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# Individual Skills in Shared Leadership Teams

## A conceptual framework



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**Keywords:** Shared leadership, virtual teams, skills, leadership development, conceptual model

**Abstract:** In the era of digital transformation an evolution takes place. Following this, new perspectives concerning leadership are required, especially in virtual teams. Shared Leadership is a promising leadership form to meet the challenges in a virtual team setting. Particularly, studies show that shared leadership increases performance, team creativity and innovative behavior. Moreover, the responsibility is distributed among several, not one individual. Nevertheless, it is unclear, which skills are needed in shared leadership teams and how they could be trained. Therefore, we develop a conceptual framework to pave the way for an empirical inquiry of the skills for and the role of shared leadership. Moreover, we encourage the discussion, whether the current leadership development is still viable and offer practical implications to develop shared leadership.



### Individuelle Kompetenzen in Shared Leadership Teams Ein konzeptionelles Rahmenmodell

**Zusammenfassung:** Im Zeitalter der digitalen Transformation findet eine Evolution statt. Daher benötigt es neue Perspektiven in der Führung, vor allem in virtuellen Teams. Shared Leadership ist eine erfolgsversprechende Führungsform, um den aktuellen Herausforderungen im virtuellen Teamsetting zu begegnen. Studien zeigen, dass Shared Leadership zu einer höheren Leistung, mehr Kreativität und innovativem Verhalten in Teams führt. Dabei ist die Verantwortung auf mehrere Schultern verteilt und nicht, wie in der traditionellen Führung, auf eine Person konzentriert. Jedoch ist unklar, welche Kompetenzen Mitglieder in Shared Leadership Teams benötigen und wie diese gefördert werden können. Daher entwickeln wir ein konzeptionelles Modell, hinsichtlich den Kompetenzen in und der Rolle von Shared Leadership in Teams. Dieses dient als Grundlage für empirische Untersuchungen. Weiters regen wir die Diskussion an, ob die aktuelle Führungskräfte-Entwicklung noch zeitgemäß ist, und bieten Handlungsempfehlungen für die Ausbildung von Shared Leadership.

**Stichworte:** Shared Leadership, virtuelle Teams, Kompetenzen, Führungskräfte-Entwicklung, konzeptionelles Modell

## 1 Introduction

Since the challenges leaders are facing a rapid change (Petrie, 2011), the skills profile of leaders also needs a review. Above all, leaders in virtual teams require different personal and interpersonal skills as the team members seek autonomy, participation and flat hierarchies (Robert & You, 2018). Hence, there is a movement from vertical to dynamic and collective forms of leadership. In this context shared leadership is often discussed as an alternative form of leadership in a virtual setting (Kauffeld et al., 2017). As it remains largely unclear which specific skills are required to execute shared leadership, and how they interrelate with team performance, we raise the question which skills are necessary to practice shared leadership in a promising way.

Offering a more detailed differentiation of the necessary skills in shared leadership teams with reference to the classification of Erpenbeck et al. (2017) and describing shared leadership as mediator-variable consisting of the four dimensions of micropolitical, relationship, change and task management (Grille and Kauffeld, 2015), we seek to answer which skills are necessary to practice shared leadership and how they could be developed. In this vein it will become clear, that adequate leadership development should thus emphasize on both *leader* development (development of one single person) and *leadership* development (with the goal to develop the skills collectively).

Doing so, the paper contributes to the literature in a multiple way. First, it paves the path for an empirical inquiry of the phenomenon. We derive five propositions providing a more nuanced view concerning individual skills as predictor, shared leadership as a mediator variable and performance as an outcome on the levels of the individual, team, and organization. Second, these insights allow to promote these skills within the framework of modern leadership development programs. Finally, this contribution questions current leadership programs which focus on individual persons and disregard leadership as a collective process. Thus, we offer practical implications to develop shared leadership in a team. With regards to virtual teams this contribution presents shared leadership as one possible form of leadership to face the challenges in these settings. Furthermore, it asks to rethink the skills development of virtual team players in a collective way.

The contribution is structured as follows. First it discusses shared leadership in virtual teams. Subsequently, it provides a definition of shared leadership and describes the theoretical framework. Before we address the individual skills in shared leadership teams, we offer an overview on the state of research concerning the topic of shared leadership. Moreover, we present shared leadership models, introduce a conceptual model, and derive propositions. Finally, we discuss leadership development beyond a leader-oriented approach.

