary goal is to list these items in order of importance for your survival. Engage in a discussion with your interaction partner to reach an agreement on the priority of each item.

You will have 15 minutes to complete this task. When there's just one minute remaining, the researcher will tell you to begin ranking the items in the Zoom chat box from most to least important for survival.

Items for Survival:

1. Cigarette lighter (without fluid)
2. Ball of steel wool
3. Extra shirt and pants for each survivor
4. Jar of coconut oil

5. 20 x 20 ft. piece of heavy-duty canvas
6. Small ax
7. Family-size chocolate bars (one per person)
8. Newspapers (one per person)
9. Loaded .45-caliber pistol
10. Quart of 100-proof whiskey
11. Compass
12. Sectional air map made of plastic

Your contributions as a follower will directly impact the chances of survival. Share your thoughts, collaborate effectively, and work together towards a successful outcome.

Appendix C

Items for Included Questionnaires

Affective Motivation to Lead Scale

1. Most of the time, I prefer being a leader rather than a follower when working in a group.
2. I am the type of person who is not interested to lead others. *[6]
3. I am definitely not a leader by nature. *
4. I am the type of person who likes to be in charge of others.
5. I believe I can contribute more to a group if I am a follower rather than a leader. *
6. I usually want to be the leader in the groups that I work in.
7. I am the type who would actively support a leader but prefers not to be appointed as leader. *
8. I have a tendency to take charge in most groups or teams that I work in.
9. I am seldom reluctant to be the leader of a group.

Follower Voice Behavior

Perceived by Follower

1. I gave my interaction partner suggestions about how to perform better in the problem-solving task, even if he/she disagreed.
2. I challenged my interaction partner on how to deal with the problem-solving task.
3. I spoke up to my interaction partner with ideas on how to address the problem-solving task.

[6] Items with the sign * refer to reverse-coded items.

Perceived by Leader

1. My interaction partner gave me suggestions about how to perform better in the problem-solving task, even if I disagreed.
2. My interaction partner challenged me on how to deal with the problem-solving task.
3. My interaction partner spoke up to me with ideas on how to address the problem-solving task.

Appendix D

CoCoLEAD: Coding the Cocreation of Leadership Coding Scheme

Dr. Amelie Güntner

2023

Table of Contents

1. Introduction

The present manual serves to guide researchers in the behavior coding of leadership interactions. Behavior interaction coding involves breaking down a stream of behavior into finely nuanced segments and assigning them predefined codes for further analysis. More precisely, the term interaction coding describes a systematic, quantitative research method that relies on unitizing and subsequently coding naturally occurring interaction behaviors between two or more individuals (Keyton, 2018)[7]. During the interaction coding process, (trained) external observers (i.e., coders) unitize behavioral segments according to predefined rules, then label the behaviors with predefined codes from a coding scheme that defines and groups behaviors of interest (see also Lehmann-Willenbrock & Allen, 2018). Interaction coding allows researchers to precisely analyze what leaders and followers do when interacting with each other, and what happens when they do what they do. As such, it allows to examine the in situ behavioral interplay between leaders and followers and their mutual influence processes.

[7]Due to space constraints, I cannot provide all the methodological details here. However, I encourage interested readers to refer to comprehensive handbooks on this topic (Bakeman & Quera, 2011; Yoder & Symons, 2010) for further information.

2. Step-by-step guide to behavioral coding

1st step: Behavioral slicing

Everything which is said during the video recording is divided into many small "sense units". In this case, one such sense unit is a self-contained statement. It does not necessarily have to be a complete sentence; it can consist of several sentences or else of only one word. That is, a sense unit may as well be "*The problem is that the results are not good enough*." as *"Exactly*." What is essential is that a sense unit expresses only one single, comprehensible message and that the sense of the statement is conserved. Whenever the speaker changes, a new sense unit begins.

