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Democratic, digital, and diverse: Essays on leadership and followership in the 21st century

Gesche Tamara Friderieke Drescher

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Vorsitzender: Prof. Dr. Hugo M. Kehr

Prüfer der Dissertation: 1. Prof. Dr. Isabell M. Welpe

2. Prof. Dr. Alwine Mohnen

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Abstract

This dissertation investigates the democratization, digitization, and diversification of the modern workforce. Due to societal changes, technological advancement, and globalization, the requirements for teams and their leaders have changed. As a consequence, teamwork often takes place virtually, and diverse team members from all over the world work together. To meet these demands, leadership is becoming more democratic as organizations empower employees. The current thesis examines the challenges posed by a democratic, digital, and diverse work environment in three empirical chapters.

First, building on the theory of shared leadership, an experimental study with two samples shows that democratic leadership influences performance and satisfaction positively. Moreover, the study integrates commonality and communication mode as moderators and therefore closes an important research gap with regard to the influence of team variables on the effectiveness of shared leadership. The results confirm that commonality of personalities and communication mode both moderate the effects of shared leadership on performance and satisfaction. Interestingly, teams with high commonality received higher performance and satisfaction ratings, and this effect was stronger in face-to-face compared to virtual teams.

Second, two studies investigate the role of democratic leadership, namely delegation, in perceptions of leaders. Research on delegation has demonstrated various positive effects for employees. However, delegation can also induce stress for employees. Moreover, leaders face the possibility of exploitation. Given these possible negative outcomes of delegation, the current study investigates the relationship between delegation behavior and employees' evaluations of leaders' effectiveness and likeability. The results of an experimental study and a longitudinal field study demonstrate the positive effects of delegation of decision-making responsibility on perceptions of leaders' effectiveness and likeability. Moreover, perceived likeability mediates

the relationship between delegation and job satisfaction.

Third, building on the stereotype content model and role congruity theory, the influence of gender on evaluations of different occupations is analyzed. Stereotypes and role expectations affect our interactions with others in both the non-corporate as well as the professional context. Insights into the characteristics of stereotypes can help in building measures against their influence. The results of a questionnaire study show how male and female jobholders are evaluated based on their occupation. Clusters show similarities and differences with regard to perceived competence, warmth, power orientation, and relationship orientation. Although men and women are perceived similarly overall, masculine traits still characterize the image of an ideal leader.

In sum, the results demonstrate the meaning of democratization for effective (virtual) teamwork and the need to support diversification to overcome stereotypes. Based on the findings, implications for theory and practice are discussed, and directions for future research are highlighted.

Kurzfassung (German abstract)

Die vorliegende Dissertation untersucht die Demokratisierung, Digitalisierung und Diversifizierung in der modernen Arbeitswelt. Die Globalisierung, technologischer Fortschritt und gesellschaftlicher Wandel verändern die Anforderungen an Führungskräfte und ihre Teams. Dies führt dazu, dass Teams häufig virtuell miteinander arbeiten und diverse Teammitglieder von überall auf der Welt kooperieren. Um diesen Ansprüchen gerecht zu werden, wird Führung demokratischer und die Rolle der Mitarbeiter wird gestärkt. Die vorliegende Arbeit untersucht die Herausforderungen einer demokratisierten, digitalen, und diversifizierten Arbeit in drei empirischen Kapiteln.

Die erste Untersuchung basiert auf der *Shared Leadership Theory* (verteilte Führung) und zeigt in einer experimentellen Studie mit zwei Stichproben, dass demokratische Führung einen positiven Einfluss auf Teamleistung und Zufriedenheit hat. Des Weiteren integriert die Studie wichtige Teamvariablen und deren Einfluss auf die Wirksamkeit von verteilter Führung und schließt damit eine bestehende Forschungslücke. Im Einzelnen werden Ähnlichkeit der Persönlichkeit (commonality of personalities) und Kommunikationsmodus (virtuell vs. nicht virtuell) als Moderatoren untersucht. Die Ergebnisse zeigen, dass beide Variablen den Einfluss von verteilter Führung auf Leistung und Zufriedenheit moderieren. Dabei zeigte sich, dass Teams mit großer Ähnlichkeit untereinander besser bezüglich Leistung und Zufriedenheit bewertet werden und dieser Effekt in virtuellen Teams besonders stark war.

In der zweiten Untersuchung wird die Rolle von demokratischer Führung für die Evaluation von Führungskräften beleuchtet. In zwei Studien wird die Beziehung zwischen Delegation von Verantwortung durch die Führungskraft und Einschätzung der Führungskraft durch die Mitarbeiter untersucht. Obwohl die Forschung einen überwiegend positiven Einfluss von Delegation auf Mitarbeiter gezeigt hat, kann Delegation auch die Gefahr von

Überforderung und Stress beherbergen. Zudem besteht die Gefahr, dass die Freiheit, die durch Delegation entsteht, von Mitarbeitern ausgenutzt wird. Aus diesem Grund, untersucht die vorliegende Studie die Beziehung zwischen Delegation und wahrgenommener Effektivität und Sympathie der Führungskraft. Die Ergebnisse einer experimentellen Studie und einer Längsschnittstudie belegen den positiven Effekt von Delegation von Verantwortung für die Einschätzung der Führungskraft. Es zeigte sich nicht nur ein positiver Effekt von Delegation auf die Wahrnehmung der Effektivität und Sympathie, sondern wahrgenommene Sympathie fungierte auch als Mediator für die Beziehung zwischen Delegation und Arbeitszufriedenheit.

Die dritte Untersuchung baut auf dem Stereotype Content Model und der Role Congruity Theory auf und untersucht den Einfluss von Geschlecht auf die Evaluation von unterschiedlichen Berufsgruppen. Stereotype und Rollenerwartungen prägen unsere Erwartungen und Interaktionen mit anderen – sowohl im privaten als auch beruflichen Kontext. Erkenntnisse bezüglich den Inhalten und Auswirkungen von Stereotypen können helfen um Maßnahmen Voreingenommenheit zu entwickeln. Die Ergebnisse einer Umfrage zeigen, wann männliche und weibliche Stelleninhaber unterschiedlich wahrgenommen werden. Die Ähnlichkeit und Unterschiede verschiedener Berufsgruppen bezüglich wahrgenommener Kompetenz, Wärme, Macht- und Beziehungsorientierung werden mit Hilfe von Clustern veranschaulicht. Obwohl die Ähnlichkeiten zwischen Männern und Frauen in der Untersuchung insgesamt überwiegen, so zeigt sich doch, dass die Erwartungen an eine ideale Führungskraft sehr männlich geprägt sind.

Zusammenfassend betonen die Ergebnisse die Bedeutung von Demokratisierung für effektive (virtuelle) Zusammenarbeit sowie die Notwendigkeit die Diversifikation zu unterstützten um den Einfluss von Stereotypen zu verringern. Basierend auf den empirischen Ergebnissen, werden die Implikationen für Forschung und Wirtschaft diskutiert. Abschließend wird ein Ausblick auf sich anschließende Forschungsfragen gegeben.

1 Introduction

Increasing complexity of work tasks and the environment, the need for innovation, globalization, and digitization have changed our working environment. In the past, stability and bureaucracy were more significant. Teamwork was often characterized by formal rules, and perfection was valued over speed. Today, working together is characterized by empowerment, digital features, cooperation with diverse peers from all over the world, the consideration of masses of data, and the need to cope with continuous change (Kehr, Rawolle, & Strasser, 2016; Kozlowski & Bell, 2003). These characteristics present teams and leaders with new challenges. In a comprehensive survey, Deloitte found that organizations need to adapt to these challenges and change their leadership and teamwork practices (Deloitte, 2016). Studies show that leadership is changing toward more collective, democratic forms of leadership (Contractor, DeChurch, Carson, Carter, & Keegan, 2012; Cullen-Lester & Yammarino, 2016; Sattelberger, Welpe, & Boes, 2015), that diversity aspects need to be considered (Guillaume, Dawson, Woods, Sacramento, & West, 2013), and that teamwork has become more digitalized to meet the global talent market (Foster, Abbey, Callow, Zu, & Wilbon, 2015; Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015).

My dissertation aims to shed light on the effects of democratic leadership (namely, shared leadership in chapter 2 and delegation in chapter 3) on leaders and team members. Moreover, chapter 2 investigates the importance of the digitization of teamwork. Chapter 4 analyzes the diversification of the workforce by investigating the role of gender in different occupations, the perceptions thereof, and the meaning of leadership for men and women.

1.1 Theoretical background and research question: The workforce of tomorrow is democratic, digital, and diverse

Surveys show that the new generation of graduates expects more freedom and self-

determination regarding their work life (Mohnen & Falk, 2014; PewResearchCenter, 2010; Schleer & Calmbach, 2014). In addition, the so-called "digital natives" are also more diverse than ever with regard to nationality, race, and educational background (PewResearchCenter, 2014). So what does that mean for employment and leadership in the future? In my dissertation, I will elaborate on how democratization in the digital world influences leaders and teams and what role diversity plays in job perceptions.

1.1.1 Democratic

The understanding of teamwork and participation in organizations changes over time. Today, the democratization of organizations and leadership is important to many organizations (Sattelberger et al., 2015). It changes our ways of working together as well as the roles of leaders and employees (Wegge et al., 2010). Democratization describes the processes of inclusion, participation, autonomy, and distribution of responsibility (Gastil, 1994). In sum, democratic leadership is an integrated model of leadership that involves top-down, bottom-up, and lateral influence processes; see Figure 1.1 (Locke, 2003). As such, democratic leadership can be considered to incorporate related concepts (Gastil, 1994) such as empowering leadership

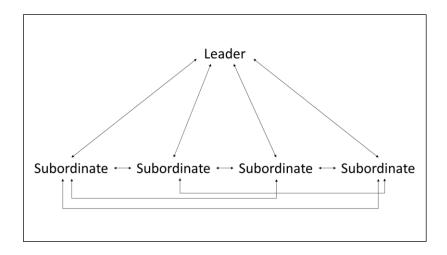


Figure 1.1 Integrated model of leadership (Locke, 2003, p. 272) with top-down, bottom-up, and lateral influences

(Kirkman & Rosen, 1999), participative leadership (Bass, Valenzi, Farrow, & Solomon, 1975), and collective leadership (Carter & DeChurch, 2012; Yammarino, Salas, Serban, Shirreffs, & Shuffler, 2012). These theories each subsume several sub-categories and theories of their own. Indeed, the theoretical landscape related to democratic leadership is spacious, complex, and sometimes indistinct. An overview of democratic leadership and the secondary theories that are relevant to this dissertation can be found in Figure 1.2. In all of the above-mentioned concepts, the decision-making process is somewhat shared by leaders and employees such that employees have more power than in a traditional top-down, autocratic leader-follower relationship (Hollander & Offermann, 1990; Locke, 2003). In order to increase readability, the term democratic leadership will refer to the set of behaviors that enhance inclusion, participation, autonomy, delegation of responsibility, empowerment, and the distribution of leadership.