## 2 Shared Leadership in virtual teams

Virtual teams may vary in terms of geography, time, culture, or organization. However, they are united through a common goal and the application of technology. With increasing virtuality due to the COVID19-pandemic, but also owing to globalization and digital transformation, challenges in the work environment have grown (Zigurs, 2003). As remote work is supposed to be continued, a crucial question will be, which form of leadership is adequate to grant effectiveness in virtual teams (Bierema, 2020). Flexible working arrangements with increased levels of virtuality and less hierarchical leadership

structures challenge leaders and require specific skills and behaviors (Gallenkamp et al., 2011). Shared leadership seems to be a promising approach in virtual team settings. Indeed, studies show that shared leadership in virtual teams leads to a higher performance than hierarchical leadership does (Hoch & Kozlowski, 2014; Hoegl & Muethel, 2016; Muethel & Hoegl, 2010). For instance, shared leadership in virtual teams has both a direct and indirect effect on satisfaction of the team members through the promotion of trust. In turn, satisfaction on the team level is a predictor of team performance (Robert Jr & You, 2018).

Leadership in virtual teams means often less control and more autonomy. Therefore, viewing leadership in these teams as a relational process implies that team members can share the leadership roles and have an influence on performance and directions. Therefore, leadership is a collective effort (Denis et al., 2012; Zigurs, 2003). However, as in virtual meetings the focus is usually on the task, socializing electronically for teambuilding is often neglected (Avolio et al., 2000). Research shows that shared leadership is an adequate approach to tackle the various challenges by the distribution of leadership (Misolek & Heckman, 2005). Thus, the focus is not on one persons' expertise, but on all members of the team (Han & Hazard, 2022). Especially knowledge-workers who are confronted with task complexity and task interdependence act in virtual teams (Shi & Weber, 2018). Studies conducted with virtual teams show that their success critically relates to leadership (Akin & Rumpf, 2013; Lilian, 2014). Hence, leadership in virtual or hybrid teams offers an opportunity to develop shared leadership team member skills (Zigurs, 2003).

In a nutshell, the significance of shared leadership increases, as the fluid and dynamic process seems to be an appropriate leadership behavior in virtual teams (Eva et al., 2021). Thus, we discuss what shared leadership is, and what it needs.

### 3 Shared Leadership and competencies

#### 3.1 Theoretical framework Shared Leadership

The idea to distribute leadership on more than one person is not new (Gibb, 1954), still the topic gained increasing importance in the last two decades (Bennett et al., 2003). The historical leadership literature assigns shared leadership to the contingency and social exchange theories. Skills and behavior theories build the theoretical foundation as they justify the influence of shared leadership on performance (Hernandez et al., 2011). Furthermore, the human relations movement also determined the development as the needs of the employees are put in the spotlight. Thereby, leaders are challenged to be accepted by their team and not only to make decisions top-down (Mayo, 1933). Relational leadership sets the focus on human processes in the sense of decision making, acting and presentation of people. Therefore, social exchange processes are in the center point (Murrell, 1997). The era of digital information age is linked to the relational leadership theory. Relationship is in the focus and leaders are learners. They live the concept of the learning organization and they follow the goal to develop the growth of others (Wong et al., 2019). Moreover, the relational theory of leadership is a process theory (Uhl-Bien, 2006). Thereby leadership is not defined with regards to the execution in connection with a job position, as leadership takes place in different directions (Rost, 1991). Besides, the network theory localizes leadership in the relationship of the individuals (Balkundi & Kilduff, 2006). Shared leadership describes a modern understanding of leadership where

the leadership capacity of a team as a whole is in the focus (Hoch & Dulebohn, 2017). The fundamentals are shared power and the pursuit of collective rather than individual goals (Hernandez et al., 2011). Nevertheless, vertical leadership is not obsolete, but is complemented by shared leadership (Grille & Kauffeld, 2015).

### 3.2 Definition and delimitation of Shared Leadership

Since a unique definition of shared leadership does not exist, the conceptualization of the construct is ambiguous. Zhu et al. (2018) define the main characteristics uniting the different definitions of shared leadership: 1) team members exercise a lateral influence on each other, 2) it is an emergent team phenomenon and 3) the existence of shared leadership roles. We propose the definition of shared leadership, based on Pearce and Conger (2003):

*“A dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both. The influence process often involves peer, or lateral influence and at other times involves upward or downward hierarchical influence” (Pearce & Conger, 2003: p. 1).*

Shared leadership overlaps with other leadership constructs. Zhu et al. (2018) differentiate between the source of the leadership influence, the unit of analysis and the distribution of the leadership influence (see table 1). In the literature, shared and collective leadership are often used synonymously. However, collective leadership deals more with a contextual approach of shared leadership functions (Yammarino et al., 2012). On top of this, emergent leadership focuses on one or more informal leaders in a team, whereas shared leadership refers to the distribution and sharing of leadership in the whole team. It takes place on an individual level and is the basis for the creation of shared leadership (Carson et al., 2007) as well as for self-leadership. By contrast, shared leadership is based on the level of the team (Bligh et al., 2006). Vertical leadership builds the foundation for empowering and participative leadership. Although the leader involves the team in these two forms of leadership in the decision-making, the leader finally makes the decision for himself. The team members act autonomously, but they do so without exercising influence on others. Shared leadership, though, includes horizontal leadership (Zhu et al., 2018). Team leadership can take place with one single leader, the roles don't have to be decentralized. Therefore, shared leadership can be seen as a form of team leadership (Day et al., 2006).