In summary:

- A complete train of thought is coded as one sense unit.
- Each sense unit can only receive one behavior code.
- Everything is coded. There must be no gaps in the sequence of events. (Exception: the very beginning of the video recording may not be coded, if interaction partners talk about something unrelated to the actual conversation. The coding begins only when the actual conversation starts.)
- Decision rule: When in doubt, fewer subdivisions are preferable to more subdivisions.

2nd step: Coding the units

In the second step, every sense unit is allocated to one of the behavior codes (act-by-act coding). The allocation of units to categories is also called "coding the units".

3. Codes for leadership behaviors (i.e., leadership claiming)

The following codes for leadership behavior (i.e., leadership claiming behavior) are built upon the behavior taxonomy of Yukl (2012) and Yukl et al. (2002), which is an attempt to comprehensively represent leadership behavior. Gary Yukl and colleagues established the three metacategories of task-oriented, relations-oriented, and change-oriented leadership behavior. These behaviors are clearly distinguishable, observable, measurable, and relevant to the leadership role. What follows is a brief description of task-oriented, relations-oriented, and change-oriented leadership[8]. Each of the three metacategories of leadership behaviors can be further differentiated into four subdimensions. However, please note that, in our case, coders will only use the codes to distinguish between the three leadership behaviors, rather than coding the single subdimensions per metacategory.

Task-oriented leadership

Task-oriented leadership revolves around leadership behaviors that aim to ensure that people, equipment, and other resources are used efficiently to accomplish the common goal of a group or organization. Task-oriented leadership comprises four key subdimensions: Planning, Clarifying, Monitoring Operations, and Problem Solving.

Planning involves creating realistic plans, coordinating activities, and utilizing resources efficiently to avoid delays and waste. *Example: "I understand that you would like the tasks to be better structured. Perhaps a task list would help you."*

Clarifying entails clarifying tasks, setting specific goals, and explaining procedures to ensure employees understand what, how, and why tasks are to be performed. *Example: "It's*

[8] Please read the articles by Yukl (2012) and Yukl et al. (2002) for detailed information on the behaviors comprising the taxonomy.

important to us that the work packages are completed within the planned time frame, which is why the team relies on your input. You are responsible for passing on customer feedback to the sales team every month."

Monitoring operations involves regularly assessing progress and performance to take corrective actions if necessary. *Example: "I would ask you to complete the task by the end of the week and then show me the results again."*

Problem solving includes identifying, analyzing, and swiftly addressing task-related issues, and applying sanctions if needed, to maintain normal workflow. *Example: Follower: "I think I need another step-by-step explanation of the system to help me find my way around." Leader: "I think that's a good idea. I could organize for the trainer we hired at the beginning to go through the system with you again to help you."*

Relations-oriented leadership

Relationship-oriented leadership particularly aims to improve the leader-follower relationship, enhance employee skills and development, and promote engagement with the work to be done. The four subcategories are: Recognizing, Supporting, Empowering, and Developing.

Recognizing involve leaders acknowledging and praising employees' performance, underscoring the importance of their contributions. *Example: "I appreciate the way you actively approached others and also supported your colleague outside of your area of responsibility."*

Supporting refers specifically to social support (i.e., not task-related support such as problem solving) and entails leaders showing empathy, providing assistance during challenges, and fostering trust, contributing to a supportive work environment. *Example: "Don't be afraid to make mistakes. We as a team will be happy to support you to give you confidence and help you get to grips with the new system."*

Empowering involves leaders involving employees in decision-making and empowering them to solve problems independently and to trust in themselves. *Example: "I trust you to take on the new task without my help. And feel free to approach colleagues independently who you think would be suitable for the project."*

Lastly, developing includes providing constructive feedback, encouraging growth opportunities, and offering career guidance to enhance employees' skills and career prospects. *Example: "I can imagine that it would be a good next step for your career if you were to take on your first management tasks in the next project. I would also recommend leadership training as preparation."*

Change-oriented leadership

Change-oriented leadership behavior aims to foster innovation, collective learning, and adaptation to the employees' external environment. This leadership dimension can be divided into four subcategories: Envisioning Change, Facilitating Collective Learning, Encouraging Innovation, and Advocating Change.