Research on democratic leadership has yielded mostly positive results for organizations.

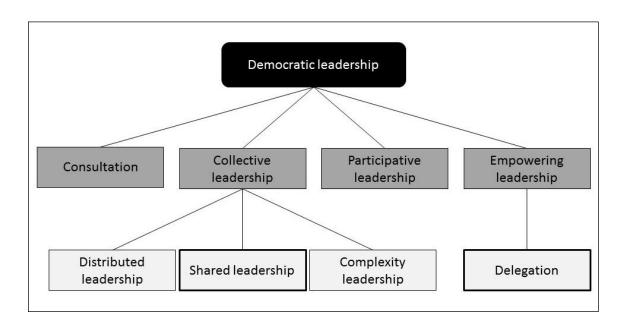


Figure 1.2 Democratic leadership and secondary leadership theories

(the secondary theories that are most relevant to this dissertation are depicted in bold face edging)

In the following, I will highlight a few findings about the positive effects of democratic leadership, mediators thereof, and finally possible criticisms of democratic leadership.

The *positive effects* of democratic leadership are manifold. Democratic leadership as a set of behaviors that enhance the meaningfulness of work, promote proactive behaviors, and motivate employees is mostly considered to be favorable for organizations, employees, and leaders (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Cheong, Spain, Yammarino, & Yun, 2016). Sharing power has many advantages: multiple leaders have potentially more knowledge, are more innovative, and provide more manpower to make decisions (Ensley, Hmieleski, & Pearce, 2006; Hollander & Offermann, 1990). Research investigating the consequences of sharing power shows that being empowered and holding decision-making powers increases motivation, satisfaction, and performance for the individual worker and the team (Amundsen & Martinsen, 2015; Grille, Schulte, & Kauffeld, 2015).

Findings on *mediators* demonstrate that the positive effects are partly based on psychological empowerment, intrinsic work motivation, and self-efficacy (Chen, Zhang, & Wang, 2014). Moreover, employees feel that their work is more meaningful (Cheong et al., 2016), and they feel more committed to their organization (Chen & Aryee, 2007), which then leads to higher team performance and satisfaction.

However, sharing decision-making responsibility can also have *negative effects* (Bozkurt & Ergeneli, 2012; Cheong et al., 2016; Hollander & Offermann, 1990) and can induce coordination and cooperation complexity. The responsibility that comes with sharing leadership and empowerment can be perceived as a burden and as an addition to the usual workload (Langfred & Moye, 2004). The cognitive complexity and responsibility that comes with autonomy can induce stress and confusion for employees (Cheong et al., 2016), which results in lower in-role and extra-role performance (Humborstad, Nerstad, & Dysvik, 2014). In addition, when delegating responsibilities, leaders could be suspected of social loafing because

they seemingly hand over tasks that are immanent in their leadership role (Bozkurt & Ergeneli, 2012).

Based on these mixed findings and the lack of research on individual outcomes for leaders, researchers are interested in detailed investigations of the antecedents, consequences, and intervening variables with regard to democratic leadership (Amundsen & Martinsen, 2015; Cullen-Lester & Yammarino, 2016). Several important questions remain unanswered. Specifically, the interplay between individual and team-level variables is rather vague (Friedrich, Griffith, & Mumford, 2016; Kozlowski, Mak, & Chao, 2016). Although the individual disappears as part of a team (Serban & Roberts, 2016), individual characteristics are important for the functionality of empowered teams (Bell, 2007). The importance of individual characteristics in addition to team features becomes apparent when one examines the antecedents of democratization at an individual level: The abilities of team members (Leana, 1986), mutual trust (Yukl & Fu, 1999), the team environment (Carson, Tesluk, & Marrone, 2007), and leader-member exchanges (Schriesheim, Neider, & Scandura, 1998) have all been identified as important antecedents of democratization. These findings show that individual characteristics and the dyadic relationship between leader and employee affects democratic, group-based leadership.

Keeping individual characteristics in mind, a question arises regarding the individual composition of the team. Democratization is built on power sharing and working together (Gastil, 1994). The combination of individual characteristics (such as personality, gender, and education) might influence how successful democratization can be implemented. Moreover, individual outcomes of democratization should be investigated in greater detail.

In addition to individual influencing variables, the team environment affects how successful teams use democratic leadership (Pearce, 2004). An important aspect for modern teams is the digitization and virtualization of work.

1.1.2 Digital

The work environment is increasingly turning into a digital work environment. Teamwork also benefits greatly from technological support, e.g., electronic groupware, virtual communication devices, and instant messaging (Foster et al., 2015; Gilson et al., 2015). Interaction on a joint work task via electronic communication devices is called *virtual teamwork*. Virtual teams rely on technological communication systems (e.g., e-mail, video-conferencing) to cooperate. The degree of virtuality can vary on a continuum from "completely face-to-face" to "completely virtual" (Foster et al., 2015; Kirkman & Mathieu, 2005) depending on the amount of virtual and face-to-face interactions.

Virtual teamwork has several advantages. Digitalized communication allows cooperation among people regardless of physical separation. Teams can work with more agility, employees are more flexible, and travel costs decrease (Gilson et al., 2015; Hertel, Geister, & Konradt, 2005). A digital work environment makes it possible for one to consult an expert on a different continent immediately (with only constraints based on time zones) or for a person who is not able to leave home (for example, because he/she has sick children) to work from home and interact with the team. In addition, digitization allows organizations to overcome country borders more easily and bring together team members with diverse backgrounds from different regions.

Despite the numerous advantages, virtual teams also face difficulties that result from digitization. Language difficulties, technological problems, geographic separation, a lack of nonverbal cues, asynchronous interactions, and cultural differences challenge communication and cooperation in virtual teams (Gilson et al., 2015). Therefore, adequate leadership measures must be taken to make use of the potential of virtual teams.

Leaders have to manage and offset some of these new demands. Nevertheless, leaders

also face the challenge of spatial separation, which makes leading employees more difficult (Kayworth & Leidner, 2001). Several researchers have therefore suggested that virtual teams could benefit from empowerment and team leadership (Hertel et al., 2005; Pearce, Yoo, & Alavi, 2004).

Indeed, sharing leadership establishes functional communication patterns and positive interactions (Aime, Humphrey, DeRue, & Paul, 2013). In particular, the frequency of communication, the context of messages, the mode of expression, and the recipients of messages change when leadership is distributed, which can help teams gain better solidarity (Hoch & Kozlowski, 2012; Pearce & Conger, 2003), establish more trusting relationships and foster team performance (Drescher, Korsgaard, Welpe, Picot, & Wigand, 2014). Other studies supporting empowerment have found that virtual teams that exhibit high performance have different communication patterns and practice more shared leadership behaviors compared with virtual teams that show low performance (Carte, Chidambaram, & Becker, 2006).

In addition, virtual teamwork equalizes employees (Jarvenpaa & Leidner, 1999; Stahl, Maznevski, Voigt, & Jonsen, 2010), and status differences fade to the background. The anonymity of virtual teamwork can make power differences become less salient. Formal status inequalities are less influential, participation is more equally distributed (Martins, Gilson, & Maynard, 2004), and employees can work more autonomously (Gajendran & Harrison, 2007). Consequently, digitization can provide support for the democratization of leadership.

1.1.3 Diverse

Diversity promotes creativity and innovation (Woolley & Malone, 2011; Woolley, Chabris, Pentland, Hashmi, & Malone, 2010). Accordingly, it is worthwhile to promote diversity in the workforce. Further, the "war for talent" calls for the inclusion of every competent worker (Chambers, Foulon, Handfield-Jones, Hankin, & Michaels, 1998),

independent of their personal conditions.

Diversity of the workforce refers to multi-faceted properties such as nationality, race, age, and sexual orientation but also skills, personality, and attitudes. One focus of the diversity literature is research on the inclusion of women in the workforce (Peus & Welpe, 2011). I will focus on this aspect of diversification for several reasons: first, the European and especially German political debate calls for changes in organizations' hiring and promoting practices with regard to gender inclusion (Shambaugh, 2015; Urbschat, 2016). Second, gender is relevant to everyone and every occupation and is often the subject of highly opinionated discussions. Third, gender is (most often) immediately visible and therefore prone to stereotyping.

The percentage of women in the workforce has been steadily increasing. The employment rate for women in Germany and the US was approximately 46% in 2015 compared to 43.9% in the year 2000 in Germany (Catalyst, 2016; Statistisches Bundesamt, 2016). Nevertheless, there are large differences between industries, and for almost all occupations, there is a large gender gap with regard to leadership positions (Catalyst, 2016; Chizema, Kamuriwo, & Shinozawa, 2015). This gap increases with leadership level (Catalyst, 2016), with very few female executives at the top of an organization (FidAr, 2015). Although there are several explanations for this effect (e.g., work-family conflict, leadership motivation), one systematic reason for the gender gap lies in the dominance of stereotypes.

The *lack of fit model* (Heilman, 2001) and *role congruity theory* (Eagly & Karau, 2002) state that based on stereotypes, men are often viewed as better suited for leadership positions. According to the theory, descriptive and prescriptive stereotypes dictate how certain (occupational) roles should be filled and shape our expectations regarding the people who fill those roles (Heilman, 2001). Leadership roles are predominantly associated with male characteristics (e.g., ambitious, independent, assertive). These stereotypes endure and influence how we evaluate male and female leadership potential (Duehr & Bono, 2006). As a

consequence, men are viewed as more competent for leadership positions (Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman, 1998), are more often hired for leadership positions (Bosak & Sczesny, 2011), and receive better evaluations when in leadership positions (Foschi, 1996; Lyness & Heilman, 2006).