In research different views exist about the fact what exactly does “shared” in shared leadership mean. Various studies examine which leadership style is thereby practiced (D'Innocenzo et al., 2016). Another research stream is concerned with the generic view of the topic and aggregates leadership of each individual to the team level (Mathieu et al., 2015). Moreover, there are also different views on the question, how leadership can be shared. On the one hand, persons can share the same job as a leader. On the other hand, the sharing process can change over time. Thereby, persons take over leadership tasks and submit them in a form of rotating leadership (Davis & Eisenhardt, 2011). Concerning the distribution of roles according to the functional leadership theory, leadership roles exist to satisfy the needs of the team members (Morgeson et al., 2010).

Construct	Sample definitions	1) Source of leadership influence	2) Units of analysis	3) Distributions of leadership influence
Shared leadership	A dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both (Pearce & Conger, 2003, p.1)	Horizontal leadership displayed by team members versus hierarchical leader-focused view	View leadership as a team-level phenomenon	Leadership is distributed across the many, not the few
Collective leadership	A dynamic leadership process in which a defined leader, or set of leaders, selectively utilize skills and expertise within a network, effectively distributing elements of the leadership role as the situation or problem at hand requires (Friedrich et al., 2009, p. 933)	Leadership is a shared social process, and it is embedded in units, teams and networks, rather than solely on the skills and individual leaders	View leadership as a collective level phenomenon	Effectively distributing elements of the leadership role as the situation or problem at hand requires
Emergent leadership/informal leadership emergence	Group members exhibit leadership influences over other group members although no formal authority has been vested in them (Schneier & Goktepe, 1983)	Focus on horizontal leadership influence (i.e. lateral influence on peers' work)	Focus on one or a few team members who emerge as informal leaders	Cannot address the distribution and sharing of leadership among all team members
Self-leadership	A process through which people influence themselves to achieve the self-direction and self-motivation needed to perform (Houghton et al., 2003, p. 126)	Followers are not peers	Can be an individual level phenomenon	Cannot address the distribution and sharing of leadership among all team members
Empowering leadership	The extent to which leaders enhance autonomy, control, self-management, and confidence in their team (Chen et al., 2011, p. 541)	Typically, the focus is vertical influence from the formal team leader	Can be an individual or dyadic level phenomenon	Cannot address the distribution and sharing of leadership among all team members
Participative leadership	Joint decision-making or at least shared influence in decision-making by a superior and his or her employees (Koopman & Wierdsma, 1998, p. 297)	Typically, the focus is the formal team leader who asks team members to voice their ideas and consider their ideas before making his or her own decision. A team leader may be a participative leader, but withholds the power of making final decision, and retains most of the authority and leadership influence.	Can be an individual or dyadic level phenomenon	Cannot address the distribution and sharing of leadership among all team members
Team leadership	Team leadership is an integrated concept, based on the literature on teams and leadership (Day et al., 2006, p. 211)	It includes both horizontal leadership influence from team members and vertical leadership influence from the formal team leader	Study leadership in teams	Do not have the requirement of decentralized distribution of leadership influence

Table 1: Delimitation of shared leadership and similar constructs

Source: Zhu et al., 2018, p. 839

### 3.3 State of research Shared Leadership

Already in the 80s Yukl (1989) recommended to pay a special attention to shared leadership. Shared leadership questions the conventional paradigm of vertical leadership (Contractor et al., 2012). This means, the comprehension of leadership changes from the view on a single person to the team (Bass & Bass, 2008; Hoch & Dulebohn, 2017; Petrie, 2011). Shared leadership is a dynamic process, as the leadership roles and the influence of the team members are distributed (D’Innocenzo et al., 2016). On the one side, it allows the input of knowledge and skills of many individuals (O’Toole et al., 2002). On the other side it demands self-management and self-leadership of the involved persons (Hoch & Dulebohn, 2017). Furthermore, the distribution of responsibility leads to less pressure for single persons as well as to a higher quality of decisions, more work-life-balance and transparency. Shared leadership takes place in virtual teams (Hoch & Dulebohn, 2017; Kauffeld et al., 2017), in knowledge-oriented and self-organized project teams, in post-hierarchical organizations that deal with transformation and innovation (Endres & Weibler, 2019; Imam & Zaheer, 2021; Scott-Young et al., 2019; Ulhøi & Müller, 2014) as well as in professional sport teams (Fransen et al., 2015).