Leaders **envision change** by articulating a clear picture of shared goals, explaining their relevance to employees, and describing new initiatives with enthusiasm and optimism. *Example: "The aim is for us as a company to stand for quality and sustainability. As a team, we are making a decisive contribution to a better world of tomorrow."*

Leaders **facilitate collective learning** by seeking ways to improve employee performance, helping employees understand factors influencing (team) performance, and fostering knowledge and experience exchange among team members, emphasizing the importance of a supportive environment for learning. *Example: "I would ask you to use the error list so that your colleagues can also learn from your mistakes and thus avoid mistakes."*

Leaders **encourage innovation** by highlighting its importance, encouraging employees to think creatively and experiment with new approaches, and supporting the development of new products, services, or processes. *Example: Follower: "I have a suggestion for another method of raising money that I think is better than the charity dinner, namely crowd-funding." Leader: "I think that's a very good idea and I'll bring it up at the next team meeting and make the case for it. And if your colleagues agree, we will implement this crowd-funding after the charity dinner."*

Lastly, leaders **advocate change** by explaining emerging threats and opportunities, identifying reasons why existing strategies or processes may no longer be appropriate, and suggesting changes to ensure that employees are aware of ongoing changes. *Example: Follower: "I don't understand why we have introduced a new system, as I think the previous one was perfectly safe." Leader: "The system was checked by specialists and it turned out that the security of our system can be improved preventively, which prevents us from falling victim to a hacker attack. It also contains new useful functions."*

Other behaviors

Given that the behavior coding is intended to be exhaustive, an utterance is coded as "Other" if the behavior to be coded cannot be assigned to any other category. *Example: Follower: "I don't think the tasks are fairly distributed and I'm therefore very keen to see a new allocation." Leader: "I have a short anecdote from my professional past, perhaps that will comfort you."; "Are we finally done with this conversation?"*

Incomprehensible

The leader's statement is not comprehensible acoustically.

4. Codes for follower behavior (i.e., follower voice and granting leadership)

Followers' behavior will be differentiated between voice, granting behavior and others. Expressions of voice will be coded based on the act4teams coding scheme by Kauffeld et al. (2018), specifically relying on the definition of problem-focused statements. Problem-focused statements are aimed at understanding and analyzing the problem at hand, discussing ideas, and developing ideas and solutions. Moreover, asking for and sharing information is also classified as problem-focused communication. Overall, the problem-focused facet of the coding scheme comprises 11 fine-grained behavioral categories, which will be briefly described in the following. However, please note that, in our case, coders will not use the 11 categories. Instead, we will differentiate between "voice problem" and "voice solution". Both types of voice have in common that they are intended to alter, modify, or destabilize the status quo. However, while "voice problem" refers to followers solely expressing a problem with a certain aspect (e.g., a suggestion by the leader), "voice solution" includes followers' expressions that add a solution to the problem mentioned. The subcategories can hence be further divided as follows:

Voice problem

Problem. Behaviors through which a follower identifies an issue, challenge, or obstacle within a situation or context. It involves acknowledging that there is something that needs to be addressed or resolved.

Examples: "The problem is that the results are not good enough." "The cooperation in the group is bad."

Describing a problem. Behavior that involves articulating or explaining the nature, characteristics, or details of the identified problem. It may include providing background information, specifying the impact or consequences, and clarifying the scope of the problem.

Examples: "… especially the results of the last four weeks were critical." "There are very many employees who shrink back in such a case and say…"

Connections with problems. Behavior that involves recognizing or establishing links, associations, or relationships between different problems or issues. It entails understanding how one problem may be related to or influenced by another, potentially revealing patterns or underlying causes.

Examples: "The biggest mistakes occur when…" "The problem occurs because 50% of them don't have any leadership experience."

Problem with a <u>proposed leader solution</u>. This behavior entails mentioning potential drawbacks, limitations, or challenges associated with a proposed solution by the leader. It involves talking about factors that may hinder or impede the effectiveness or feasibility of the proposed solution.