Stereotypes influence not only how we evaluate leadership but generally influence how we evaluate social groups regarding two basic dimensions: warmth and competence. The *stereotype content model* (Fiske, Cuddy, & Glick, 2007) demonstrates that people judge others with respect to social desirability (warmth) and intellectual desirability (competence). The warmth dimension represents characteristics such as being good-natured, trustworthiness, or likeability. The competence dimension reflects cognitive characteristics such as intelligence, effectiveness, and ability (Fiske, Cuddy, Glick, & Xu, 2002). Evaluations based on these dimensions influence how people feel and act toward others (e.g., avoid someone who is viewed as less warm) (Cuddy, Glick, & Beninger, 2011).

Overall, men and women are rated differently regarding warmth and competence. Men are viewed as competent but less warm, whereas women are seen as warm and less competent (Ebert, Steffens, & Kroth, 2014). The seemingly positive assumption that women are relationship-oriented, warm, and nice can nevertheless lead to negative consequences (e.g., an assumption that a woman is not able to negotiate rationally). This effect is called benevolent sexism. According to the *ambivalent sexism theory* (Glick & Fiske, 1996, 2001), discrimination against women manifests itself in *hostile sexism* (an assumption that men are superior to women) and *benevolent sexism* (subjectively positive attitudes toward women that serve their inferior status). While hostile sexism is easily detectable, benevolent sexism is subtler because the stereotypes can be seemingly positive but still harmful for the women. An example of benevolent sexism is the assumption that a woman is better suited to plan an office party because she is more organized and social.

In this manner, occupations are sometimes viewed as typically female (e.g., nurse) or typically male (e.g., mechanic) (Cejka & Eagly, 1999). A person of the opposite sex (e.g., male nurse, female auto mechanic) can face backlash (Moss-Racusin, Phelan, & Rudman, 2010; Rudman & Fairchild, 2004), has fewer career opportunities, and might be viewed as an outsider in that occupational group (Clow & Ricciardelli, 2011; Gaucher, Friesen, & Kay, 2011). In addition, stereotypes ascribed to an occupational group reflect on a jobholder of that group (e.g., nurses are warm and nurturing but have limited intellectual abilities). Previous studies have examined the evaluation of different gender subgroups and occupational groups (Eckes, 2002). Generally, social groups are stereotyped as high on one dimension and low on the other dimension (competent but cold vs. warm but not competent) rather than high or low on both dimensions (Cuddy et al., 2011). Female subgroups (e.g., society lady, career woman, vamp) are overall viewed as warmer, whereas male subgroups (e.g., radical, career man, yuppie) are seen as more competent (Eckes, 2002).

The increase in women in all work environments and the changing roles of women in business might have changed the stereotypes about the different occupational roles of women in recent years (Eagly & Sczesny, 2009). Moreover, the interplay between gender, leadership, and different occupations needs to be investigated in more detail.

In conclusion, diversification as well as democratization and digitization play major roles in organizations and teams in particular. The current dissertation will address several of the above-mentioned challenges for future teamwork.

1.1.4 Research questions

The previous sections highlighted important advancements in the modern workforce: The democratization, digitization, and diversification of teamwork. Notwithstanding the significant advancements in research and practice, several questions remain unanswered. The current dissertation tries to address several of these issues and contributes to the research on leadership and followership.

The increase in democratic forms of leadership (such as delegation or shared leadership) in recent years evokes research that investigates the antecedents and consequences for individuals, teams, and organizations. In chapter 1.1.1, I outlined how democratization is related to high work satisfaction and performance. Nevertheless, the focus of previous studies was on work-related variables (e.g., ability) or aspects that play a role during interactions (e.g., trust). The focus of this dissertation is on individual characteristics (e.g., personality) that are essential for interactions among people (e.g., an extrovert acts differently among a group of people than an introvert) and on the influence of these individual characteristics on democratic leadership.

Moreover, the role of the digitization and virtualization of teamwork in democratic leadership ought to be investigated in more detail. As discussed in chapter 1.1.2, virtual teamwork is central to the future work environment. I noted that virtual teams can benefit from a more democratic form of leadership. Nevertheless, a deeper understanding of the interaction is needed. In this dissertation, I will examine how virtuality is related to shared leadership and team member personality.

Finally, although research on democratic leadership has substantially increased in the last decade, only a few studies have implemented an experimental design to analyze causal dependences with respect to democratization (Foels, Driskell, Mullen, & Salas, 2000).

The current research therefore tries to address the following research questions in order to close this knowledge gap.

RQ1: How do delegation and shared leadership (as manifestations of democratic leadership) influence leaders and team members positively?

RQ2: What are the relevant moderators and mediators of the above-mentioned

relationship?

The third challenge of modern teamwork, namely diversification, is often related to stereotypes that can evoke discrimination and injustice. In chapter 1.1.3, I explained that gender stereotypes often influence how we perceive a person and the roles that people play at work (e.g., mechanic vs. nurse). Occupations also underlie gender stereotyping and influence our evaluations of a person's competence and warmth. Accordingly, jobholders in typically female occupations (e.g., nurse) might be evaluated differently than jobholders in typically male occupations (e.g., mechanic). Thus, research question three targets the interaction between gender and occupation.

RQ3: What is the role of gender in perceptions of occupations?

These research questions will be examined in three empirical studies.

1.2 Research method and data sources

The current research applies empirical, quantitative research methods to investigate democratization, digitization, and diversification. One of the most complex issues is the measurement of (democratic) leadership. In the next section, I will outline how researchers have used different approaches to measure democratic leadership and its relation to other constructs.

1.2.1 Measuring democratic leadership

Researchers have used several different measurement approaches to evaluate democratic leadership. I will briefly report on questionnaire measures, network approaches and density measures, archival data analyses, and experimental study designs to investigate (democratic) leadership.

With the *questionnaire design*, one simply asks the leader and/or other included personnel (e.g., employees, superiors) how leadership is performed. To do so, a variety of standardized questionnaires have been developed. To assess democratic leadership and

associated constructs, several questionnaires are appropriate. To measure shared leadership, most researchers follow the full range of leadership model (Bass & Avolio, 1993), and measure transformational, transactional, directive, and empowering leadership first with regard to a single leader (e.g., "My team leader gives me positive feedback when I perform well") and second with regard to other team members (e.g., "My team members give me positive feedback when I perform well") (Ensley et al., 2006; Pearce & Sims, 2002). Ratings from several team members are then aggregated to the team level (usually by calculating the mean). The aggregated questionnaire approach is limited to an unspecified group of people, and this measurement can easily confound causes and outcomes because reporting on the how of leadership can be influenced by personal beliefs about the effectiveness and value of a particular leadership behavior. Therefore, other approaches to measure shared leadership have gained increasing attention.

Network approaches to leadership try to map the relationships between people (Chrobot-Mason, Gerbasi, & Cullen-Lester, 2016; Mehra, Smith, Dixon, & Robertson, 2006). Team members and the ties between them are depicted to show a network of influences (D'Innocenzo, Mathieu, & Kukenberger, 2014). To do so, people are asked to report whom in a specified group (e.g., a work team) they perceive as a leader, whom they go to for support, or how much decision-making power each team member has. The results show a network of relationships and connections among the team. These relationships are analyzed in relation to relevant outcome variables. The advantage of this approach is that leadership behavior does not have to be defined but is rather characterized by source of influence (Carson et al., 2007).

Most often, researchers measure the density of a network when assessing collectivistic leadership (D'Innocenzo et al., 2014). The density is the number of reported ties within a network divided by the total number of possible ties within that network. In their study on the antecedents of shared leadership and the performance outcomes of it, Carson et al. (2007) used

a density index to measure shared leadership. They let team members rate each other on the question, "To what degree does your team rely on this individual for leadership?" on a scale from 1 (not at all) to 5 (to a very great extent). Using this approach, the density score can vary between 1 (the lowest level of shared leadership) and 5 (the highest level of shared leadership). By measuring the density, all possible relationships and leadership influences within a team can be captured (Serban & Roberts, 2016).

Archival data are more objective, can be collected unobtrusively, and do not rely on the subjective testimony of team members, unlike questionnaires and network approaches. Archival data refer to information that has been gathered separately from the research at hand, such as business reports, newspaper articles, federal statistics, or protocols (Fritsche & Linneweber, 2006). Organizational performance data can be found in business reports. Individual performance can be deduced from the formal achievement of objectives as documented for bonuses. Leadership roles can be found in an organizational chart. Demographic details such as age, gender, or salary for teams and leaders can be extracted from internal documents. However, data on democratic leadership might be more difficult to find. Drescher and colleagues (2014) used log file data to measure shared leadership in teams in an online simulation game. They conceptualized shared leadership as the distribution of power within a team and measured it by counting certain entitlements the participants held (such as the right to invite other participants into the group). By using log file data, they were able to measure the distribution of decisionmaking power more objectively. The disadvantage of this measurement is that one cannot ensure that the formal distribution of rights aligns with the actual execution of those rights and subjective perceptions of the leadership roles within a team.

Experimental research on empowerment tries to measure democratic leadership, its antecedents, and its outcomes in a more controlled setting. Specifically, independent variables are manipulated in a controlled manner, while confounding variables are eliminated or

stabilized. However, the difficulty lies in the appropriate manipulation of empowering leadership as the independent variable. For example, Aime et al. (2013) arranged teams in which the participants had different fields of expertise, which helped them solve three different tasks. Depending on the task, a different field of expertise was most helpful to solve the problem. Teams that shifted power between team members based on the demands of the task, instead of having one powerful team member, were more creative. Another recent study that examined the use of collective leadership behaviors used a scenario-based approach (Friedrich et al., 2016). In this study, the researchers measured collective leadership by coding participants' behaviors with regard to the degrees of network development, communication, and leader-team exchange as important dimensions of collective leadership. Researchers have emphasized that the strength of an experimental study is its controlled research environment and strong causal claims. However, experimental research has limitations with regard to external validity and the ability to represent a complex, multidimensional reality.

Agent-based modeling uses computer simulation to analyze the complexity and dynamics of democratic leadership (McHugh et al., 2016). This approach is somewhat different from the above-mentioned approaches because it does not rely on personal data or behavioral measures but simulation data. The advantage of simulation techniques is their internal validity, controlled setting, and the ability to analyze data that could not have been collected under traditional circumstances (McHugh et al., 2016; Serban et al., 2015). Accordingly, simulation techniques are particularly suited for complex situations such as democratic leadership (Will, 2016). However, a disadvantage is a possible lack of external validity and the risk of making false assumptions that alter the results (Davis, Eisenhardt, & Bingham, 2007). Thus, agent-based modeling should not be used exclusively but in combination with other methods to explore democratic leadership (Kozlowski, Chao, Grand, Braun, & Kuljanin, 2013).