Existing research point out a positive relationship between shared leadership and higher team performance which is reciprocally (D’Innocenzo et al., 2021) above all in virtual teams and diverse groups (D’Innocenzo et al., 2016). Moreover, shared leadership leads to improved internal processes and a higher quality of the product (Carson et al., 2007). Shared leadership supports creativity in teams (Wu & Cormican, 2016), shows a positive effect on the innovation process (Cox et al., 2003) and on trust in a team. Moderators are among others dependent on the team members and the length of time they work together (Nicolaides et al., 2014). With regards to the introduction and cultivation of shared leadership the factors trust, empowerment, age and maturity of the team, fair payment, the mood in the team and beliefs play major roles (Wang et al., 2014). Favorable conditions for the creation of shared leadership are a shared purpose, social cohesion, a good mood in the team and external coaching (Carson et al., 2007; Ulhøi & Müller, 2014). Furthermore, an organizational culture is demanded, which is characterized by the willingness to share power (Muethel & Hoegl, 2010).

Shared Leadership is a multidirectional, dynamic and fluid process (Pearce, 2004), whereby team members often work temporarily on work assignments (Bruch et al., 2006). Thus, the whole group is in the focus as a leadership actor. Moreover, a categorization in leaders and followers is not needed as shared leadership is a collective influence process (Endres & Weibler, 2019). In this process two or more members of the team engage in leadership to push performance through their influence (Bergman et al., 2012). Besides, shared leadership teams undergo a development process and need appropriate training (Pearce & Manz, 2005). Obviously, professional, methodological, social and personal skills are key factors in the development process of shared leadership (Kauffeld & Paulsen, 2018). Shared leadership means leadership on a team level and it arises through collective knowledge and skills (Mathieu et al., 2008). However, meta-analysis show that the knowledge about the emergence of shared leadership is still scarce (D’Innocenzo et al., 2016; Nicolaides et al., 2014; Wang et al., 2014).

### 3.4 Individual Skills in Shared Leadership Teams

This chapter deals with competencies and subsequently addresses individual skills in shared leadership teams. The term competencies was first used by White (1959), but McClelland (1976) is considered the pioneer of the modern competency movement, relating the presence of competencies to higher performance. Therefore, competencies are dispositions of self-organized actions. Boyatzis (1982) transferred the concept to the organizational and work environment with his work, *The competent Manager*. Competencies can be developed and fostered through training. "Competencies are a behavioral approach to emotional, social, and cognitive intelligence" (Boyatzis, 2008, p. 6). In contrast, personality traits are predominantly characterized by stability and cannot be developed (Holling & Liepmann, 2004).

Erpenbeck et al. (2017) differentiates qualifications and competencies. On the one hand, qualifications are organized externally to fulfill a special purpose. They are limited to the fulfillment of specific requests (object-related), are focused on job-related knowledge and skills, and are related to the elements of individual skills that can be cited legally. On the other hand, competencies include self-organization skills, are subject-oriented, refer to the whole person and include the multitude of in principle unlimited individual dispositions to act. To sum up, competencies include qualifications, knowledge as well as abilities. These three concepts are indispensable components of competencies.

Professional action competence is seen as a multidimensional construct. However, the facets of competence are defined and delimited from each other in very different ways. The formation of categories lacks a consistent theoretical basis (Holling & Liepmann, 2004). Pragmatically, professional competence can be subdivided into the four competence areas of professional, methodological, social, and personal competence (Erpenbeck et al., 2017). This classification of skills has been widely accepted in practice (Kauffeld & Albrecht, 2021), as it is derived from vocational training practice and shows analogies to theoretically based systematizations of learning outcomes concerning vocational training measures in the anglo-american literature (Kraiger et al., 1993).

Regarding the development of shared leadership, individual skills are supposed to play a major role (Clutterbuck et al., 2019; Ulhøi & Müller, 2014). However, for the process of development there is no technical logic of implementation in practice existing, but individual skills, knowledge and responsibility are first steps (Endres & Weibler, 2019). Therefore, skills like attentive listening, a good feeling for moods and the promotion of perceptual skills are needed (Endres & Weibler, 2019). In fact, theoretical models name individual skills especially as necessary requirements for the emergence and the practice of shared leadership (Cox et al., 2003; Day et al., 2004; Scott-Young et al., 2019). Hence, no empirical research exists that shows which skills in detail are helpful to promote shared leadership behavior (Scott-Young et al., 2019).