Examples: "This is not possible because the procedure change three times a year." "But then the question is: how do we fill jobs like x, y, or z."

Voice solution

Defining the objective. This behavior involves mentioning clear and specific goals, aims, or outcomes that one seeks to achieve in addressing a problem or situation.

Examples: "It would be great if in the future we might complete breaking in new people within two days." "That would need to be defined some place."

Solution. Behavior that involves proposing a potential answer, remedy, or resolution to a problem. It involves suggesting a course of action or approach that is intended to alleviate or resolve the identified problem.

Examples: "We have to qualify the employees for the ... seminars first." "Someone has to be there at 6 o'clock then."

Describing a solution. Behavior that involves explaining and giving details on the proposed solution for addressing the problem. It may include outlining the steps to be taken and specifying the resources required.

Examples: "The manual should contain the most important procedures." "In the survey, there must be an evaluation, there must be management discussions, …"

Arguing for a solution. This behavior involves presenting reasons, justifications, or evidence in support of a particular solution. It entails persuasively making the case for why a certain solution should be implemented.

Examples: "That only works if…" "That will safe us this and this much money/ time."

Agree with/Accept (i.e., granting leadership)

This response is characterized by the follower expressing acceptance or agreement with the proposed suggestion by the leader. They may indicate their support, approval, or willingness to go along with the idea without any significant reservation. The follower may affirm the suggestion directly or provide positive feedback that indicates alignment with the proposed course of action. *Examples: "I agree," "That sounds good," or "I'm on board with that."*

Other behaviors

Given that the behavior coding is intended to be exhaustive, an utterance is coded as "Other" if the behavior to be coded cannot be assigned to any other category. *Example: "I have never done any kind of survival training."; "Are we finally done with this conversation?"*

Incomprehensible

The follower's statement is not comprehensible acoustically.

5. Codes for leaders' granting/rejecting behavior

Expression of leadership granting behavior will be coded based on the TEMPO coding scheme (Kelly et al., 2018), specifically the category "evaluate". Leaders may grant or reject a leadership claim by the follower, that is, agree or disagree with a proposed suggestion.

Agree with/Accept. This response is characterized by the leader expressing acceptance or agreement with the proposed suggestion. They may indicate their support, approval, or willingness to go along with the idea without any significant reservation. The leader may affirm the suggestion directly or provide positive feedback that indicates alignment with the proposed course of action. *Examples: "I agree," "That sounds good," or "I'm on board with that."*

Clarify/Modify. This response includes behavior signaling that the leader may seek further information or clarification to fully comprehend the suggestion or propose alterations to better align with their preferences or needs. It included behavior such as seeking clarification or suggesting modifications to suggestions that have been made by the follower. *Examples: "Could you clarify that?" "What if we tried this instead?"*

Disagree/Reject. This response encompasses a range of reactions that express clear disagreement with the proposed suggestion. It includes expressing disagreement, or outright rejecting the idea. The leader may express disagreement based on differing opinions or perspectives, or outright reject the suggestion due to fundamental disagreements or practical constraints. *Examples: "I don't think that would work because..." or "I'm not comfortable with that idea."*