In summary, several measurement tactics can be applied to assess democratic

leadership. In the current dissertation, I combined several different measurement approaches to balance out the limitations of each approach. First, to assess the outcomes of shared leadership, I used an experimental, scenario-based design. Second, to investigate the delegation of responsibilities and decision-making capabilities, I combined a scenario study with a longitudinal questionnaire survey. The next section will provide a brief overview of the study design and data sources.

1.2.2 Data sources

The current dissertation covers several empirical studies with multiple data sources. The first study used a policy-capturing method with two samples ($N_1 = 262$ students; $N_2 = 99$ employees) to examine shared leadership and its moderators and outcomes. Policy-capturing studies use an experimental design based on a simulation technique. Participants read a series of short scenarios and evaluate them with regard to the dependent variables in question (Aguinis & Bradley, 2014). This approach has been applied in several different research areas, and it efficiently reveals causal relationships (Aguinis & Bradley, 2014; Karren & Barringer, 2002). The integration of employees as participants increases the generalizability of the results.

Next, to examine how delegation behavior influences employees' evaluation of their leaders, I implemented an experimental, scenario-based study with a mixed sample (N=304 employees, entrepreneurs, retirees, and students) and a questionnaire survey with two measurement points (N=109 employees). The results of both studies largely resemble each other and support the high quality of a multi-method approach.

Finally, I surveyed 100 students about their attitudes toward male and female jobholders and requirements for leaders. Using cluster analyses, the results build a "landscape" of female and male jobholders with regard to warmth and competence. The questionnaire is based on previous studies that examined gender roles (Asbrock, 2010; Eckes, 2002), and the results are

compared to their "gender landscapes".

1.3 Structure and main results

Each of the following chapters of this dissertation addresses an aspect of the aforementioned challenges for tomorrow's workforce: democratization (chapters 2 and 3), digitization (chapter 2), and diversification (chapter 4). Fig 1.3 provides an overview of the studies and displays the basic research model and its integration into the overall orientation of this dissertation. The chapters build on a specific stream of literature that will be discussed at the beginning of each chapter. The theoretical background is followed by a description of the research gap, the methods employed for the empirical study, the results, and a discussion of the results with respect to theoretical and practical implications as well as limitations.

Chapter 2 examines the outcomes of shared leadership (Pearce & Conger, 2003) as a form of collective leadership (Cullen-Lester & Yammarino, 2016) in virtual and face-to-face teams. Shared leadership is a more dynamic approach to empowering leadership. It is defined as "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. This influence process often involves peer, or lateral, influence and at other times involves upward or downward hierarchical influence" (Pearce & Conger, 2003, p. 1). Several meta-analyses (D'Innocenzo et al., 2014; Nicolaides et al., 2014; Wang, Waldman, & Zhang, 2014), reviews (Carter, DeChurch, Braun, & Contractor, 2015), and special issues (Cullen-Lester & Yammarino, 2016) have shed light on the relationship between shared leadership and performance as well as affective outcomes. Overall, it is believed that shared leadership has a positive influence on teams and organizations with regard to performance and satisfaction (D'Innocenzo et al., 2014; Nicolaides et al., 2014; Wang et al., 2014). Nevertheless, research on the moderating influences of other team variables is missing. Specifically, the role of commonality (perceived similarity of team members) was analyzed. The results of two

experimental policy-capturing studies show that shared leadership as well as high commonality cause higher performance and satisfaction. Moreover, we found interactive effects of leadership and communication mode (virtual vs. face-to-face), which suggest that compared to face-to-face teams, virtual teams benefit even more than face-to-face teams from shared leadership compared to hierarchical leadership. The results for commonality and communication mode were the opposite of what we expected: Virtual teams with low commonality reported high performance and satisfaction scores. The findings have practical implications both for implementing shared leadership in virtual teams and arranging a team with respect to similarities among team members. Additional analyses regarding the study method (i.e., combined sample, negativity of items) and demographic characteristics (country of participants) are presented in Appendix B, chapter 2.9.

Chapter 3 covers another aspect of democratization, namely delegation of responsibility and decision-making power. Delegation of decision-making power typically leads to a high degree of empowerment (Hollander & Offermann, 1990). Delegation is an important facet of leadership (Yukl, 2010; Yukl & Fu, 1999) with increasing meaning in organizations (Atwater, Brett, Waldman, DiMare, & Hayden, 2004). Research shows that delegation is related to organizational outcomes such as performance, satisfaction, innovation, and commitment as well as organizational citizenship behavior (OCB) (Chen & Aryee, 2007; Leana, 1986; Schriesheim et al., 1998). Nevertheless, engaging in delegation behavior is also a challenge for leaders, and its influence on leader perception is still uncertain. In an experimental scenario study and a longitudinal field study, I analyzed the role of delegation in perceptions of leaders. Specifically, the results show that employees' perceptions of leader ability, performance, and likeability are higher when leaders delegate more responsibilities. Moreover, leader likeability mediates the effect of delegation on employee satisfaction. The results highlight the importance of delegation and contribute to previous research by showing the positive effects of delegation on the

evaluation of leaders. Additional analyses regarding the influence of age and gender as well as possible nonlinear effects of delegation are presented in Appendix B, chapter 3.9.

Chapter 4 covers the meaning of diversity for different occupations. Based on the stereotype content model (Fiske et al., 2007; Fiske et al., 2002) and role congruity theory (Eagly & Karau, 2002; Heilman, 2001), we examined how different occupations (such as physician, teacher, and farmer) were perceived with regard to warmth and competence. Moreover, we found a difference for female and male incumbents of an occupation. Finally, the results with regard to the ideal attributes of leaders show that competence, assertiveness, effectiveness, and strategic orientation were rated the most important for successful leaders. The results can help organizations overcome gender stereotypes and their impact in the work context.

All of the findings are summarized in chapter 5. Furthermore, the results of the studies are discussed with regard to their contribution to the current debate about future challenges in leadership and followership.

This dissertation therefore contributes to the literature on new work trends by demonstrating how democratization (with regard to delegation and shared leadership), digitization (with regard to virtual communication), and diversification (with regard to gender and occupation) affect individuals and teams (with regard to performance, satisfaction, competence, and warmth).

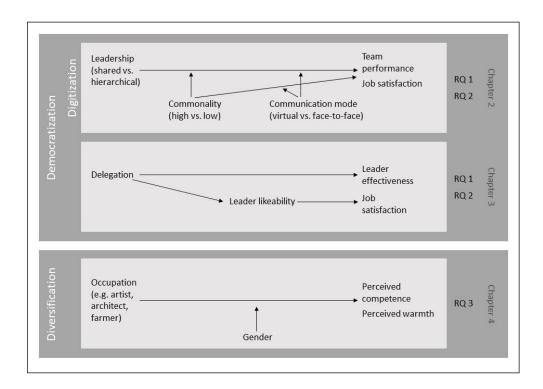


Figure 1.3 Study overview (RQ = Research question)

1.4 References

- Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, 17, 351-371. doi:10.1177/1094428114547952
- Aime, F., Humphrey, S., DeRue, D., & Paul, J. (2013). The riddle of heterarchy: Power transitions in cross-functional teams. *Academy of Management Journal*, *57*, 327-352. doi:10.5465/amj.2011.0756
- Amundsen, S., & Martinsen, Ø. L. (2015). Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment.

 Journal of Leadership & Organizational Studies, 22, 304-323.

 doi:10.1177/1548051814565819
- Asbrock, F. (2010). Stereotypes of social groups in Germany in terms of warmth and competence. *Social Psychology*, *41*, 76-81. doi:10.1027/1864-9335/a000011
- Atwater, L. E., Brett, J. F., Waldman, D., DiMare, L., & Hayden, M. V. (2004). Men's and women's perceptions of the gender typing of management subroles. *Sex Roles*, *50*, 191-199. doi:10.1023/B:SERS.0000015551.78544.35
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques. In
 M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49-80). San Diego, CA: Academic Press.
- Bass, B. M., Valenzi, E. R., Farrow, D. L., & Solomon, R. J. (1975). Management styles associated with organizational, task, personal, and interpersonal contingencies. *Journal of Applied Psychology*, 60, 720-729. doi:10.1037/0021-9010.60.6.720
- Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-

- analysis. Journal of Applied Psychology, 92, 595-615. doi:10.1037/0021-9010.92.3.595
- Bosak, J., & Sczesny, S. (2011). Gender bias in leader selection? Evidence from a hiring simulation study. *Sex Roles*, 65, 234-242. doi:10.1007/s11199-011-0012-7
- Bozkurt, F. G., & Ergeneli, A. (2012). Moderating effect of trust in managers on the relation between delegation of authority and managers' perceived social loafing. *Information Management and Business Review*, 4, 583-595.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50, 1217-1234. doi:10.2307/amj.2007.20159921
- Carte, T. A., Chidambaram, L., & Becker, A. (2006). Emergent leadership in self-managed virtual teams: A longitudinal study of concentrated and shared leadership behaviors.

 Group Decision and Negotiation, 15, 323-343. doi:10.1007/s10726-006-9045-7
- Carter, D. R., & DeChurch, L. A. (2012). Networks: The way forward for collectivistic leadership research. *Industrial and Organizational Psychology*, 5, 412-415. doi:10.1111/j.1754-9434.2012.01470.x
- Carter, D. R., DeChurch, L. A., Braun, M. T., & Contractor, N. S. (2015). Social network approaches to leadership: An integrative conceptual review. *Journal of Applied Psychology*, 100, 597-622. doi:10.1037/a0038922
- Catalyst. (2016). *Statistical overview of women in the workforce*. Retrieved 05/13/2016 from http://www.catalyst.org/knowledge/statistical-overview-women-workforce
- Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin*, 25, 413-423. doi:10.1177/0146167299025004002

- Chambers, E. G., Foulon, M., Handfield-Jones, H., Hankin, S. M., & Michaels, E. G. (1998).