Given this lack of knowledge, this paper suggests the classification of skills according to Erpenbeck et al. (2017). Thereby, skills are classified into professional, methodological, social, and personal skills as they rely on the self-concept regarding competence in a work-related environment. First, professional skills support in the mastering the vocational challenges in an organization. Shared leadership is practiced in innovative working environments where experts act cross-functionally and are dependent from each other. Therefore, these individuals dispose of high professional skills and contribute to a higher team performance (Cox et al., 2003). Second, methodological skills mean to

use methods and strategies adequately and flexibly to execute tasks and processes successfully (Erpenbeck et al., 2017). Indeed, in shared leadership teams the members need a common understanding how to organize processes and tasks with regards to their goal and how to work together best. This includes the methods, the clarification of the role and timing (Shuffler et al., 2010). Third, social skills describe the interaction with people in social situations (Erpenbeck et al., 2017). Social skills include all dispositions to perform communicative and cooperative self-organization, as well as interaction situations with colleagues, superiors, customers or business partners to develop and implement plans and goals (Kauffeld, 2021). Studies confirm that shared leadership teams show a higher level of trust and empowerment (Nicolaides et al., 2014; Wang et al., 2014) as well as social cohesion (Carson et al., 2007). Additionally, promoting factors are attentive listening and a sense for the working atmosphere (Endres & Weibler, 2019). Finally, personal skills signify how a person deals with her- or himself. Besides, this includes self-perception and openness for changes as well as initiative and assuming responsibility (Erpenbeck et al., 2017). Personal competence includes organizational, decision-making and responsibility skills with the focus on the realization of goals, the development of resources, perseverance, initiative, learning and performance. Moreover, personal competence covers self-awareness, evaluation of one's own actions and conscious reflection on one's own abilities (Kauffeld & Frieling, 2001).

Hence, in shared leadership teams self-management and self-leadership are demanded from the team members (Hoch & Dulebohn, 2017). Additionally, these four skills facets influence each other (Kauffeld et al., 2017). For instance, to shape activities at work effectively, it is helpful to integrate and inspire others – this represents a social skill. Besides, the usage of special methods for structuring can promote professional skills. Thus, only by linking these four dimensions of skills, the whole work-related competence becomes visible (Kauffeld, 2016).

With regards to the measurement of shared leadership there are different approaches. On the one hand behavior-based methods investigate the behavior of team members on an individual level and aggregate it on a team level (Banks et al., 2021). One example for this measurement method is the Shared Professional Leadership Inventory Tool (Grille & Kauffeld, 2015). On the other hand, social network analysis examines the centralization and the density of shared leadership, whereby the theoretical basics are social network theories (Gockel & Werth, 2010).

With regards to qualitative research methods, which dominate the research field of shared leadership (Döös & Williamson, 2021), interviews or observations could be conducted to investigate the leading-following interactions according to DeRue (2011). Thereby, shared leadership relies on the willingness of a formal leader to share his power, and team members who are open to lead and follow simultaneously. Shared leadership is identified by frequent interpersonal interactions of peers where they mutually influence on the one hand and give trust on the other hand. Shared leadership is seen as a co-constructed process which is developed through a reciprocal influence and social exchange relationship (Uhl-Bien, 2006). This view on leadership relies on the relational leadership approach, represented by the adaptive leadership theory (DeRue, 2011) and the theoretical explanations of DeRue and Ashford concerning the construction of leadership identity. Thereby, social dynamics and interaction are in the focus of leadership processes. Leadership means a social negotiation and exchange process between follower and leader and the success

depends on the willingness of peers to follow each other and not on formal leadership positions (DeRue & Ashford, 2010). These interactions could be observed through analyzing communication platforms, emails or phone conversations (Han & Hazard, 2022), even machine learning approaches are possible (Hemshorn de Sanchez et al., 2022).

### 3.5 Shared Leadership Models

Several authors (Kozlowski et al., 2016; Mathieu et al., 2008; Nicolaides et al., 2014) recommend adopting the Input-Mediator-Output-Input (I-M-O-I) model by Ilgen et al. (2005) to create a shared leadership model. Following this, team input (I) like skills, knowledge, and experience have an influence on the team output (O) by moderators (M). Moreover, feedback loops are necessary (I) which figure out the reasons for team success. In turn, the outputs act as inputs for the following team processes. Therefore, a cycle is created (Day et al., 2004; Hoch & Dulebohn, 2017; Ilgen et al., 2005; Mathieu et al., 2008). Besides, various shared leadership models show a relationship between individual skills and shared leadership (Cox et al., 2003; Day et al., 2004; Scott-Young et al., 2019). For example, the Multi-Level-Process for project teams by Scott-Young et al. (2019) describes a fluid and ongoing process, wherein individual skills represent an input and shared leadership is a mediator with regards to the outcome, which includes the individual, team and organizational success.

In addition, the Multi-Level-Process Model shows that individuals of a team interact in a network with other team members. The team in turn interacts with other teams and organizational departments. Hence, the model shows that inputs like individual skills promote the emergence and development of shared leadership in a team. Thus, the outcome includes the success on the levels of the individual, team, and organization. Although shared leadership is a construct on a team level, it has cross-level effects. Hence, individual skills build the basis for the emergence and development of shared leadership in teams (Scott-Young et al., 2019).