6. Coding with INTERACT

Getting started

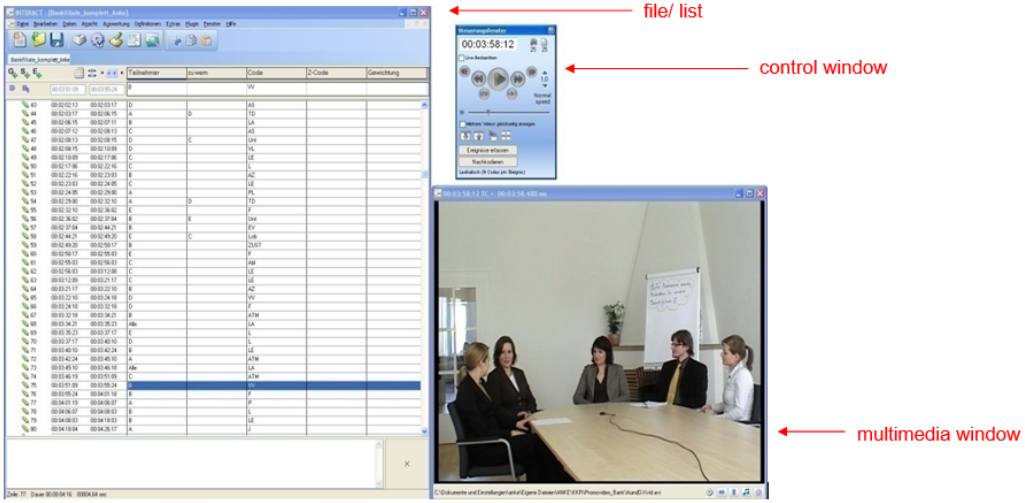
1. Plug Dongle into a USB port in the PC
2. Select the application “INTERACT”
3. Once INTERACT opens, choose the following options under “coding settings”
   - time code: choose “25 pictures per second”
   - settings: mode of coding: “lexical”;
   - “Start video simultaneously with event capturing”
   - “Pause after event capturing”

The INTERACT desktop

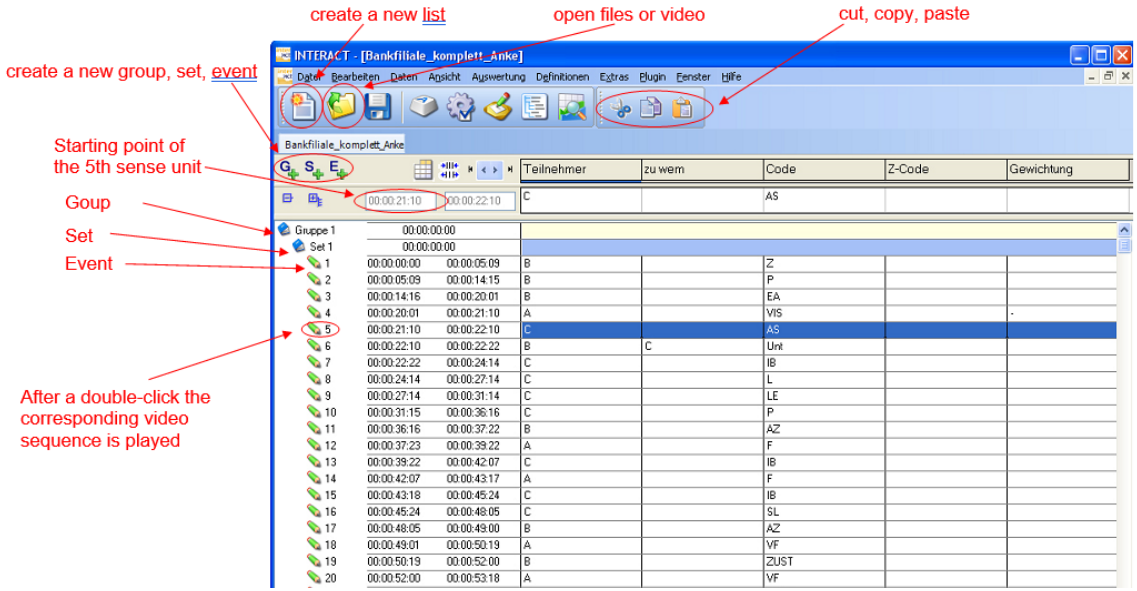
There are 3 “windows” in Interact:

1. The **file** proper (also called **list**), which lists the sense units with their starting and ending times in the video as well as their codes.
2. The **control window**, with which you can operate the video (Play, Pause, Stop, …).
3. The **multimedia window**, in which you can see the video.