 The war for talent. *McKinsey Quarterly*, 44-57.
- Chen, C. C., Zhang, A. Y., & Wang, H. (2014). Enhancing the effects of power sharing on psychological empowerment: The roles of management control and power distance orientation. *Management and Organization Review*, 10, 135-156. doi:10.1111/more.12032
- Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, 92, 331-346. doi:10.1037/0021-9010.92.2.331
- Chen, Z. X., & Aryee, S. (2007). Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China. *Academy of Management Journal*, 50, 226-238. doi:10.5465/amj.2007.24162389
- Cheong, M., Spain, S. M., Yammarino, F. J., & Yun, S. (2016). Two faces of empowering leadership: Enabling and burdening. *The Leadership Quarterly*, 27, 602-616. doi:10.1016/j.leaqua.2016.01.006
- Chizema, A., Kamuriwo, D. S., & Shinozawa, Y. (2015). Women on corporate boards around the world: Triggers and barriers. *The Leadership Quarterly*, 26, 1051-1065. doi:10.1016/j.leaqua.2015.07.005
- Chrobot-Mason, D., Gerbasi, A., & Cullen-Lester, K. L. (2016). Predicting leadership relationships: The importance of collective identity. *The Leadership Quarterly*, 27, 298-311. doi:10.1016/j.leaqua.2016.02.003
- Clow, K. A., & Ricciardelli, R. (2011). Women and men in conflicting social roles: Implications from social psychological research. *Social Issues and Policy Review*, 5, 191-226. doi:10.1111/j.1751-2409.2011.01030.x

- Contractor, N. S., DeChurch, L. A., Carson, J. B., Carter, D. R., & Keegan, B. (2012). The topology of collective leadership. *The Leadership Quarterly*, 23, 994-1011. doi:10.1016/j.leaqua.2012.10.010
- Cuddy, A. J. C., Glick, P., & Beninger, A. (2011). The dynamics of warmth and competence judgments, and their outcomes in organizations. *Research in Organizational Behavior*, 31, 73-98. doi:10.1016/j.riob.2011.10.004
- Cullen-Lester, K. L., & Yammarino, F. J. (2016). Collective and network approaches to leadership: Special issue introduction. *The Leadership Quarterly*, 27, 173-180. doi:10.1016/j.leaqua.2016.02.001
- D'Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2014). A meta-analysis of different forms of shared leadership—team performance relations. *Journal of Management*, Advance online publication. doi:10.1177/0149206314525205
- Davis, J. P., Eisenhardt, K. M., & Bingham, C. B. (2007). Developing theory through simulation methods. *Academy of Management Review*, 32, 480-499. doi:10.5465/amr.2007.24351453
- Deloitte. (2016). *Global human capital trends 2016 The new organization: Different by design.* Retrieved 05/24/2016 from http://www2.deloitte.com/us/en/pages/human-capital/articles/introduction-human-capital-trends.html
- Drescher, M. A., Korsgaard, M. A., Welpe, I. M., Picot, A., & Wigand, R. T. (2014). The dynamics of shared leadership: Building trust and enhancing performance. *Journal of Applied Psychology*, 99, 771-783. doi:10.1037/a0036474
- Duehr, E. E., & Bono, J. E. (2006). Men, women, and managers: Are stereotypes finally changing? *Personnel Psychology*, *59*, 815-846. doi:10.1111/j.1744-6570.2006.00055.x
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders.

- Psychological Review, 109, 573-598. doi:10.1037//0033-295X.109.3.573
- Eagly, A. H., & Sczesny, S. (2009). Stereotypes about women, men, and leaders: Have times changed? In M. Barreto, M. K. Ryan, & M. T. Schmitt (Eds.), *The glass ceiling in the 21st century: Understanding barriers to gender equality* (pp. 21-47). Washington, DC: American Psychological Association.
- Ebert, I. D., Steffens, M. C., & Kroth, A. (2014). Warm, but maybe not so competent? Contemporary implicit stereotypes of women and men in germany. *Sex Roles*, 70, 359-375. doi:10.1007/s11199-014-0369-5
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: Testing predictions from the stereotype content model. *Sex Roles*, 47, 99-114. doi:10.1023/A:1021020920715
- Ensley, M. D., Hmieleski, K. M., & Pearce, C. L. (2006). The importance of vertical and shared leadership within new venture top management teams: Implications for the performance of startups. *The Leadership Quaterly*, 17, 217-231. doi:10.1016/j.leaqua.2006.02.002
- FidAr. (2015). *Women on Board Index (WoB 160)*. Retrieved 06/11/2016 from http://www.fidar.de/wob-indizes-und-studien.html
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition:

 Warmth and competence. *Trends in Cognitive Sciences*, 11, 77-83.

 doi:10.1016/j.tics.2006.11.005
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902. doi:10.1037/0022-3514.82.6.878
- Foels, R., Driskell, J. E., Mullen, B., & Salas, E. (2000). The effects of democratic leadership on group member satisfaction: An integration. *Small Group Research*, *31*, 676-701.

- doi:10.1177/104649640003100603
- Foschi, M. (1996). Double standards in the evaluation of men and women. *Social Psychology Quarterly*, 59, 237-254. doi:10.2307/2787021
- Foster, M. K., Abbey, A., Callow, M. A., Zu, X., & Wilbon, A. D. (2015). Rethinking virtuality and its impact on teams. *Small Group Research*, 46, 267-299. doi:10.1177/1046496415573795
- Friedrich, T. L., Griffith, J. A., & Mumford, M. D. (2016). Collective leadership behaviors: Evaluating the leader, team network, and problem situation characteristics that influence their use. *The Leadership Quarterly*, 27, 312-333. doi:10.1016/j.leaqua.2016.02.004
- Fritsche, I., & Linneweber, V. (2006). Nonreactive methods in psychological research. In M. Eid & E. Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 189-203). Washington, DC: American Psychological Association.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences.

 *Journal of Applied Psychology, 92, 1524-1541. doi:10.1037/0021-9010.92.6.1524
- Gastil, J. (1994). A definition and illustration of democratic leadership. *Human Relations*, 47, 953-975. doi:10.1177/001872679404700805
- Gaucher, D., Friesen, J., & Kay, A. C. (2011). Evidence that gendered wording in job advertisements exists and sustains gender inequality. *Journal of Personality and Social Psychology*, 101, 109-128. doi:10.1037/a0022530
- Gilson, L. L., Maynard, M. T., Young, N. C. J., Vartiainen, M., & Hakonen, M. (2015). Virtual teams research: 10 years, 10 themes, and 10 opportunities. *Journal of Management*, 41, 1313-1337. doi:10.1177/0149206314559946

- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70, 491-512. doi:10.1037/0022-3514.70.3.491
- Glick, P., & Fiske, S. T. (2001). Ambivalent sexism. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. Volume 33, pp. 115-188). San Diego, CA: Academic Press.
- Grille, A., Schulte, E.-M., & Kauffeld, S. (2015). Promoting shared leadership: A multilevel analysis investigating the role of prototypical team leader behavior, psychological empowerment, and fair rewards. *Journal of Leadership & Organizational Studies*, 22, 324-339. doi:10.1177/1548051815570039
- Guillaume, Y. R. F., Dawson, J. F., Woods, S. A., Sacramento, C. A., & West, M. A. (2013).

 Getting diversity at work to work: What we know and what we still don't know. *Journal of Occupational & Organizational Psychology*, 86, 123-141. doi:10.1111/joop.12009
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues: Gender, Hierarchy, and Leadership*, 57, 657-674. doi:10.1111/0022-4537.00234
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success:

 Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology*, 89, 416-427. doi:10.1037/0021-9010.89.3.416
- Hertel, G., Geister, S., & Konradt, U. (2005). Managing virtual teams: A review of current empirical research. *Human Resource Management Review*, 15, 69-95. doi:10.1016/j.hrmr.2005.01.002
- Hoch, J. E., & Kozlowski, S. W. J. (2012). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, 99, 390-

- 403. doi:10.1037/a0030264
- Hollander, E. P., & Offermann, L. R. (1990). Power and leadership in organizations: Relationships in transition. *American Psychologist*, 45, 179-189. doi:10.1037/0003-066x.45.2.179
- Humborstad, S. I. W., Nerstad, C. G. L., & Dysvik, A. (2014). Empowering leadership, employee goal orientations and work performance: A competing hypothesis approach.

 *Personnel Review, 43, 246-271. doi:10.1108/PR-01-2012-0008
- Jarvenpaa, S. L., & Leidner, D. E. (1999). Communication and trust in global virtual teams.

 Organization Science, 10, 791-815. doi:10.1111/j.1083-6101.1998.tb00080.x
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-capturing methodology in organizational research: Guidelines for research and practice.

 **Organizational Research Methods, 5, 337-361. doi:10.1177/109442802237115*
- Kayworth, T. R., & Leidner, D. E. (2001). Leadership effectiveness in global virtual teams.

 Journal of Management Information Systems, 18, 7-40.

 doi:10.1080/07421222.2002.11045697
- Kehr, H. M., Rawolle, M., & Strasser, M. (2016). Selbstgesteuert in die Zukunft [Self-directed into the future]. *Wirtschaft und Weiterbildung*, 5, 24-29.
- Kirkman, B. L., & Mathieu, J. E. (2005). The dimensions and antecedents of team virtuality. *Journal of Management*, 31, 700-718. doi:10.1177/0149206305279113
- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42, 58-74. doi:10.2307/256874
- Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organizations. In W. C.

- Borman, D. R. Ilgen, & J. Klimoski (Eds.), *Handbook of Psychology: Industrial and Organizational Psychology* (2nd ed., Vol. 12, pp. 333-375). Hoboken, NJ: John Wiley & Sons.
- Kozlowski, S. W. J., Chao, G. T., Grand, J. A., Braun, M. T., & Kuljanin, G. (2013). Advancing multilevel research design: Capturing the dynamics of emergence. *Organizational Research Methods*, 16, 581-615. doi:10.1177/1094428113493119
- Kozlowski, S. W. J., Mak, S., & Chao, G. T. (2016). Team-centric leadership: An integrative review. *Annual Review of Organizational Psychology and Organizational Behavior*, *3*, 21-54. doi:10.1146/annurev-orgpsych-041015-062429
- Langfred, C. W., & Moye, N. A. (2004). Effects of Task Autonomy on Performance: An Extended Model Considering Motivational, Informational, and Structural Mechanisms.