To sum up, individual skills are a predictor for shared leadership in a team. First, the basis of shared leadership are skills, knowledge and task expertise to promote the functioning in teams effectively (Bergman et al., 2012) and to improve technical processes in order to reach the team goals (Nicolaides et al., 2014). Second, task outputs are enhanced and the outcomes of the individual, team and organization are improved (D'Innocenzo et al., 2016). Synthesizing the findings of these studies, we refine a conceptual framework, describing the relationship between individual skills and shared leadership behavior (see figure 1). On the one hand we use those insights and offer a more detailed differentiation of the necessary skills in shared leadership teams, referring to the classification of Erpenbeck et al. (2017).

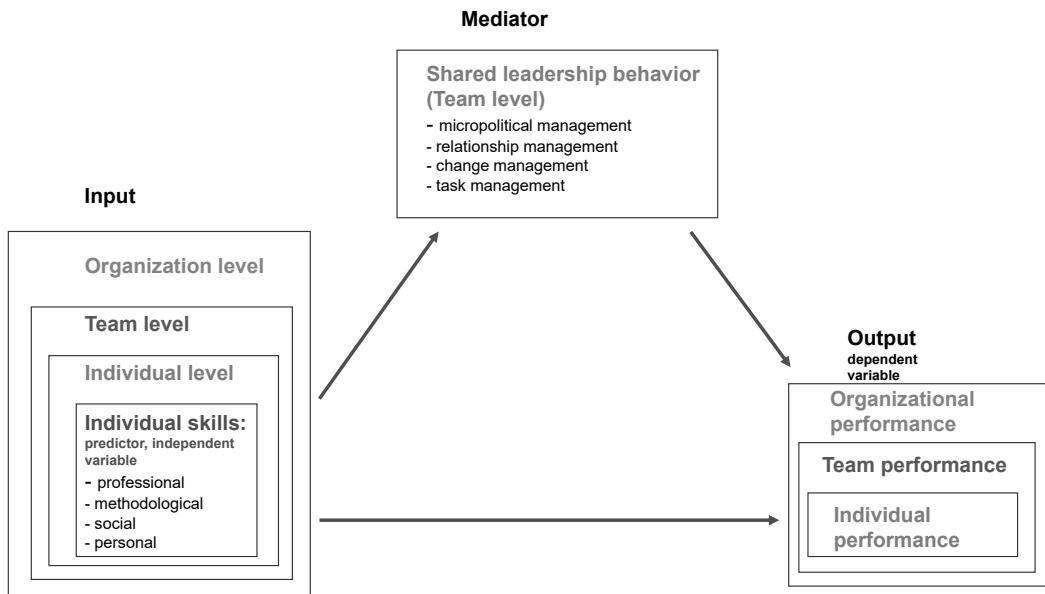


Figure 1: Conceptual framework

Source: own creation, based on Scott-Young et al., 2019, p. 572

To our knowledge no shared leadership model differentiates the necessary skills into various facets like we do with regards to the classification into professional, methodological, social, and personal skills. On the other hand, we describe shared leadership referring to the four dimensions of micropolitical, relationship, change and task management as suggested in the Shared Professional Leadership Inventory Tool (SPLIT) of Grille and Kauffeld (2015). With regards to SPLIT, micropolitical management means that the team members help each other to network. They are loyal and look actively for help in problematical situations. Hence, networking means a contribution to leader effectiveness (West, 1999). Next, relationship management illustrates that the team members are respectful, deal openly with criticism, support training and integrate new team members. What is more, task management is described as clarification of tasks, formulation of clear goals, sharing important information within the team, include others in decisions and control the achievement of goals (Grille & Kauffeld, 2015). Besides, meta-analysis confirm a relationship between the orientation to task and relation leadership and performance in an organization (Judge & Piccolo, 2004). Finally, change management means that team members initiate reflection processes and support each other in the realization of ideas (Grille & Kauffeld, 2015). Studies show that change-oriented leadership is requested in the era of transformation and is therefore crucial with regards to leadership effectiveness (Sheehan et al., 2014).

The tool SPLIT is based on established theories of leadership and gives feedback about the way how team members experience the influence of others. Thus, it offers a big picture about the impression of shared leadership processes in teams (Gockel & Werth, 2010). Indeed, this instrument identifies shared leadership by measuring the perceived shared leadership on a team level on the basis of behavior observations. Team members judge the level of shared leadership in the way of self-estimation and the level of vertical

leadership of the leader from an external view. Thus, this allows an insight into the level of participation and autonomy in a team on the assumption that shared leadership teams act democratically and the employees act quite autonomously (Grille & Kauffeld, 2015). To sum up, no other shared leadership model shows this differentiation into these four major dimensions according to the SPLIT.