The meaning of the first two “windows” are presented on the following pages:



The file/list



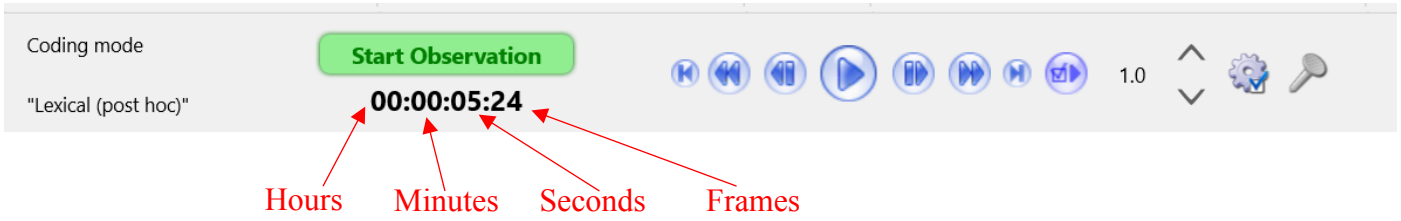
The list is subdivided into the following elements:

1. The columns of the list are called **classes**. They have the titles of *speaker* (who says something), *and leader/follower* (what code is assigned to this statement)
2. An **event** is a sense unit. For each event, it is determined who said it, and what code corresponds to the statement.
3. A **set** corresponds to 5 minutes of the film and consists of the associated events. So in a 15-min conversation, three sets are placed: 0-5 minutes, 6-10 minutes, 11-15 minutes. A set is not created automatically, but must be added manually.
4. A **group** corresponds to a complete film and consists of all sets and all events, respectively. So there is only one group for each conversation.

Note: When a file is opened, the sub-elements are hidden! With a double click on a group or a set, the subordinate elements are opened or hidden again.

The control window

The control window helps operate the video. The counter shows the current point in time of the video. The points in time recorded by the counter are subdivided into the following elements: hours, minutes, seconds, and frames (pictures). A second consists of 25 frames so that after the 24th frame, the counter will jump to the next second.
After "start observation" has been clicked in the control window, the coding process can begin.



Beginning to code a new video

1. Insert Dongle.
2. Open Interact.
3. Click "Create new file/list".
4. Open the video to be coded.
5. In the control window, click "start observation". This will also open the coding window, which you can just shut again.
6. Now, for each sense unit, the following steps have to be repeated:

    a. Press the space bar: the film starts playing.
    b. At the end of a sense unit, press the space bar again: the film stops at this point.
    c. In the table, an event (=sense unit) with a starting and an ending point has been created automatically. Therewith, group as well as the first set have been generated automatically as well.
    d. Now press the corresponding keys for the code you want to assign. The codes appear in the row of the event and at the head row of the list.

e. Want to replay the sense unit? Click F12. It is advisable to replay the preceding sense unit prior to cutting the next sense unit, so that the counter in the control window will stop exactly at the end of the preceding sense unit. This guarantees a consistent recording because every sense unit follows the preceding one exactly.
f. In order to code the next sense unit, start over at a.

7. After the completion of every five minutes of the video, respectively, press the icon "add set". This is important for the ensuing sequence analytical evaluation.
8. At the end of a session, the list can be saved either via the disk symbol or in "File" / "Save as". If you are asked to assign the current file to a code archive, click "Use existing CodeArchive" and then choose "claimgrantstudy" out of the list.

Ways of post-editing

The post-editing of a coded video is possible as well. Here, codes are changed and/or events are deleted, shortened or lengthened, or new events are added in retrospect.

During post-editing, both the icons "capture events" and "recode" can be activated in the control window.