 Journal of Applied Psychology, 89, 934-945. doi:10.1037/0021-9010.89.6.934
- Leana, C. R. (1986). Predictors and consequences of delegation. *Academy of Management Journal*, 29, 754-774. doi:10.2307/255943
- Locke, E. A. (2003). Leadership: Starting at the top. In C. L. Pearce & J. A. Conger (Eds.), Shared leadership: Reframing the hows and whys of leadership (pp. 271-284). Thousand Oaks, CA: Sage.
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, 91, 777-785. doi:10.1037/0021-9010.91.4.777
- Martins, L. L., Gilson, L. L., & Maynard, M. T. (2004). Virtual teams: What do we know and where do we go from here? *Journal of Management*, 30, 805-835. doi:10.1016/j.jm.2004.05.002
- McHugh, K. A., Yammarino, F. J., Dionne, S. D., Serban, A., Sayama, H., & Chatterjee, S.

- (2016). Collective decision making, leadership, and collective intelligence: Tests with agent-based simulations and a Field study. *The Leadership Quarterly*, 27, 218-241. doi:10.1016/j.leaqua.2016.01.001
- Mehra, A., Smith, B. R., Dixon, A. L., & Robertson, B. (2006). Distributed leadership in teams:

 The network of leadership perceptions and team performance. *The Leadership Quarterly*, 17, 232-245. doi:10.1016/j.leaqua.2006.02.003
- Mohnen, A., & Falk, S. (2014). Familienunternehmen als Arbeitgeber: Empirische Untersuchung der Sicht junger Akademiker [Family firms as employers: Empirical investigation from the perspective of young academics]. Retrieved 06/12/2016 from http://www.familienunternehmen.de/de/pressebereich/meldungen/2014/2014-05-08/familienunternehmen-die-besseren-arbeitgeber
- Moss-Racusin, C. A., Phelan, J. E., & Rudman, L. A. (2010). When men break the gender rules:

 Status incongruity and backlash against modest men. *Psychology of Men & Masculinity*,

 11, 140-151. doi:10.1037/a0018093
- Nicolaides, V. C., LaPort, K. A., Chen, T. R., Tomassetti, A. J., Weis, E. J., Zaccaro, S. J., & Cortina, J. M. (2014). The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships. *The Leadership Quarterly*, 25, 923-942. doi:10.1016/j.leaqua.2014.06.006
- Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Executive*, 18, 47-57. doi:10.5465/AME.2004.12690298
- Pearce, C. L., & Conger, J. A. (2003). All those years ago: The historical underspinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership* (pp. 1-18). Thousand Oaks, CA: Sage.

- Pearce, C. L., & Sims, H. P. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics:*Theory, Research, and Practice, 6, 172-197. doi:10.1037/1089-2699.6.2.172
- Pearce, C. L., Yoo, Y., & Alavi, M. (2004). Leadership, social work, and virtual teams: The relative influence of vertical versus shared leadership in the nonprofit sector. In R. E. Riggio & S. S. Orr (Eds.), *Improving leadership in nonprofit organizations* (pp. 180-203). San Francisco, CA: Jossey-Bass.
- Peus, C., & Welpe, I. M. (2011). Frauen in Führungspositionen: Was Unternehmen wissen sollten [Women in leadership: What organizations should know]. **OrganisationsEntwicklung*, 2, 47-55.**
- PewResearchCenter. (2010). Millennials a portrait of generation next: Confident, connected,

 Open to change. Retrieved 05/15/2016 from

 http://www.pewsocialtrends.org/2010/02/24/millennials-confident-connected-open-to-change/
- PewResearchCenter. (2014). *Millennials in adulthood: Detached from institutions, networked*with friends. Retrieved 05/15/2016 from

 http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology*, 74, 629-645. doi:10.1037/0022-3514.74.3.629
- Rudman, L. A., & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology*, 87, 157-176. doi:10.1037/0022-3514.87.2.157

- Sattelberger, T., Welpe, I. M., & Boes, A. (Eds.). (2015). Das demokratische Unternehmen:

 Neue Arbeits- und Führungskulturen im Zeitalter digitaler Wirtschaft [The democratic organization: New work- and leadership culture in a digital age]. Freiburg, Germany:

 Haufe.
- Schleer, C., & Calmbach, M. (2014). Azubis gewinnen und fördern: Eine Zielgruppenstudie des SINUS-Instituts für die Industrie- und Handelskammern in Baden-Württemberg [Attracting and promoting apprentices: A study on target groups from the SINUS insitute for the chambers of commerce and industry in Baden-Wuerttemberg] Retrieved 05/15/2016 from https://www.ulm.ihk24.de/aus_und_weiterbildung/Ausbildung_neu/Fuer_Unternehme n/AZUBIS_finden2/IHK_Jugendstudie/1630374
- Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal*, *41*, 298-318. doi:10.2307/256909
- Serban, A., & Roberts, A. J. B. (2016). Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach. *The Leadership Quarterly*, 27, 181-199. doi:10.1016/j.leaqua.2016.01.009
- Serban, A., Yammarino, F. J., Dionne, S. D., Kahai, S. S., Hao, C., McHugh, K. A., . . . 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, 402-418. doi:10.1016/j.leaqua.2015.02.006
- Shambaugh, R. (2015, March 18). Should US follow Europe's lead for gender quotas on boards?

 *Huffingtonpost.** Retrieved from http://www.huffingtonpost.com/rebecca-shambaugh/should-us-follow-europes-_b_6885208.html

- Stahl, G. K., Maznevski, M. L., Voigt, A., & Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups.

 **Journal of International Business Studies, 41, 690-709. doi:10.1057/jibs.2009.85*
- Statistisches Bundesamt. (2016). Beschäftigungsstatistik [Employment statistics]. Retrieved 04/02/2016 from https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Arbeitsmarkt/Erw erbstaetigkeit/TabellenBeschaeftigungsstatistik/Insgesamt.html
- Urbschat, A. (2016, September 06). Ohne Frauenquote in der Politik wird es keine wirkliche Gleichberechtigung geben [There will be no gender equality without a quota in politics].

 *Huffingtonpost.** Retrieved from http://www.huffingtonpost.de/anja-urbschat/frauenquote-gleichberechtigung_b_10370070.html
- Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, 99, 181-198. doi:10.1037/a0034531
- Wegge, J., Jeppesen, H. J., Weber, W. G., Pearce, C. L., Silva, S. A., Pundt, A., . . . Piecha, A. (2010). Promoting work motivation in organizations: Should employee involvement in organizational leadership become a new tool in the organizational psychologist's kit?

 **Journal of Personnel Psychology, 9, 154-171. doi:10.1027/1866-5888/a000025
- Will, T. E. (2016). Flock leadership: Understanding and influencing emergent collective behavior. *The Leadership Quarterly*, 27, 261-279. doi:10.1016/j.leaqua.2016.01.002
- Woolley, A., & Malone, T. (2011, June). What makes a team smarter? More women. *Harvard Business Review*, 89(6), 32-33.
- Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010). Evidence for a collective intelligence factor in the performance of human groups. *Science*, *330*, 686-688. doi:10.1126/science.1193147

- Yammarino, F. J., Salas, E., Serban, A., Shirreffs, K., & Shuffler, M. L. (2012). Collectivistic leadership approaches: Putting the "we" in leadership science and practice. *Industrial and Organizational Psychology*, *5*, 382-402. doi:10.1111/j.1754-9434.2012.01467.x
- Yukl, G. (2010). Leadership in organizations (7th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., & Fu, P. P. (1999). Determinants of delegation and consultation by managers. *Journal of Organizational Behavior*, 20, 219-232. doi:10.1002/(SICI)1099-1379(199903)20:2<219::AID-JOB922>3.0.CO;2-8

2 Shared leadership and commonality: A policy-capturing study

This study is joint work with Yvonne Garbers. The paper is published at The Leadership Quarterly:

Drescher, G., & Garbers, Y. (2016). Shared leadership and commonality: A policy-capturing study. *The Leadership Quarterly*, 27, 200-217. doi:10.1016/j.leaqua.2016.02.002

Abstract

Although research has extensively examined the relationship between shared leadership and performance outcomes, little is known about the interaction with other team variables such as commonality and communication mode. Moreover, nearly all research on shared leadership has adopted a cross-sectional approach. Accordingly, this research examined the effects of shared leadership, commonality, and communication mode on work performance and satisfaction. Using an experimental policy-capturing design, shared leadership, commonality, and communication mode were manipulated. Students (sample 1) and employees (sample 2) evaluated their performance and satisfaction. The results of multilevel analyses revealed that both shared leadership and high commonality had positive effects on team members' intended performance and predicted satisfaction. Moreover, we found that commonality and communication mode had interactive effects. Interestingly, commonality was more important for face-to-face teams than for virtual teams. The results both emphasize the importance of shared leadership and prompt significant recommendations for virtual teamwork.

Keywords: shared leadership, hierarchical leadership, commonality, virtual teams, policy-capturing

3 Effects of delegation on employees' perception of leaders' performance and affect

The paper is published at The Journal of Managerial Psychology.

Drescher, G. (2017). Delegation outcomes: perceptions of leaders and follower's satisfaction. *Journal of Managerial Psychology*, *32*, 2-15. doi:10.1108/JMP-05-2015-0174

Subsets of these data were presented at the 16th Congress of the European Association of Work and Organizational Psychology:

Lotzkat, G., & Welpe, I. M. (2013, May). *Receiving work from your boss - does leader gender matter in organizational delegation?* Presentation at the 16th Congress of the European Association of Work and Organizational Psychology, Münster, Germany.

Abstract

Purpose – The purpose of this paper is to examine the relationships among delegation, employees' perceptions of leader's performance and likeability and follower's job satisfaction. These variables are significantly associated with leader influence.

Design/methodology/approach - To test how employees evaluate delegation, an experimental study (study 1: n=304) and a longitudinal field questionnaire (study 2: n=109) were implemented.

Findings – The results of study 1 showed that leader delegation leads to higher levels of perceived leader ability and performance. Study 2 replicated and extended these results. Mediation analyses revealed that leader likeability mediates the relationship between delegation and employee's job satisfaction.

Practical implications – The study emphasizes the meaning of delegation for leaders and organizations. By transferring responsibilities and decision-making responsibilities, leaders can improve their image among their employees and enhance job satisfaction.

Originality/value — This study investigated employees' perceptions of leaders with regard to performance-related and affective responses to delegation. The results are combined with findings on employee job satisfaction. The study fills an important gap in leadership research. Experimental data combined with field survey data show that the delegation of responsibilities is associated with positive impressions of leaders.

Keywords: leadership, job satisfaction, delegation, leader likeability, perception of leaders' performance

4 Gibt es Geschlechtsstereotype in der Wahrnehmung von

Berufsgruppen?