Therefore, the conceptual framework is in line with the authors who developed shared leadership models (Cox et al., 2003; Day et al., 2004; Scott-Young et al., 2019). However, it expands previous research and provides a more nuanced view, putting individual skills, shared leadership, and team performance into the focus of interest. Therefore, individual skills are seen as predictor with the differentiation into the four facets of professional, methodological, social, and personal skills. Furthermore, shared leadership is regarded as a mediator variable with the four dimensions of micropolitical, relationship, change and task management, with regards to performance as an outcome on the levels of the individual, team, and organization. Hence, the line of argumentation is presented in the reflection of the proposition 1 to 4.

Proposition 1: The level of individual professional skills has a positive impact on the degree of shared leadership behavior.

Proposition 2: The level of individual methodological skills has a positive impact on the degree of shared leadership behavior.

Proposition 3: The level of individual social skills has a positive impact on the degree of shared leadership behavior.

Proposition 4: The level of individual personal skills has a positive impact on the degree of shared leadership behavior.

Moreover, various shared leadership models show that shared leadership plays a mediator role concerning the input of individual skills and team performance (Cox et al., 2003; Day et al., 2004; Scott-Young et al., 2019). Thus, we develop this assumption further with regards to studies which show that shared leadership is practiced in professional sport teams (Fransen et al., 2015) and suggest that shared leadership is an adequate leadership structure in high performance teams. Following this, the argument is reflected in proposition 5.

Proposition 5: Shared leadership behavior mediates the relationship between individual skills and performance on the level of the individual, team, and organization.

In summary, we suppose that individual skills likely play a major role in the emergence and execution of shared leadership in teams. Furthermore, a high degree of shared leadership behavior in teams mediates the performance on the level of individuals, teams, and organizations.

#### 4 Leadership Development beyond a leader-oriented approach

Synthesizing the findings in chapter 3, we propose a new way of thinking about leadership development. We argue that *leader* development currently concentrates on the development of one single person, whereas *leadership* development pursues the goal of developing the team members collectively. Ideally leadership development programs involve both approaches (Day & Harrison, 2007). Collective learning is supposed to be one of the

most important skills (Raelin, 2018). However, there is a lack for recommended actions with regards to trainings and the development of leadership skills for the collective in shared leadership teams (Carson et al., 2007). Hence, to improve performance, leadership development should deal with skill-based approaches. Scientists are encouraged to make current concepts of leader development adoptable for leadership development (Eva et al., 2021).

Still, leadership development programs are based on the traditional understanding of leadership with the focus on one single person (Bennett, 2008; Hoppe & Reinelt, 2010; Turner et al., 2018). From the viewpoint of leadership as a collective process and in the sense of paradigm shift a democratization of leadership is demanded to master this development challenge (Petrie, 2011). Instead of concentrating on single persons in leadership development, a relational perspective on leadership sets the focus on the collective (Güntner & Kauffeld, 2021). All persons involved in a shared leadership team take part in a collective learning path (Endres & Weibler, 2019). Besides, every single person contributes to the leading process and benefits from the leadership training (Tafvelin et al., 2019). Hence, every team member is regarded as a leader (Singh & Jampel, 2010), as leadership is seen as a collective rather than an individual property (Yammarino et al., 2012). Moreover, the current leadership development might not be gender-specific and rather suited for men (Ely et al., 2011). However, leadership development has to give attention to marginalized groups to avoid power imbalance (Eagly & Chin, 2010).

Facing the challenges of digital transformation in complex workplaces, the capability of multiple individuals and their engagement in the leadership process is promising. Hence, organizations and communities strive to develop necessary skills to execute leadership in a collective way (Cullen-Lester & Yammarino, 2016). One approach is to develop network relationships as it is regarded as a key mechanism for the emergence of collective leadership. Thereby individuals are supported to develop and utilize their networks as well as to participate in networks. When leadership is regarded as a property of a collective system and not as an individual, leadership effectiveness can be seen as a product of these relationships rather than of one leader. Organizations invest resources to develop and improve goal-oriented networks. However, it needs more empirical work to guide practitioners in the development leadership in a collective form (O'Connor & Quinn, 2004).

Based on these explanations, table 2 shows practical implications and measures for collective leadership development.

Theoretical assumptions	Practical implications and actions for all team members
Co-construction of leadership (Güntner & Kauffeld, 2021)	Creation of an autonomy-supported organization culture
Team members react on changes through a dynamic interaction (Güntner & Kauffeld, 2021)	Breaking down traditional role models and rigid power structures
Leadership includes both formal and informal influence (Döös & Wilhelmson, 2021; Güntner & Kauffeld, 2021)	Openness for new leadership approaches