1. When you click on an event, it is possible to change the starting and the ending point of the chosen event manually in the head row. Likewise, codes can be changed manually.
2. Events can be cut, copied, and inserted. To this end, you click on the respective event and execute the desired action similarly to how it is done in Word: you either right-click the file, go via "Edit", use the respective key combination (e.g. Ctrl + c) or click the respective icon.
3. In order to insert a new event, you click the event which is to **precede** the new event. Now, the new event can be inserted in "Edit" / "Insert event". Then, the starting and ending point of the new event are added manually and the corresponding codes are set.
4. If you want to use the current point in time of the video (counter in the control window) as the starting or ending point of an event, then you can do that via Drag & Drop: you left-click the point in time highlighted in yellow in the control window and keep the left mouse button pressed. The cursor is then moved to the place where the point in time is to be added, and there, the mouse button is let go; the point in time has been added at this place. (**Careful**: Do not let go too early, or the wrong points in time will be changed

7. References

Bakeman, R., & Quera, V. (2011). Sequential analysis and observational methods for the behavioral sciences. *Cambridge University Press.* https://doi.org/10.1017/CBO9781139017343.

Kauffeld, S., Lehmann-Willenbrock, N., & Meinecke, A. L. (2018). The advanced interaction analysis for teams (act4teams) coding scheme. In E.Brauner, M. Boos., M.Kolbe (Eds.), *The Cambridge handbook of interaction analysis (pp. 422-431).* Cambridge University Press. https://doi.org/10.1017/9781316286302

Kelly, J. R., Dvir, M., Parsons, D. M. (2018). TEMPO – A time-based system for analysis of group interaction process. In Brauner, E., Boos, M., & Kolbe, M. (Eds.), *The Cambridge handbook of group interaction analysis.* Cambridge University Press.

Keyton, J. (2018). Interaction analysis: An introduction. In E. Brauner, M. Boos, & M. Kolbe (Eds.), *The Cambridge handbook of group interaction analysis (pp. 3–19).* Cambridge University Press. https://doi.org/10.1017/9781316286302.

Lehmann-Willenbrock, N., Meinecke, A. L., Rowold, J., & Kauffeld, S. (2015). How transformational leadership works during team interactions: A behavioral process analysis. *The Leadership Quarterly, 26*(6), 1017–1033. https://doi.org/10.1016/j.leaqua.2015.07.003

Yoder, P., & Symons, F. (2010). *Observational measurement of behavior.* Springer.

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives, 26*(4), 66–85. https://doi.org/10.5465/amp.2012.0088

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies, 9*(1), 15–32. https://doi.org/10.1177/107179190200900102

Appendix E

Inter-Rater Reliability Statistics

Table 1E

Inter-Rater Reliability Statistics of Independent Double Codings

Subject	Rater				
	Rater 1	Rater 2	Rater 3	Rater 4	κ (Follower; Leader)
1	x	y			0.51; 0.51
2	x			y	0.69; 0.77
3		x		y	1.00; 1.00
4		x		y	0.59; 0.74
5	x		y		0.74; 0.74
6			x	y	0.93; 0.98
7			x	y	0.14; 0.68
8		x	y		0.64; 0.38

Note. x indicates that the respective rater was the first coder of the corresponding subject; y indicates that the respective rater was the second coder of the corresponding subject. κ = kappa. Follower = follower class; Leader = leader class. The classification of kappa values: < 0.40 poor agreement, 0.40-0.59 fair agreement, 0.60-0.74 good agreement, 0.75-1.00 excellent agreement.

Appendix F

Comparison Between Groups

Table 1F

Results of Independent T-Tests Comparing Participants who Knew Each Other with Participants who did not Know Each Other Before their Dyadic Conversation

	Yes		No		*t*(41)	*p*	*d*
	M	*SD*	*M*	*SD*			
[F]Affective MTL	3.33	0.78	3.24	0.65	0.32	.751	0.14
[F]Voice Behavior	5.31	3.76	5.58	3.22	-0.19	.852	-0.08
	(16.43)	(6.90)	(16.59)	(6.85)	(-0.06)	(.957)	(-0.02)
[L]Granting Behavior	1.92	2.15	2.05	1.47	-0.13	.895	-0.06
	(5.51)	(3.77)	(6.20)	(4.04)	(-0.45)	(.656)	(-0.20)
[F]Leadership Behavior	6.81	2.89	4.74	2.85	1.65	.106	0.73
	(12.38)	(4.08)	(11.36)	(5.66)	(0.42)	(.675)	(0.19)

Note. Yes = Interaction partners knew each other before the dyadic conversation (n = 6), No = Interaction partners did not know each other before the dyadic conversation (n = 37). Values without parentheses are based on analyses using standardized interval frequencies whereas values with parentheses are based on analyses using standardized total frequencies. MTL = Motivation to lead. F = Follower Variable, L = Leader Variable. d = Cohen's d.