This study is joint work with Isabell M. Welpe. The paper is published in the edited book "Selection of men and women as leaders: Perspectives from business, academia, media, and politics [Auswahl von Männern und Frauen als Führungskräfte: Perspektiven aus Wirtschaft, Wissenschaft, Medien und Politik]":

Lotzkat, G., & Welpe, M. (2015). Gibt es Geschlechtsstereotype in der Wahrnehmung von Berufsgruppen? In M. I. Welpe, P. Brosi, L. Ritzenhöfer, & T. Schwarzmüller (Eds.), Auswahl von Männern und Frauen als Führungskräfte: Perspektiven aus Wirtschaft, Wissenschaft, Medien und Politik (pp. 167 - 182). Wiesbaden: Springer.

Zusammenfassung

Unser tägliches Leben ist geprägt vom Umgang mit Personen verschiedener Berufsgruppen (z. B. der Handwerkerin oder dem Kinderbetreuer im Hort). Obwohl wir wissen, dass der Umgang mit anderen Personen von Stereotypen und Rollenerwartungen geprägt ist, ist bislang wenig über die stereotypen Erwartungen an unterschiedliche Berufsgruppen bekannt. Das Wissen über Ausprägungen von Stereotypen kann als Grundlage für entsprechende Maßnahmen gegen deren Einfluss wichtig sein. Vor diesem Hintergrund wird in diesem Beitrag die stereotype Wahrnehmung von Berufsgruppen betrachtet. In einer explorativen Befragung mit 100 Studierenden untersuchten wir, wie männliche und weibliche Vertreter von 30 verschiedenen Berufsgruppen bezüglich ihrer Kompetenz, Wärme, Machtund Beziehungsorientierung, Status und Durchsetzungsfähigkeit wahrgenommen werden. Eine Veranschaulichung der Berufsgruppen in Clustern gibt Aufschluss über die Ähnlichkeit verschiedener Berufsgruppen.

5 Conclusions

5.1 Summary of findings

This dissertation contributes to the literature on the challenges for tomorrow's workforce by focusing on democratization of leadership, digitization of work, and diversification of teams. Specifically, I examined the roles of commonality and virtual communication in the positive influence of shared leadership on team performance and job satisfaction (chapter 2). A different aspect of democratization, namely delegation, was analyzed with regard to the evaluation of leaders' warmth and competence (chapter 3). Finally, I analyzed the diversification of the workforce (chapter 4) and evaluated different occupational roles with regard to gender and leadership.

Chapter 2 builds on collectivistic leadership (Cullen-Lester & Yammarino, 2016; Yammarino, Salas, Serban, Shirreffs, & Shuffler, 2012) and the theory of shared leadership (Pearce & Conger, 2003). The purpose of the study was to a) replicate prior findings regarding the relationship between shared leadership, job satisfaction, and team performance; b) explore the role of commonality (perceived personality similarity) in shared leadership, job satisfaction, and team performance; and c) illustrate the role of communication mode (virtual vs. face-to-face) in the efficacy of shared leadership and commonality. An experimental, policy-capturing study with student and employee samples provided support for several of our hypotheses. First, shared leadership (compared to hierarchical leadership) and high commonality (compared to low commonality) each positively influenced intended performance and predicted satisfaction. These relationships were moderated by communication mode: virtual teams with hierarchical leadership reported lower performance and satisfaction ratings than face-to-face teams. This difference was smaller for shared leadership. In addition, teams with low commonality benefitted more from shared leadership compared to hierarchical leadership with regard to

satisfaction. In summary, chapter 2 provides empirical support for the causal influence of shared leadership on team performance and satisfaction. Furthermore, the moderating role of communication mode and personality commonality was validated.

Chapter 3 contributes to the literature on delegation (Schriesheim, Neider, & Scandura, 1998; Yukl & Fu, 1999) by focusing on employees' perceptions of leaders. Prior studies mainly focused on team or employee outcomes and did not consider outcomes for leaders. However, leaders run the risk of being exploited or viewed as lazy when they delegate to their employees (Bozkurt & Ergeneli, 2012; Liberman & Boehe, 2011). Therefore, the purpose of this study was to determine how employees evaluate leaders who delegate authority and decision-making responsibility. Two empirical studies demonstrated that the delegation of responsibility and decision-making power is related to positive perceptions of leader effectiveness and leader likeability. Moreover, the results show that leader likeability mediates the positive relationship between delegation and employee satisfaction. Thus, chapter 3 provides initial insights into the relationship between delegation and leader evaluation by showing that leaders who delegate are perceived as more competent and more likeable.

Chapter 4 investigates how different occupational groups are evaluated, with an emphasis on possible gender differences. Based on the stereotype content model (Fiske, Cuddy, & Glick, 2007) and role congruity theory (Eagly & Karau, 2002; Heilman, 2001), the chapter assessed how female and male jobholders are perceived with regard to warmth, competence, power orientation, and relationship orientation. The results show that occupational groups are indeed evaluated differently and that people sometimes differentiate between male and female jobholders (e.g., a female physician is viewed as warmer compared to a male physician, and a male engineer is considered to be more competent compared to a female engineer). However, altogether, the similarities between male and female jobholders outnumber the differences. In addition, we examined the features of successful leaders and compared them to stereotypically

male and female attributes. The results demonstrate that the characteristics of leadership are, even today, typically male (namely, competence, assertiveness, effectiveness, and strategic orientation). Overall, chapter 4 replicates and extends prior findings on stereotypical evaluations of social groups and occupations and therefore helps to review stereotypical beliefs and their influences.

5.2 Main contributions

This thesis highlights important challenges to working in teams in the future. Globalization and digitization have changed our working environment (Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015; McKinsey Global Institute, 2016). As a consequence, addressing diversification and democratization has become more important than ever (Sattelberger, Welpe, & Boes, 2015; Welpe, Brosi, Ritzenhöfer, & Schwarzmüller, 2015). The current dissertation contributes to the management literature by investigating how democratization, digitization, and diversification affect leaders and employees. First, this research focused on shared leadership (Pearce & Conger, 2003; chapter 2) and delegation (Yukl & Fu, 1999; chapter 3) as manifestations of democratic leadership (Gastil, 1994). The findings of this thesis add to previous results and contribute to the literature by including relevant moderators and mediators and by implementing a multi-method approach.

The results support the prevalent notion that democratic leadership is positively related to organizational outcomes. However, leadership does not emerge in isolation in the organizational context; therefore, situational demands must be taken into account (Hackman & Wageman, 2007). I provide initial insights into the role of team characteristics (i.e., commonality of personality) and the work environment (i.e., virtuality) in effective democratic leadership.

Team variables have gained great interest from scholars with regard to leadership per se

but in particular with regard to democratic leadership (Mathieu, Kukenberger, D'Innocenzo, & Reilly, 2015; Nicolaides et al., 2014). Team variables such as team size or team task have often been examined (Mathieu, Maynard, Rapp, & Gilson, 2008; Maynard, Mathieu, Gilson, O'Boyle, & Cigularov, 2013). Perceived similarity of personalities (personality commonality, Echterhoff, Higgins, & Levine, 2009), however, has not gained the same attention. The current research demonstrated that high commonality (compared to low commonality) was related to higher performance and satisfaction of team members. Furthermore, the results show that commonality and shared leadership interact with each other. This finding highlights the importance of informal characteristics for effective democratic leadership.

Contributing to the discussion on the digitization of work, I analyzed the effects of virtuality and shared leadership on performance and satisfaction. Virtual communication offers many advantages for organizations and employees because it allows easier cooperation from different locations, thus making teamwork more customizable, flexible, and cost efficient (Gilson et al., 2015). Accordingly, virtual teamwork has been implemented in many organizations (McKinsey Global Institute, 2016). However, because of the limited social cues, virtual cooperation also challenges teamwork, and teams sometimes struggle with the constraints of virtual communication (Gilson et al., 2015). Accordingly, scholars and practitioners alike are interested in ways to implement virtual teamwork more efficiently. By combining virtual teamwork with shared leadership, this thesis makes a significant contribution to the literature on virtual leadership. The results demonstrate that virtual teams can benefit from democratic leadership because it empowers employees.

Furthermore, the current thesis provides an important contribution to the literature on democratic leadership by expanding the research methods employed. To my knowledge, shared leadership (in comparison to hierarchical leadership) has not been manipulated in a controlled setting before. Moreover, the studies on delegation combined a controlled, experimental setting

with a more applied, questionnaire design.

Beyond digitization and democratization, this thesis focused on the diversification of the workforce (chapter 4). By replicating and extending prior research on the evaluation of male and female attributes (Eckes, 2002), this research contributes to the literature on gender stereotypes and leadership. In their studies, Eckes and colleagues (2002; 2005) analyzed how different gendered social groups (e.g., vamp, career man) are perceived with regard to their warmth and competence. For this dissertation, this method was transferred to everyday social groups (namely occupations and their male and female jobholders). The results allow a better description of typical occupational gender stereotypes and their influence on men and women.

5.3 Implications for practice

This thesis offers a number of practical implications. Teams and organizations face new challenges, such as increasing complexity, constant change, global markets, and the need for innovation. Associated with these challenges is the democratization, digitization, and diversification of the modern workforce. This dissertation addresses the advantages and challenges to democratization, digitization, and diversification with regard to leadership and followership in the 21st century.

The findings demonstrate that democratization (i.e., shared leadership) can help strengthen performance and satisfaction in virtual teams. Moreover, leaders can benefit from more democratic leadership (i.e., delegation) because they receive better evaluations from their employees. Accordingly, organizations should consider installing democratic leadership. To do so, the values, vision, and structure of the organization must be aligned with the basic assumptions of democratic leadership (Bolden, 2011). Empowering employees and providing them with decision-making responsibility is often viewed as difficult for leaders and employees (Abele, 2011). An environment where control and bureaucracy have been the daily routine

makes it even more difficult to change behaviors toward democratization (Sattelberger et al., 2015). Nevertheless, the empirical studies in this dissertation show that implementing democratic leadership is favorable for leaders, employees, and organizations. However, the current findings also show that organizations must use caution when putting together a team that is empowered and leads itself. Considering invisible variables such as personality may make an important impact on the team and organization's outcomes.

Furthermore, this dissertation addresses the challenges to diversification by showing how female and male workers are evaluated differently based on their occupation. Gender stereotypes affect career opportunities for men and women because they preserve social inequality (Cejka & Eagly, 1999). Knowledge of these stereotypes can help in the development of measures to minimize their influence on work decisions.