Theoretical assumptions	Practical implications and actions for all team members
Shared leadership is trust and relationship oriented (Döös & Wilhelmson, 2021)	Promotion of mutual trust in a team, creating common values, promoting respect, honesty, loyalty and commitment
Power sharing is a necessary foundation (Döös & Wilhelmson, 2021)	Using action instruments to handle power balance Recruiting of persons who are willing to share power (notice of their mindset)
Shared leadership teams consist of high skilled people (Cox et al., 2003)	Build a team who combines complementary competencies and has different points of views Provide an environment where the possibility of learning continuously is given Build a team with functional diversity
Shared leadership teams handle change management well (Grille & Kauffeld, 2015)	Promote the ability to handle change and development
Shared leadership is characterized by interaction (Güntner & Kauffeld, 2021; D'Innocenzo et al., 2014)	Creation of an atmosphere where open communication is possible. This leads to shared thinking and a better handling of challenges. Creation of a cooperative climate
Shared leadership teams have high methodological competencies (Shuffler et al., 2010)	Create a team with members who think differently to ensure new ways of problem solving Practice team-centric interventions: e.g. an intervention on team processes with the aim to facilitate task execution
Shared leadership teams are masters in networking and have pronounced personal skills (Grille & Kauffeld, 2015)	Recruiting of people with personal qualities like curiosity, honesty, an open-mind, generosity, kindness, respect differences
Network relationship is essential in shared leadership teams (Stepper, 2015)	Building Working out Loud Circles

Table 2: Practical implications and measures for collective leadership development

## 5 Conclusion

On the one hand, studies show that shared leadership is promising in managing virtual teams (Bergman et al., 2012; D'Innocenzo et al., 2016). On the other hand, the performance of shared leadership teams depends on the individual skills of the team members. Therefore, the characteristic of a team influences the emergence and effectiveness of shared leadership. This contribution has the purpose to ask for the necessary skills in shared leadership teams and how they can be developed. It delivers an extended insight into the phenomenon of shared leadership and is useful for practitioners and scientists. Prior thoughts and studies are integrated in our conceptual framework in figure 1 to allow a more nuanced way of looking at the development of shared leadership skills. Individual skills are related to shared leadership and have an influence on the outcome in a team (Zhu et al., 2018). Although the topic of shared leadership in research is assigned with

high importance (Endres & Weibler, 2020), there is a lack of primary studies which examine the influence of mediators and moderators regarding the relationship of shared leadership and team performance (Nicolaides et al., 2014). First and foremost, researchers are encouraged to conduct the application of shared leadership in virtual teams (Han & Hazard, 2022), as they are supposed to be more effective (Muethel & Hoegl, 2010).

Next, we seek to start a discussion on the current understanding of leadership development. We argue that all team members must be included into the development training. Hence, from a practical view, the main implication of this contribution is to adapt leadership programs to enable teams to create and execute shared leadership as worked out in table 2. Transferring this point of view to the workplace implies that the human resource department as well as other institutions in charge of leadership development should evaluate, support, and train these promising skills. To gain more insights into the practices how team members in shared leadership teams adopted the necessary skills to act effectively, it is recommended conducting qualitative research with involved persons in virtual teams or in professional sport teams (DeRue, 2011; Kang & Svensson, 2019). These findings could offer a new scientific approach for the development of innovative tools with regards to shared leadership development programs as the common methods are not the solution to face this leadership challenge. Moreover, mixed-method-approaches are recommended to deepen the knowledge of the complexity of the phenomenon of shared leadership (Serban & Roberts, 2016).

From a theoretical perspective, the conceptual model offers a detailed view with a focus on the relationship of individual skills, shared leadership and performance on the individual, team, and organizational level. Thus, it should encourage researchers to investigate the propositions in chapter 3.5 by using appropriate multi-level statistical techniques. While one could argue that the construct of shared leadership is influenced by many different variables, it should be noted that the investigation of the promising skills in these teams means a starting point in the emergence and execution of this leadership structure. While stressing that shared leadership is subject to many influences like the organizational culture, the willingness to share power, trust in the team, etc., the training of shared leadership skills means a first step in the implementation of this leadership form (Endres & Weibler, 2020).

As always, this contribution has limitations. Whereas it doesn't address shared leadership in virtual teams as a main anchor, it represents an adequate example for the relevance of shared leadership in virtual settings. Moreover, this paper does not address the challenges of applying shared leadership in an extensive way. Thus, shared leadership is not suitable for every environment, for instance not for newly formed teams in which the participants do not yet know the weaknesses and strengths of their colleagues. Furthermore, leaders face a loss of power when introducing shared leadership, which can lead to resistance and process conflicts (Kauffeld et al., 2017). Ambiguities can lead to excessive demands on individual participants. Furthermore, the implementation of shared leadership often fails due to the will to assume responsibility (Grille et al., 2017). Furthermore, negative outcomes in shared leadership teams are confusion, distrust, conflicts and communication problems, salary or competence problems (Döös & Wilhelmson, 2021).

To summarize, practicing shared leadership in virtual teams means rethinking leadership skills and leadership development in a collective way.

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