Table 2F

Results of Independent Samples T-Test with Followers' Knowledge on the Study Goal as the Between-Subject Factor

	Yes		No		*t*(41)	*p*	*d*
	M	*SD*	*M*	*SD*			
[F]Affective MTL	3.19	0.65	3.34	0.67	-0.76	.451	-0.23
[F]Voice Behavior	5.45	3.12	5.65	2.83	-0.18	.429	-0.55
	(16.05)	(7.40)	(17.23)	(6.03)	(0.65)	(.260)	(-0.17)
[L]Granting Behavior	2.33	1.47	1.68	1.62	1.37	.178	0.42
	(6.80)	(4.12)	(5.40)	(3.74)	(1.15)	(.256)	(0.35)
[F]Leadership Behavior	5.06	2.89	4.99	2.99	0.07	.945	0.02
	(11.98)	(6.16)	(10.89)	(4.46)	(.65)	(.520)	(0.20)

Note. Yes = Follower indicated that they knew the goal of the study (n = 24), No = Follower indicated that they did not know the goal of the study (n = 19). Values without parantheses are based on analyses using standardized interval frequencies, whereas values with parantheses are based on analyses using standardized total frequencies. MTL = Motivation to lead. F = Follower Variable, L = Leader Variable. d = Cohen's d.

Table 3F

Results of Independent Samples T-Test with Leaders' Knowledge on the Study Goal as the Between-Subject Factor

	Yes		No		*t*(41)	*p*	*d*
	M	*SD*	*M*	*SD*			
[F]Affective MTL	3.34	0.69	3.28	0.61	-0.19	.853	-0.06
[F]Voice Behavior	5.94	3.36	4.88	3.07	1.03	.307	0.33
	(17.43)	(6.91)	(15.12)	(6.49)	(1.08)	(.286)	(0.34)
[L]Granting Behavior	2.31	1.56	1.59	1.46	1.51	.140	0.48
	(6.34)	(4.47)	(5.93)	(3.09)	(0.33)	(.747)	(0.10)
[F]Leadership Behavior	4.58	2.84	5.78	2.94	-1.32	.195	-0.42
	(10.03)	(4.50)	(13.99)	(6.10)	(-2.44)	(.019)*	(-0.77)

Note. Yes = Leader indicated that they knew the goal of the study (n = 27), No = Leader indicated that they did not know the goal of the study (n = 16). Values without parentheses are based on analyses using standardized interval frequencies, whereas values with parentheses are based on analyses using standardized total frequencies. MTL = Motivation to lead. F = Follower Variable, L = Leader Variable. d = Cohen's d.

* $p < .05$

Appendix G

Descriptive Statistics for Total Standardized Frequencies

Table 1G

Means, Standard Deviation, and Correlations Between Study Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. [F]Age	23.35	2.28	-						
2. [F]Gender	0.38	0.49	.09	-					
3. [F]Leadership Experience	1.01	1.84	.42**	-.08	-				
4. [F]Affective MTL	3.25	0.66	.18	.35*	-.05	-			
5. [L]Granting Behavior	6.19	3.97	-.04	.03	.16	.18	-		
6. [F]Voice Behavior	16.57	6.78	-.12	-.11	.16	.30*	.45**	-	
7. [F]Leadership Behavior	11.50	5.44	.15	.25	.18	.15	.14	.02	-

Note. Results are based on the standardized total frequencies for leader granting behavior, follower voice behavior, and follower leadership behavior. $N = 43$ dyadic follower-leader dyads. Gender 1 = male, 0 = female. MTL = Motivation to lead. F = follower variable, L = leader variable.

* $p < .05$, ** $p < .01$.