5.4 Implications for future research

The results of this dissertation emphasize the importance of democratization, digitization, and diversification for the modern workforce. Based on the findings and limitations, several directions for future research can be identified. First, in association with the main research stream, this thesis focused on the positive effects of democratic leadership on organizational outcomes. A necessary next step would be to investigate possible reciprocal relationships. Other research areas (e.g., theory of leader-member exchange, LMX) have emphasized a reciprocal relationship between leadership and organizational outcomes (O'Donnell, Yukl, & Taber, 2012; Zaccaro, Rittman, & Marks, 2001). Indeed, a leader's willingness to empower his/her employees also depends on the employees' performance (Leana, 1986) and motivation (Jha, 2004). Therefore, it is likely that performance and satisfaction affect the practice of democratic leadership.

Another somewhat related question concerns the potential negative effects of

democratic leadership. Cheong, Spain, Yammarino, and Yun (2016) noted that the responsibility that comes with empowerment can induce stress and feel like a burden for employees. This "too much of a good thing" (Pierce & Aguinis, 2013) could eventually result in negative performance outcomes, frustration, and discontent. However, the empirical data are sparse, and the results of this thesis do not point in that direction. Accordingly, more research is needed on how much democratization is needed and when empowerment is most effective.

Finally, I focused on shared leadership and delegation to investigate democratic leadership. However, democratization can take several other forms as well (Gastil, 1994). Scholars have demonstrated the variety of different types of democratic leadership by investigating collective leadership (Cullen, Palus, Chrobot-Mason, & Appaneal, 2012), social exchange (White, Currie, & Lockett, 2016), and distributed leadership (Gronn, 2002), among others. A differentiation and structuring of the theoretical constructs subsumed under democratic leadership is much needed. Nevertheless, the individual facets each make an important contribution to the overall notion of democratization of the workforce.

I also highlighted the role of occupational stereotypes in the challenges to diversity and inclusion in the workforce. Although the results of this thesis contribute to the understanding of gender stereotypes, occupational stereotypes, and leadership, several interesting questions remain unanswered. First and foremost, more insights into the barriers to overcoming stereotypical beliefs is needed (Eagly & Sczesny, 2009). To overcome discrimination based on unconscious stereotypes, more knowledge regarding the underlying mechanisms and possible measures that can be taken against them is required (Ebert, Steffens, & Kroth, 2014). Moreover, the findings indicate that gender stereotypes are subject to change. Thus, it is necessary to replicate prior studies to continuously examine such changes.

In conclusion, across several empirical studies, this thesis demonstrates the meaning of democratization, digitization, and diversification for leadership and followership in the 21st

century. The results suggest that democratization is beneficial for team members and leaders alike and encourages virtual teams in particular. With a focus on stereotypes, the findings offer insights into diversification, gender, and different occupations. By providing several directions for future research, this thesis aims to stimulate discussion about the challenges and opportunities of our future work environment.

5.5 References

- Abele, J. (2011, July-August). Bringing minds together. *Harvard Business Review*, 89(7), 86-93.
- Bolden, R. (2011). Distributed leadership in organizations: A review of theory and research.

 *International Journal of Management Reviews, 13, 251-269. doi:10.1111/j.1468-2370.2011.00306.x
- Bozkurt, F. G., & Ergeneli, A. (2012). Moderating effect of trust in managers on the relation between delegation of authority and managers' perceived social loafing. *Information Management and Business Review*, 4, 583-595.
- Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin*, 25, 413-423. doi:10.1177/0146167299025004002
- Cheong, M., Spain, S. M., Yammarino, F. J., & Yun, S. (2016). Two faces of empowering leadership: Enabling and burdening. *The Leadership Quarterly*, 27, 602-616. doi:10.1016/j.leaqua.2016.01.006
- Cullen-Lester, K. L., & Yammarino, F. J. (2016). Collective and network approaches to leadership: Special issue introduction. *The Leadership Quarterly*, 27, 173-180. doi:10.1016/j.leaqua.2016.02.001
- Cullen, K. L., Palus, C. J., Chrobot-Mason, D., & Appaneal, C. (2012). Getting to "we": Collective leadership development. *Industrial and Organizational Psychology*, *5*, 428-432. doi:10.1111/j.1754-9434.2012.01475.x
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573-598. doi:10.1037//0033-295X.109.3.573

- Eagly, A. H., & Sczesny, S. (2009). Stereotypes about women, men, and leaders: Have times changed? In M. Barreto, M. K. Ryan, & M. T. Schmitt (Eds.), *The glass ceiling in the 21st century: Understanding barriers to gender equality* (pp. 21-47). Washington, DC: American Psychological Association.
- Ebert, I. D., Steffens, M. C., & Kroth, A. (2014). Warm, but maybe not so competent? Contemporary implicit stereotypes of women and men in germany. *Sex Roles*, 70, 359-375. doi:10.1007/s11199-014-0369-5
- Echterhoff, G., Higgins, E. T., & Levine, J. M. (2009). Shared reality: Experiencing commonality with others' inner states about the world. *Perspectives on Psychological Science*, *4*, 496-521. doi:10.1111/j.1745-6924.2009.01161.x
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: Testing predictions from the stereotype content model. *Sex Roles*, 47, 99-114. doi:10.1023/A:1021020920715
- Eckes, T., Trautner, H. M., & Behrendt, R. (2005). Gender subgroups and intergroup perception: Adolescents' views of own-gender and other-gender groups. *Journal of Social Psychology*, 145, 85-111. doi:10.3200/SOCP.145.1.85-112
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition:

 Warmth and competence. *Trends in Cognitive Sciences*, 11, 77-83.

 doi:10.1016/j.tics.2006.11.005
- Gastil, J. (1994). A definition and illustration of democratic leadership. *Human Relations*, 47, 953-975. doi:10.1177/001872679404700805
- Gilson, L. L., Maynard, M. T., Young, N. C. J., Vartiainen, M., & Hakonen, M. (2015). Virtual teams research: 10 years, 10 themes, and 10 opportunities. *Journal of Management*, 41, 1313-1337. doi:10.1177/0149206314559946
- Gronn, P. (2002). Distributed leadership as a unit of analysis. The Leadership Quarterly, 13,

- 423-451. doi:10.1016/S1048-9843(02)00120-0
- Hackman, J. R., & Wageman, R. (2007). Asking the right questions about leadership: Discussion and conclusions. *American Psychologist*, 62, 43-947. doi:10.1037/0003-066X.62.1.43
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues: Gender, Hierarchy, and Leadership*, 57, 657-674. doi:10.1111/0022-4537.00234
- Jha, S. (2004). Determinants of delegation A study in five star hotels. *Vision: The Journal of Business Perspective*, 8, 17-32. doi:10.1177/097226290400800203
- Leana, C. R. (1986). Predictors and consequences of delegation. *Academy of Management Journal*, 29, 754-774. doi:10.2307/255943
- Liberman, L., & Boehe, D. (2011). Worldwide willingness to delegate and country labor quality. *International Journal of Human Resource Management*, 22, 3477-3495. doi:10.1080/09585192.2011.610943
- Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, 34, 410-476. doi:10.1177/0149206308316061
- Mathieu, J. E., Kukenberger, M. R., D'Innocenzo, L., & Reilly, G. (2015). Modeling reciprocal team cohesion–performance relationships, as impacted by shared leadership and members' competence. *Journal of Applied Psychology*, 100, 713-734. doi:10.1037/a0038898
- Maynard, M. T., Mathieu, J. E., Gilson, L. L., O'Boyle, E. H., & Cigularov, K. P. (2013).

 Drivers and outcomes of team psychological empowerment: A meta-analytic review and model test. *Organizational Psychology Review, 3*, 101-137.

doi:10.1177/2041386612456868

- McKinsey Global Institute. (2016). *Digital globalization: The new era of global flows*.

 Retrieved 06/27/2016 from http://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-globalization-the-new-era-of-global-flows
- Nicolaides, V. C., LaPort, K. A., Chen, T. R., Tomassetti, A. J., Weis, E. J., Zaccaro, S. J., & Cortina, J. M. (2014). The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships. *The Leadership Quarterly*, 25, 923-942. doi:10.1016/j.leaqua.2014.06.006
- O'Donnell, M., Yukl, G., & Taber, T. (2012). Leader behavior and LMX: A constructive replication. *Journal of Managerial Psychology*, 27, 143-154. doi:10.1108/02683941211199545
- Pearce, C. L., & Conger, J. A. (2003). All those years ago: The historical underspinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership* (pp. 1-18). Thousand Oaks, CA: Sage.
- Pierce, J. R., & Aguinis, H. (2013). The too-much-of-a-good-thing effect in management. *Journal of Management*, 39, 313-338. doi:10.1177/0149206311410060
- Sattelberger, T., Welpe, I. M., & Boes, A. (Eds.). (2015). Das demokratische Unternehmen:

 Neue Arbeits- und Führungskulturen im Zeitalter digitaler Wirtschaft [The democratic organization: New work- and leadership culture in a digital age]. Freiburg, Germany:

 Haufe.
- Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal*, *41*, 298-318. doi:10.2307/256909
- Welpe, I. M., Brosi, P., Ritzenhöfer, L., & Schwarzmüller, T. (Eds.). (2015). Auswahl von

- Männern und Frauen als Führungskräfte Perspektiven aus Wirtschaft, Wissenschaft, Medien und Politik [Selection of men and women as leaders: Perspectives from business, academia, media, and politics]. Wiesbaden, Germany: Springer.
- White, L., Currie, G., & Lockett, A. (2016). Pluralized leadership in complex organizations: Exploring the cross network effects between formal and informal leadership relations.

 The Leadership Quarterly, 27, 280-297. doi:10.1016/j.leaqua.2016.01.004
- Yammarino, F. J., Salas, E., Serban, A., Shirreffs, K., & Shuffler, M. L. (2012). Collectivistic leadership approaches: Putting the "we" in leadership science and practice. *Industrial and Organizational Psychology*, *5*, 382-402. doi:10.1111/j.1754-9434.2012.01467.x
- Yukl, G., & Fu, P. P. (1999). Determinants of delegation and consultation by managers. *Journal of Organizational Behavior*, 20, 219-232. doi:10.1002/(SICI)1099-1379(199903)20:2<219::AID-JOB922>3.0.CO;2-8
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, 12, 451-483. doi:10.1016/S1048-9843(01)00093-5